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## State Water Resources Control Board

### Mitigation Monitoring and Reporting Plan

#### Application A030949 to Appropriate Water by Permit – Lynch Canyon Reservoir

This Mitigation Monitoring and Reporting Plan (MMRP) has been prepared in conformance with the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21081.6). The MMRP has been developed based on the information and mitigation measures contained in the Initial Study/Mitigated Negative Declaration (IS/MND) for water right permit application A030949, prepared May 2022 by the Solano Land Trust (State Clearinghouse Number 2021060018). The MMRP lists the mitigation measures recommended in the IS/MND for the proposed project and specifies implementation and monitoring responsibilities. Pursuant to Public Resources Code, section 21081.6, subdivision (b), each of the mitigation measures identified in the MMRP has been included as enforceable permit terms in the permit authorizing construction, diversion and use of water pursuant to water right permit application A030949.

Generally, the State Water Resources Control Board, Division of Water Rights (Division) will monitor mitigation measures requiring pre-construction actions or submittals. Implementation of mitigation measures is the sole responsibility of the Permittee. Compliance with mitigation measures will be assessed through the Division's routine compliance monitoring activities. Non-compliance with mitigation measures may be addressed through the Division's ongoing enforcement program on an as-needed basis.

All documents and other information that constitute the public record for this project shall be maintained by the Division and shall be available for public review at the following address: State Water Resources Control Board, Division of Water Rights, 2nd Floor, 1001 I Street, Sacramento, CA 95814.

#### Project Description

Water right permit application A030949 requests a permit for the diversion to storage of up to 47 acre-feet of water from an Unnamed Stream in Solano County. The purpose of use for water is stockwatering, incidental fish and wildlife preservation and enhancement, and incidental recreation. The season of diversion is from October 1 of each year to June 1 of the succeeding year. Water would be stored in an existing onstream reservoir, and the proposed project would include a three-foot reduction in the elevation of the existing reservoir spillway.

**Table 1. Geology and Soils**

Mitigation Measure	Implementation	Timing	Monitoring and Enforcement
<p><b>Mitigation Measure GS-1 – Erosion and Sediment Control Plan</b></p> <p>No work on upgrades to Lynch Canyon Reservoir shall commence until an erosion and sediment control plan, approved by the Deputy Director for Water Rights, has been implemented by the right holder. The erosion and sediment control plan shall be prepared by a certified professional in erosion and sediment control, and shall describe the measures that will be implemented by the right holder to control accelerated erosion and sedimentation during project construction, and the measures that will be used to revegetate and stabilizes disturbed areas once construction is complete. Measures will include, at a minimum, the following:</p> <ol style="list-style-type: none"> <li>1. Limit the extent of the Construction Footprint as much as possible, clearly marking all construction areas (e.g., designated access roads and staging areas), and confining all construction activities to these locations.</li> <li>2. Restrict stockpiling of construction materials, including portable equipment and supplies, to designated staging areas.</li> </ol> <p>Before storing water in the reservoir, right holder shall furnish evidence which substantiates that the erosion and sediment control plan has been implemented. Evidence includes photographs showing the project area vegetation and slopes.</p>	<p>Right Holder</p>	<p>Pre-Construction</p>	<p>Division of Water Rights</p>

<p><b>Mitigation Measure GS-2 – Construction Debris Control</b></p> <p>No debris, soil, silt, cement that has not set, or other such foreign substance will be allowed to enter into or be placed where it may be washed by rainfall runoff into the waters of the State. When operations are completed, any excess construction-related materials or debris shall be removed from the work area.</p>	<p>Right Holder</p>	<p>Construction, Ongoing</p>	<p>Division of Water Rights</p>
<p><b>Mitigation Measure GS-3 – Regulatory Compliance:</b></p> <p>No water shall be diverted or used under this right, and no construction related to such diversion shall commence, unless right holder has obtained and is in compliance with all necessary permits or other approvals required by other agencies. If an amended right is issued, no new facilities shall be utilized, nor shall the amount of water diverted or used increase beyond the maximum amount diverted or used during the previously authorized development schedule, unless right holder has obtained and is in compliance with all necessary requirements, including but not limited to the permits and approvals listed in this term.</p> <p>Within 90 days of the issuance of this right or any subsequent amendment, right holder shall prepare and submit to the Division of Water Rights a list of, or provide information that shows proof of attempts to solicit information regarding the need for, permits or approvals that may be required for the project. At a minimum, right holder shall provide a list or other information pertaining to whether any of the following permits or approvals are required: (1) lake or streambed alteration agreement with the Department of Fish and Wildlife (Fish &amp; G. Code, § 1600 et seq.); (2) Department of Water Resources, Division of Safety of Dams approval (Wat. Code, § 6002); (3) Regional Water Quality Control Board Waste Discharge Requirements (Wat. Code, § 13260 et seq.); (4) U.S. Army Corps of Engineers Clean Water Act section 404 permit (33 U.S.C. § 1344); and (5) local grading permits.</p>	<p>Right Holder</p>	<p>Pre-Construction</p>	<p>Division of Water Rights</p>

Right holder shall, within 30 days of issuance of any permits, approvals or waivers, transmit copies to the Division of Water Rights.			
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**Table 2. Hydrology and Water Quality**

Mitigation Measure	Implementation	Timing	Monitoring and Enforcement
<p><b>Mitigation Measure WQ-1 – Maintain Existing Livestock Exclusion Fencing</b></p> <p>Maintain the existing livestock exclusion fencing around the reservoir and associated stream channels as shown in Figure 10 of the Lynch Canyon Reservoir Initial Study/Mitigated Negative Declaration, as modified by the Proposed Project, where the modifications would decrease the extent of fringe emergent wetland area within the reservoir that would be directly impacted by cattle relative to existing conditions. No new ground disturbing activities shall occur within the existing or modified livestock exclusion fencing area. Equipment access within the livestock exclusion fencing area shall be limited to activities necessary for the ongoing operation of the reservoir and shall incorporate best management practices to minimize disturbance to water, soils, and vegetation. Natural vegetation shall be preserved and protected within the livestock exclusion fencing area. Planting of native vegetation within the livestock exclusion fencing area is allowed.</p>	Right Holder	Ongoing	Right Holder/ Division of Water Rights
<p><b>Mitigation Measure WQ-2 – Construction Pollution Control</b></p> <p>No fuels, oil, lubricants, or other fluids related to the use of construction equipment will be allowed to enter into or be placed where they may be</p>	Right Holder	During Construction	Right Holder/ Division of Water Rights

<p>washed by rainfall runoff into the waters of the State. Additionally, the following shall be adhered to within the Construction Footprint:</p> <ul style="list-style-type: none"> <li>- Vehicles and equipment will be kept in good repair, without leaks of hydraulic or lubricating fluids. If such leaks or drips occur, they shall be cleaned up immediately. Drip pans shall be utilized when vehicles are parked. Equipment maintenance and/or repair will be confined to one location.</li> <li>- Equipment shall be stored, when not in use, in upland areas well away from designated wetland areas and waterways.</li> <li>- Service and refueling procedures will be conducted where there is no potential for fuel spills to seep or wash into wetland areas or waterways and extreme caution will be used when handling and or storing chemicals (e.g., fuel) near wetland areas or waterways.</li> <li>- When operations are completed, any excess fuels, oils, lubricants, or other fluids related to the use of construction equipment shall be removed from the work area.</li> </ul>			
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**Table 3. Biological Resources**

Mitigation Measure	Implementation	Timing	Monitoring and Enforcement
<p><b>Mitigation Measure BIO-1 – Environmental Awareness Training</b></p> <p>Prior to initiating construction activities, a qualified biologist shall provide an environmental awareness training to all construction personnel before construction begins, which may include information</p>	Right Holder	Pre-Construction	Division of Water Rights

<p>about sensitive resources that may be affected by the project, protection measures, and penalties associated with those resources.</p>			
<p><b>Mitigation Measure BIO-2 – Conduct Pre-Construction Survey for Red-Legged Frog</b></p> <p>Within 14 days prior to the onset of construction activities, a qualified biologist shall survey for California red-legged frog (<i>Rana draytonii</i>) and western pond turtle (<i>Actinemys marmorata</i>) within any suitable aquatic or upland nesting habitat located within 100 feet of construction areas. The biologist will be familiar with the life cycle of each species and will conduct appropriate surveys for the applicable life stage for each species.</p> <p>If California red-legged frogs (<i>Rana draytonii</i>) or western pond turtles (<i>Actinemys marmorata</i>) are observed during the pre-construction surveys, the right holder shall cease all construction activity and consult with the United States Fish and Wildlife Service and/or the California Department of Fish and Wildlife to determine an appropriate course of action. A qualified biologist shall be present onsite during construction to monitor for presence of California red-legged frogs (<i>Rana draytonii</i>) and western pond turtles (<i>Actinemys marmorata</i>) and to ensure that impact avoidance and minimization measures prescribed or approved by the California Department of Fish and Wildlife and United States Wildlife Service are implemented throughout the construction period.</p> <p>Right holder shall submit a report documenting compliance with the provisions of this term to the Deputy Director for Water Rights no more than 30 days after construction is complete.</p>	<p>Right Holder</p>	<p>Pre-Construction</p>	<p>Division of Water Rights</p>
<p><b>Mitigation Measure BIO-3 – Limit Construction Season</b></p>	<p>Right Holder</p>	<p>During Construction</p>	<p>Right Holder/ Division of Water</p>

<p>Construction activities within 100 feet of any surface stream, as identified in Figure 10 of the Lynch Canyon Reservoir Initial Study/Mitigated Negative Declaration, shall only occur between June 15 and October 15 to minimize the potential for direct impacts to California red-legged frogs (<i>Rana draytonii</i>).</p>			Rights
<p><b>Mitigation Measure BIO-4a – Conduct Pre-Construction Survey for Nesting Bird Species</b></p> <p>Within 14 days prior to the onset of construction activities, a qualified biologist shall conduct a pre-construction survey for the purpose of identifying nesting bird species. The pre-construction survey shall include all potential nesting habitat within 500 ft of proposed construction areas. If an active raptor or migratory bird nest is found during the pre-construction survey, the right holder shall notify the California Department of Fish and Wildlife and the United States of Fish and Wildlife Service. If an active raptor nest is found during the pre-construction survey, a 500 ft no-disturbance buffer shall be established and maintained around the nest until all young have fledged. If an active nest of any other migratory or non-migratory bird is found, a 250 ft no-disturbance buffer shall be established around the nest until all young have fledged. If active tricolored blackbirds are documented nesting during the pre-construction survey, a minimum 300 ft no-disturbance buffer shall be established around the nest until all young have fledged. Right holder shall submit a report documenting compliance with the provisions of this term to the Deputy Director for Water Rights no more than 30 days after construction is complete.</p>	Right Holder	Pre-Construction	Division of Water Rights
<p><b>Mitigation Measure BIO-4b – Swainson’s Hawk Surveys</b></p> <p>If Project-related construction activities are scheduled during the nesting season for Swainson’s hawk (March 1 to September 15), then prior to beginning work on the Project, a qualified biologist shall conduct surveys according to the Recommended Timing and Methodology for Swainson’s Hawk Nesting Surveys in California’s Central Valley</p>	Right Holder	Pre-Construction, During Construction	Division of Water Rights

<p>(Swainson’s Hawk Technical Advisory Committee 2000). Survey methods should be closely followed by starting early in the nesting season (late March to early April) to maximize the likelihood of detecting an active nest (nests, adults, and chicks are more difficult to detect later in the growing season because trees become less transparent as vegetation increases). Surveys shall be conducted: 1) within a minimum 0.5-mile radius of the Project site or a larger area if needed to identify potentially impacted active nests, and 2) for at least the two survey periods immediately prior to initiating Project-related construction activities. Surveys shall occur annually for the duration of the Project-related construction activities. The qualified biologist shall have a minimum of two years of experience implementing the survey methodology resulting in detections. If active Swainson’s hawk nests are detected, the Project shall implement a 0.5-mile construction avoidance buffer around the nest until the nest is no longer active as determined by a qualified biologist. If take of Swainson’s hawk cannot be avoided, then the Project shall consult with CDFW pursuant to CESA and obtain an Incidental Take Permit (ITP). CDFW Bay Delta Region staff are available to provide guidance on the ITP application process.</p>			
<p><b>Mitigation Measure BIO-5 – Pre-Construction Survey for Burrowing Owl</b></p> <p>Within 14 days prior to the start of construction, a qualified biologist shall conduct a pre-construction survey for active burrowing owl (<i>Athene cunicularia</i>) burrows using methods identified in the California Department of Fish and Wildlife 2012 Staff Report on Burrowing Owl Mitigation. The pre-construction survey shall include all potential nesting habitat within 500 ft of proposed construction areas.</p> <p>If occupied burrowing owl (<i>Athene cunicularia</i>) nests are found, Permittee shall establish no-disturbance buffers around each nest within which no disturbance resulting from construction may occur unless a qualified biologist verifies through non-invasive methods that</p>	<p>Right Holder</p>	<p>Pre-Construction</p>	<p>Division of Water Rights</p>

<p>either the owls occupying the nests have not begun egg-laying and incubation, or that juveniles from the occupied burrows are foraging independently and are capable of independent survival. Buffers ranging from fifty to five hundred meters in diameter shall be established around occupied nest sites in accordance with the provisions of the California Department of Fish and Wildlife 2012 Staff Report on Burrowing Owl Mitigation.</p> <p>Right holder shall submit a report documenting compliance with the provisions of this term to the Deputy Director for Water Rights no more than 30 days after construction is complete.</p>			
<p><b>Mitigation Measure BIO-6 – Pre-Construction Survey for American Badger</b></p> <p>Within 14 days prior to the start of construction, a qualified biologist shall conduct a pre-construction survey for the purpose of identifying any potential denning habitat for the American badger (<i>Taxidea taxus</i>). The pre-construction survey shall include all potential denning habitat within or adjacent to the construction footprint. If denning habitat is found during the pre-construction survey, right holder shall consult with the California Department of Fish and Wildlife to identify and implement acceptable impact avoidance and minimization measures. Measures that would be considered include, but are not limited to establishing suitable no-disturbance construction buffers around active den sites (e.g., 50 ft) and active natal/pupping dens site (e.g., 250 ft), passive relocation, and for dens that are inactive to be collapsed by hand to prevent occupation. Right holder shall submit a report documenting compliance with the provisions of this term to the Deputy Director for Water Rights no more than 30 days after construction is complete.</p>	<p>Right Holder</p>	<p>Pre-Construction</p>	<p>Division of Water Rights</p>
<p><b>Mitigation Measure BIO-7 – Implement American Bullfrog</b></p>	<p>Right Holder</p>	<p>Ongoing</p>	<p>Right Holder/ Division of Water</p>

**Eradication Plan**

Right holder shall develop and implement, in consultation with the USFWS and CDFW, an American Bullfrog Eradication Plan for Lynch Canyon Reservoir that is satisfactory to the Deputy Director for Water Rights. The plan shall address control of American bullfrog (*Lithobates catesbeianus*) in Lynch Canyon Reservoir, with eradication of the bullfrog from the reservoir as the ultimate goal. Right holder shall submit a report on American Bullfrog Eradication Plan activities in accordance with the time schedule contained in the American Bullfrog Eradication Plan, and whenever requested by the Division of Water Rights. The Deputy Director for Water Rights may require modification of the American Bullfrog Eradication Plan upon a determination that the plan is ineffective or unsuccessful, or provide relief from this term upon a determination that the American Bullfrog Eradication Plan is no longer required.

The American Bullfrog Eradication Plan shall be developed and implemented by qualified individual(s) approved by the Deputy Director for Water Rights, and at a minimum, shall provide the following information:

- a. A description of the method by which non-native species present or potentially present in the reservoir will be identified;
- b. A description of the approach that will be used to control, with the intention to eradicate, the species from the reservoir if American bullfrog is present, including the method and the frequency of applying the method;
- c. A description of the criteria that will be used to evaluate the effectiveness and success of the control method;
- d. A description of the program that will be used to monitor the effectiveness and success of the control method;

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<p>e. A description of how the approach will be supplemented or modified if the monitoring program indicates that the current control plan is not effective or successful;</p> <p>f. A time schedule for periodic inspection of the reservoir and control of American bullfrog from the reservoir, if present; and</p> <p>g. A time schedule for the periodic submittal of reports on control plan activities that describe the control methods or approaches used, the frequencies that the methods and approaches were applied, the results of effectiveness monitoring efforts, an evaluation of the effectiveness and success of the methods or approaches used, and descriptions of how the methods or approaches used will be supplemented or modified if the monitoring program indicates that ongoing methods or approaches for American bullfrog control are ineffective.</p>			
<p><b>Mitigation Measure BIO-8 – Retain Reservoir Habitat for Native Species</b></p> <p>At no point will non-native fish or wildlife species be intentionally introduced into the reservoir.</p>	<p>Right Holder</p>	<p>Ongoing</p>	<p>Right Holder/ Division of Water Rights</p>
<p><b>Mitigation Measure BIO-9 – Install Construction Flagging or Fencing to Exclude Construction Activities from Wetlands</b></p> <p>A qualified wetland scientist shall clearly mark with flagging or construction fencing the boundaries of all waters of the State, wetlands, and other waters of the United States located within the construction footprint prior to the commencement of construction activities to exclude construction equipment and construction materials from wetlands.</p>	<p>Right Holder</p>	<p>Pre-Construction</p>	<p>Division of Water Rights</p>

**Table 4. Hazards and Hazardous Materials**

Mitigation Measure	Implementation	Timing	Monitoring and Enforcement
<p><b>Mitigation Measure HZ-1 – Wildfire Control</b></p> <p>Construction areas shall be cleared of combustible materials, spark arrestors on construction equipment shall be in good working order, and dry grasses and low-growing shrubs shall be mowed in the equipment staging area.</p>	Right Holder	During Construction	Division of Water Rights

**Table 5. Cultural Resources**

Mitigation Measure	Implementation	Timing	Monitoring and Enforcement
<p><b>Mitigation Measure CR-1 – Notification and Consultation with Professional Archeologist</b></p> <p>Should any buried archeological materials be uncovered during project activities, such activities shall cease within 100 ft of the find. Prehistoric archeological indicators include: obsidian and chert flakes and chipped stone tools; bedrock outcrops and boulders with mortar cups; ground stone implements (grinding slabs, mortars and pestles) and locally darkened midden soils containing some of the previously listed items plus fragments of bone and fire affected stones. Historic period site indicators generally include: fragments of glass, ceramic and metal objects; milled and split lumber; and structure and feature remains such</p>	Right Holder	During Construction	Division of Water Rights

<p>as building foundations, privy pits, wells and dumps; and old trails. The Deputy Director for Water Rights shall be notified of the discovery and a professional archeologist shall be retained by the right holder to evaluate the find and recommend appropriate mitigation measures. Proposed mitigation measures shall be submitted to the Deputy Director for Water Rights for approval. Project-related activities shall not resume within 100 ft of the find until all approved mitigation measures have been completed to the satisfaction of the Deputy Director for Water Rights.</p>			
<p><b>Mitigation Measure CR-2 – Consultation with County Coroner and Native American Heritage Commission</b></p> <p>If human remains are encountered during project construction, then the right holder shall comply with Section 15064.5 (e) (1) of the California Environmental Quality Act Guidelines and the Health and Safety Code Section 7050.5. All project-related ground disturbances within 100 ft of the find shall be halted until the county coroner has been notified. If the coroner determines that the remains are Native American, the coroner will notify the Native American Heritage Commission to identify the most-likely descendants of the deceased Native Americans. Project-related ground disturbance in the vicinity of the find shall not resume until the process detailed under Section 15064.5 (e) has been completed and evidence of completion has been submitted to the Deputy Director for Water Rights. If remains of Native Americans are encountered, a tribal monitor shall be present during further ground disturbing activities.</p>	<p>Right Holder</p>	<p>During Construction</p>	<p>Division of Water Rights</p>