Mitigation Monitoring and Reporting Program for the Continued Implementation of the Lawrence Berkeley National Laboratory Vegetation Management Program

In September 2025, the Board of Regents of the University of California (The Regents) certified the Lawrence Berkeley National Laboratory (LBNL or Berkeley Lab) 2025 Long Range Development Plan (LRDP) Final Environmental Impact Report (Final EIR) and approved the 2025 LRDP. The 2025 LRDP Final EIR identified and analyzed the environmental impacts of LBNL 2025 LRDP implementation, and it also analyzed the environmental impacts associated with the continued implementation of the LBNL Vegetation Management Program (VMP) as a related program, through 2045. The 2025 LRDP Final EIR identified certain significant VMP-related biological and noise impacts that required mitigation measures, and those mitigation measures are incorporated into the LBNL VMP to reduce the VMP's impacts to the extent feasible.

The California Environmental Quality Act (CEQA) requires that a Lead Agency establish a program to monitor and report on mitigation measures adopted as part of the environmental review process to avoid or reduce the severity and magnitude of potentially significant environmental impacts associated with project implementation. CEQA (Public Resources Code Section 21081.6(a)(1)) requires that a Mitigation Monitoring and Reporting Program (MMRP) be adopted at the time that the agency determines to carry out a project for which an Environmental Impact Report (EIR) has been prepared to ensure that mitigation measures identified in the EIR are fully implemented.

The VMP MMRP is presented as a table that includes the full text of the mitigation measures identified in the Final EIR to mitigate the significant impacts of the VMP. The Lab may modify the means by which it will implement a mitigation measure (such as the manner in which the measure is implemented, its timing or its reporting), as long as the alternative means ensure compliance during project implementation. The MMRP describes implementation and monitoring procedural guidance, responsibilities, and timing for each mitigation measure identified in the EIR, including:

- **Significant Environmental Impact:** Presents the significant environmental impacts identified in the Final EIR associated with VMP implementation.
- **Mitigation Measures:** Identifies the mitigation measures associated with the impacts identified in the Final EIR associated with VMP implementation.
- **Monitoring Responsibility / Action:** Designates the entities responsible for mitigation measure implementation and recordation. Where appropriate, steps to implement the measures are summarized.

- **Mitigation Timing:** Identifies the project phase during which the mitigation action will be taken.
- **Monitoring Schedule and Reporting Procedure:** Specifies procedures for documenting and reporting mitigation implementation.

The responsibilities of mitigation implementation, monitoring, and reporting extend to several Berkeley Lab organizational units and offices. The manager or organizational unit lead of the identified unit or division will be directly responsible for ensuring mitigation compliance. Campus Planning is responsible for the overall mitigation program administration and for assisting assigned organizational units and project managers in their oversight and reporting responsibilities. Campus Planning is also responsible for ensuring the assigned team understands their charge and completes the required procedures accurately and on schedule.

VEGETATION MANAGEMENT PROGRAM MITIGATION MONITORING AND REPORTING PROGRAM

Environmental Impact	Mitigation Measures	Monitoring Responsibility/Action Notes	Mitigation Timing	Monitoring Schedule/ Reporting Procedure
EIR Section 4.3 Biological Resources				
LRDP Impact BIO-1: Implementation of the LBNL 2025 LRDP and the related LBNL VMP would have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	**LRDP Mitigation Measure BIO-1a: Protection of Rare Plants** 1) Prior to construction on suitably vegetated areas of the campus Perimeter Open Space Zone, a qualified biologist shall conduct a focused survey for rare plant species with potential to be present during their respective blooming periods (western leatherwood blooms January to March; Diablo helianthella blooms March to June; most beautiful jewelflower blooms April to September). Surveys should be conducted during the periods of identification for all species under consideration at each applicable development site. If no special-status plants are observed, no further action is required. If special-status plant species, including western leatherwood, are observed, the plants will be avoided with a suitable buffer, determined in coordination with CDFW. The buffer zone shall be clearly demarcated using exclusion fencing.	Campus Planning/Facilities Division and/or Applicable Division Where applicable, engage a qualified biologist to conduct a focused survey(s) for special-status plants specified in the mitigation measure.	Prior to start of and during applicable VMP activities/projects.	Considered complete upon receipt of biologist's final report and/or written confirmation by Campus Planning.
	2) If establishing an avoidance buffer is not feasible, individual plants shall be transplanted to an area with suitable physical and biological conditions outside of the work area, according to a Rare Plant Relocation Plan to be prepared by UC LBNL or its contractor and reviewed and approved by CDFW. The Relocation Plan will include regular monitoring and weeding for a period of five years, as well as adaptive management criteria, including additional monitoring, weeding, watering, or replanting, if success criteria are not met after the five-year management period.	If special-status plants are found at VMP work sites and cannot be avoided, engage a qualified biologist to prepare and implement a Rare Plant Relocation Plan as specified in the mitigation measure.	Prior to start of VMP activities/projects.	When applicable, considered complete upon receipt of final transplantation and monitoring report and/or written confirmation by Campus Planning.
	LRDP Mitigation Measure BIO-1b: Protection of Special-Status Terrestrial Species 1) At least fifteen (15) calendar days prior to the start of construction, a qualified biologist(s) shall conduct pre-construction surveys for Alameda whipsnake and San Francisco dusky-footed woodrat in all areas of suitable habitat. If Alameda whipsnake or San Francisco dusky-footed woodrat is found, it will be allowed to leave the area of its own accord, and USFWS and/or CDFW shall be notified.	Campus Planning/Facilities Division and/or Applicable Division Where applicable, engage a qualified biologist to conduct pre-construction surveys for Alameda whipsnake and San Francisco dusky-footed woodrat as specified in the mitigation measure.	Prior to start of applicable VMP activities/projects.	Considered complete upon receipt of biologist's final report and/or written confirmation by Campus Planning.
	2) UC LBNL shall minimize adverse effects to the Alameda whipsnake and San Francisco dusky-footed woodrat by limiting to the maximum extent possible the number of access routes; construction areas; equipment staging, storage, parking, and stockpile areas, and placing these outside of sensitive habitat for both species. No more than 24 hours prior to initial ground disturbance at a project site, equipment staging areas, site access routes, construction equipment and personnel parking areas, debris store areas, and any other areas that may be disturbed will be identified, surveyed by a qualified biologist, and clearly marked with bright orange	Where applicable, engage a qualified biologist to survey and mark construction areas for Alameda whipsnake and San Francisco dusky-footed woodrat and inspect construction fencing as specified in the mitigation measure.	Prior to initial ground disturbance, and regularly during VMP activities/projects.	Considered complete upon receipt of biologist's final report and/or written confirmation by Campus Planning.

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Environmental Impact	Mitigation Measures	Monitoring Responsibility/Action Notes	Mitigation Timing	Monitoring Schedule/ Reporting Procedure
EIR Section 4.3 Biological Resources (cont.)				
LRDP Impact BIO-1 (cont.)	plastic construction fencing, or equivalent. The fencing shall be inspected regularly by the qualified biologist and maintained daily by the contractor until project completion.			
	3) Prior to commencement of construction or vegetation management activities with the potential to impact Alameda whipsnake and/or San Francisco dusky-footed woodrat, workers shall be trained in Alameda whipsnake and San Francisco dusky-footed woodrat avoidance, minimization, and conservation measures, legal protection, and other related issues. Training will be prepared and delivered under the guidance of a qualified biologist.	Where applicable, engage a qualified trainer to instruct work crews that may encounter Alameda whipsnake and San Francisco dusky-footed woodrat in avoidance, minimization, and conservation measures as specified in the mitigation measure.	Prior to start of applicable VMP activities/projects.	Considered complete upon documented delivery of required training by qualified trainer.
	4) If a dusky-footed woodrat midden is identified in a work area, the contractor, as directed by a qualified biologist, shall attempt to preserve the midden and maintain an intact dispersal corridor between the midden and undisturbed habitat. An adequate dispersal corridor would be considered to be a minimum of 50 feet wide and have greater than 70 percent vegetative cover. If dusky-footed woodrat midden(s) cannot be avoided, CDFW will be notified and information regarding the midden location(s) and a relocation plan will be provided. With approval from CDFW, a qualified biologist shall dismantle and relocate the midden material no less than 10 days prior to the beginning of construction. The work will be performed during morning hours using hand tools. Materials from the midden shall be dispersed into adjacent suitable habitat that is at least 200 feet outside of the work area, including vegetation to provide nest cover. During the deconstruction process, the biologist shall attempt to assess if there are juveniles in the midden. If immobile juveniles are observed, the deconstruction process shall be discontinued until a time (after 2-to-4 weeks) when the biologist believes the juveniles are fully mobile. A 50-foot-wide no-disturbance buffer will be established around the midden until the juveniles are mobile. The midden may be dismantled once the biologist has determined that adverse effects on the juveniles would not occur. All disturbances to woodrat middens will be documented in a construction monitoring report and submitted to CDFW.	Engage a qualified biologist to prepare and implement a relocation plan for dusky-footed woodrat as specified in the mitigation measure.	During applicable VMP activities/projects.	Considered complete upon receipt of biologist's final report and/or written confirmation by Campus Planning.
	5) In habitat with a high potential for the Alameda whipsnake to occur (see Figure 4.3-3), a biological monitor shall be employed at project sites. Each morning, prior to initiating excavation, construction, equipment or vehicle operation at project sites identified as having high potential for whipsnake occurrence, the project sites shall be surveyed by a designated monitor trained in Alameda whipsnake identification to ensure that no Alameda whipsnakes are present. All laydown and deposition areas, as well as other areas that might conceal or shelter snakes or other animals, shall be inspected each morning by the designated monitor to ensure that	For VMP activities/projects located in habitat with a high potential for Alameda whipsnake to occur, engage a qualified biological monitor to survey and inspect construction site as specified in the mitigation measure.	Prior to start of and during applicable VMP activities/projects.	Considered complete upon completion of relevant project activity and written notification by biological monitor and/or receipt by Berkeley Lab of biologist's final report and/or written confirmation by Campus Planning.

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Environmental Impact	Mitigation Measures	Monitoring Responsibility/Action Notes	Mitigation Timing	Monitoring Schedule/ Reporting Procedure
EIR Section 4.3 Biological Resources (cont.)				
LRDP Impact BIO-1 (cont.)	Alameda whipsnakes are not present. The designated monitor shall have the authority to halt construction or vegetation management activities in the event that a whipsnake is found within the construction footprint or work area until such time as threatening activities can be eliminated in the vicinity of the snake and it can be removed from the site by a biologist permitted to handle whipsnakes. USFWS and CDFW shall be notified within 24 hours of such event.			
	6) In habitats designated as having low to moderate potential for Alameda whipsnake to occur, a preconstruction survey shall be performed by a qualified biologist to identify presence of suitable habitat. If suitable habitat is observed, daily monitoring shall be provided during clearing and grubbing in suitable whipsnake habitat areas. Work areas shall be limited to the maximum extent possible as stated above in Number 2, and worker training shall be provided as stated in Number 3.	For VMP activities/projects located in undeveloped/natural areas with a low to moderate potential for Alameda whipsnake to occur, engage a qualified biological monitor to survey the site for suitable habitat and conduct daily monitoring during grubbing and clearing as specified in the mitigation measure.	Prior to start of and during applicable VMP activities/projects.	Considered complete upon receipt of biologist's final report and/or written confirmation by Campus Planning.
	7) A litter control program shall be instituted at each project site to ensure that Alameda whipsnake predators, such as crows, ravens, and coyotes, are not attracted to the construction site by discarded food and trash. All workers will ensure their food scraps, paper wrappers, food containers, cans, bottles, and other trash are deposited in covered trash or removed from the site each working day.	Instruct VMP work crews to implement a litter control program to minimize potential for Alameda whipsnake predators at work sites as specified in the mitigation measure.	During applicable VMP activities/projects.	Considered complete upon receipt of documentation from Project Manager or applicable Division.
	LRDP Mitigation Measure BIO-1c: Protection of Nesting Birds 1) To the extent feasible, removal of any tree and/or other vegetation suitable for bird nesting shall not occur during the bird breeding season of February 1 to August 15. If tree removal must occur during the bird breeding season, all trees to be removed shall be surveyed by a qualified biologist to verify the presence or absence of nesting raptors or other birds. Pre-removal surveys shall be conducted within 15 days prior to the start of work and shall be submitted to UC LBNL for review and approval. 2) For projects that do not involve tree removal but involve construction during the bird nesting season noted above, pre-construction nesting bird surveys shall be conducted on project sites that contain nesting habitat or are in proximity of suitable nesting habitat, 15 days prior to start of work. The area to be surveyed will be determined by a qualified biologist.	<u>Campus Planning/Facilities Division and/or Applicable Division</u> Include mitigation information in VMP work plans and Facilities Division procedures specifications. The VMP Project Manager will demonstrate understanding of requirements and will contact Campus Planning, as necessary, for guidance on mitigation requirements.	Prior to applicable VMP activities/projects when work would occur during the applicable breeding seasons.	Considered complete upon receipt of biologist's final report and/or written confirmation by Campus Planning at end of applicable breeding season.

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Environmental Impact	Mitigation Measures	Monitoring Responsibility/Action Notes	Mitigation Timing	Monitoring Schedule/ Reporting Procedure
EIR Section 4.3 Biological Resources (cont.)				
LRDP Impact BIO-1 (cont.)	3) If the pre-removal or pre-construction nesting bird survey indicates the potential presence of nesting raptors or other birds, the biologist shall determine an appropriately sized buffer around the nest in which no work would be allowed until the young have successfully fledged. The size of the nest buffer will be determined by the biologist, and will be based to a large extent on the nesting species and its sensitivity to disturbance. In general, buffer sizes of 200 feet for raptors and 50 feet for other birds should suffice to prevent noise, vibration, and visual disturbance to birds nesting in the urban environment, but these buffers may be increased or decreased, as appropriate, in consultation with CDFW, depending on the bird species and the level of disturbance anticipated near the nest.			
	LRDP Mitigation Measure BIO-1d: Protection of Roosting Bats 1) To the extent feasible, removal of any tree or other structure suitable for bat maternity roosting shall not occur during the bat breeding season of March 1 to July 31. Prior to project construction activities during the breeding season, a qualified bat biologist shall conduct a pre-construction survey for roosting bats in suitable trees to be removed or pruned and suitable structures to be demolished within the work area and within a 50-foot radius of the work area. If no roosting bats are found, no further action is required.	<u>Campus Planning/Facilities Division and/or Applicable Division</u> Include mitigation information in VMP work plans and Facilities Division procedures specifications.	Prior to applicable VMP activities/projects when work would occur during the applicable breeding seasons.	Considered complete upon receipt of biologist's final report and/or written confirmation by Campus Planning at end of applicable breeding season.
	2) If a non-maternal roost of bats is found in a tree or structure to be removed or demolished as part of project construction, the individuals shall be safely evicted, under the direction of a qualified bat biologist, by opening the roosting area to allow airflow through the cavity. Removal or demolition should occur no sooner than at least two nights after the initial minor site modification (to alter airflow). This action allows bats to leave during darkness, thus increasing their chance of finding new roosts with a minimum of disturbance. Departure of the bats from the construction area shall be confirmed with a follow-up survey by a qualified bat biologist prior to start of construction. 3) If active maternity roosts are found in trees or structures that will be removed or demolished as part of project construction, tree removal or structure demolition shall commence and be completed before maternity roosting colonies form (generally before March 1), or those activities shall not commence until after the young are flying (generally after July 31). Active maternity roosts shall not be disturbed between March 1 and July 31.	The VMP Project Manager will demonstrate understanding of requirements and will contact Campus Planning, as necessary, for guidance on mitigation requirements.		

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Environmental Impact	Mitigation Measures	Monitoring Responsibility/Action Notes	Mitigation Timing	Monitoring Schedule/ Reporting Procedure
EIR Section 4.3 Biological Resources (cont.)				
LRDP Impact BIO-2: Implementation of the LBNL 2025 LRDP and the related LBNL VMP would have a substantial adverse effect on riparian habitat or other sensitive natural communities identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	**LRDP Mitigation Measure BIO-2: Habitat Restoration and Monitoring** 1) UC LBNL and its contractors shall avoid or minimize impacts on sensitive natural communities and potentially jurisdictional aquatic habitat, and project design shall minimize the extent of temporary and permanent loss of such areas. For any unavoidable permanent loss of sensitive habitat, including riparian, stream, or wetland areas, UC LBNL shall prepare and submit to the USACE for verification an aquatic resources delineation report.	<u>Campus Planning/Facilities Division and/or Applicable Division</u> Engage a qualified wetlands biologist or other qualified professional to ensure plans for applicable VMP activities/ projects avoid or minimize impacts on sensitive natural communities and jurisdictional aquatic habitat. Prepare and submit an aquatic resources delineation report to USACE for verification of any unavoidable permanent loss of jurisdictional wetlands.	During VMP project work plan and review process and environmental review and approval process.	Considered complete upon documentation in project file at project approval.
	2) For unavoidable temporary or permanent impacts, UC LBNL shall prepare a Habitat Restoration and Monitoring Plan. The Plan shall address the restoration of jurisdictional waters or protected habitats through the replacement or enhancement of a comparable amount of habitat area (i.e., a minimum 1:1 ratio based on acreage or linear feet of channel) at an agency-approved location within the same or nearby watershed. Ephemeral channels or sensitive habitats temporarily impacted by construction-related activity shall be replanted or reseeded with native plants from the watershed, under guidance from a qualified biologist.	Where applicable, engage a qualified biologist to prepare Habitat Restoration and Monitoring Plan in coordination with UC LBNL and relevant regulatory and overseeing agencies for review and approval.	During VMP project work plan and review process and environmental review and approval process.	Considered complete upon approval by applicable regulatory agencies of the Habitat Restoration and Monitoring Plan and submittal of documentation to these agencies of successful implementation of Plan and completion of monitoring for the agency-prescribed period.
	3) The Habitat Restoration and Monitoring Plan shall include protocols for replanting of native vegetation removed prior to or during construction, and management and monitoring of the plants for a five-year period to ensure replanting success. The plan shall specify monitoring and performance criteria for the species planted, invasive species control criteria, as well as the best time of year for seeding to occur, pursuant to requirements of permits granted for the project. Appropriate performance standards may include, but are not limited to, a 75-percent survival rate of restoration plantings; absence of invasive plant species; and a viable, self-sustaining creek or wetland system at the end of the five-year monitoring period. The plan shall include adaptive management strategies if success criteria are not being met. The Habitat Restoration and Monitoring Plan shall include interim thresholds for replanting success and alternative management approaches, including weed control, supplementary watering, or additional replanting to undertake if performance thresholds are not met.	Include protocols for replanting of native vegetation in Habitat Restoration and Monitoring Plan as specified in the mitigation measure.		

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Environmental Impact	Mitigation Measures	Monitoring Responsibility/Action Notes	Mitigation Timing	Monitoring Schedule/ Reporting Procedure
EIR Section 4.3 Biological Resources (cont.)				
LRDP Impact BIO-3: Implementation of the LBNL 2025 LRDP and the related LBNL VMP would have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	Implement LRDP Mitigation Measure BIO-2, above.	See monitoring responsibility/ action notes for LRDP Mitigation Measure BIO-2, above.	See mitigation timing for LRDP Mitigation Measure BIO-2, above.	See monitoring schedule/ reporting procedure for LRDP Mitigation Measure BIO-2, above.
LRDP Impact CUM-BIO-1: Implementation of the LBNL 2025 LRDP and the related LBNL VMP would result in cumulatively considerable impacts on biological resources, in combination with past, present, and reasonably foreseeable future projects in the vicinity of Berkeley Lab.	Implement LRDP Mitigation Measures BIO-1a, BIO-1b, BIO-1c, BIO-1d, and BIO-2, above.	See monitoring responsibility/ action notes for LRDP Mitigation Measures BIO-1 and BIO-2, above.	See mitigation timing for LRDP Mitigation Measures BIO-1 and BIO-2, above.	See monitoring schedule/ reporting procedures for LRDP Mitigation Measures BIO-1 and BIO-2, above.
EIR Section 4.11 Noise and Vibration				
LRDP Impact NOI-2: Certain vegetation management activities under the VMP during the LBNL 2025 LRDP timeframe would generate a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance as applied as the relevant threshold of significance, or applicable standards of other agencies.	Implement LRDP Mitigation Measures NOI-1a and NOI-1b, as follows: **LRDP Mitigation Measure NOI-1a: Construction Noise Control Measures** To reduce daytime noise impacts due to construction/demolition activities under the proposed 2025 LRDP, UC LBNL shall require construction/ demolition contractors to implement noise reduction measures designed specifically to address the project being undertaken. Measures to be implemented shall include, but not be limited to, the following: • Construction/demolition activities shall be limited, to the maximum extent feasible, to a schedule that minimizes disruption to uses surrounding the project site. Accordingly, such activities would be limited to the hours designated in the Berkeley Community Noise Ordinance, as applicable to the location of the project (e.g., when in the vicinity of city of Berkeley noise-sensitive receptors). This would eliminate or substantially reduce noise impacts that might otherwise occur during nighttime hours and on days when construction noise might be more disturbing.	<u>Campus Planning/Facilities Division and/or Applicable Division</u> Include required noise control standards in work plans/ contracts for applicable VMP activities/projects and include implementation of noise control measures in project planning, as applicable.	During contract specifications preparation prior to VMP project bidding process. Planning prior to final project approval. Monitoring during VMP project activities/projects.	Considered complete upon documentation of compliance in project file for each applicable VMP project under the 2025 LRDP.

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Environmental Impact	Mitigation Measures	Monitoring Responsibility/Action Notes	Mitigation Timing	Monitoring Schedule/ Reporting Procedure
EIR Section 4.11 Noise and Vibration (cont.)				
LRDP Impact NOI-2 (cont.)	• To the maximum extent feasible, equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically-attenuating shields or shrouds). • Stationary noise sources shall be located as far from off-site sensitive receptors as possible. • At locations where noise may affect neighboring residential uses (e.g., within 500 feet), UC LBNL will develop a comprehensive construction noise control specification to implement construction/ demolition noise controls, such as noise attenuation barriers, siting of construction laydown and vehicle staging areas, and community outreach, as appropriate to specific projects. The specification will include such information as general provisions, definitions, submittal requirements, construction limitations, requirements for noise and vibration monitoring and control plans, and noise control materials and methods. This document will be modified as appropriate for a particular construction project and included within the construction specification. • At the discretion of UC LBNL environmental planners and community relations officials, and prior to the start of excavation, UC LBNL shall conduct outreach–including but not limited to written notification–to all potentially impacted neighbors within 500 feet of the construction site. Notification shall indicate the estimated duration and completion date of the construction, construction hours, and necessary contact information for potential complaints about construction noise (i.e., name, telephone number, and address of UC LBNL's chief community relations official). The notice shall indicate that noise complaints resulting from construction can be directed to the contact person identified in the notice.			
	LRDP Mitigation Measure NOI-1b: Construction Noise Control Measures for Large/Long-term Projects For particularly large, long-term, or noisy construction and demolition projects—such as a multi-year demolition project like the Bevatron, or construction of large, multi-story research/office buildings—or projects expected to involve substantial nighttime work, and where such projects might occur within the vicinity of off-site noise-sensitive receptors, UC LBNL subject matter experts shall assess whether additional noise measures should be considered. In such cases, UC LBNL shall engage a qualified noise consultant to determine whether, based on the location of the site and the activities proposed, construction/demolition noise levels could approach the property-line receiving noise standards of the City of Berkeley (as applicable). If the consultant determines that the standards will not be exceeded, no further mitigation is required.	<u>Campus Planning/Facilities Division and/or Applicable Division</u> Engage a qualified noise consultant, consistent with this mitigation measure to determine if additional noise controls are needed or not. Where applicable, implement the consultant's recommended noise reduction measures and, if recommended, conduct noise monitoring.	During planning of applicable VMP activities/projects.	Considered complete upon documentation of compliance in project file for each applicable VMP activity/project.

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Environmental Impact	Mitigation Measures	Monitoring Responsibility/Action Notes	Mitigation Timing	Monitoring Schedule/ Reporting Procedure
EIR Section 4.11 Noise and Vibration (cont.)				
LRDP Impact NOI-2 (cont.)	If the standards would be reached or exceeded absent further mitigation, one or more of the following additional measures shall be required, as determined necessary by the noise consultant. • Stationary noise sources shall be muffled and enclosed within temporary sheds, shall incorporate insulation barriers, or shall employ other measures to the extent feasible. • Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever feasible. • Noise from idling trucks shall be kept to a minimum. To the maximum extent feasible, no trucks shall be permitted to idle for more than 10 minutes if waiting within 100 feet of a residential area. • If determined necessary by the noise consultant, a set of site-specific noise attenuation measures shall be developed before construction begins. Possible measures might include erection of temporary noise barriers around the construction site, use of noise control blankets on structures being erected to reduce noise emission, and monitoring the effectiveness of noise attenuation measures by taking noise measurements. • If determined necessary by the noise consultant, at least two weeks prior to the start of excavation, UC LBNL shall conduct outreach–including but not limited to written notification–to all potentially impacted neighbors within 500 feet of the construction site. The notification shall indicate the estimated duration and completion date of the construction, construction hours, and necessary contact information for potential complaints about construction noise (i.e., name, telephone number, and address of UC LBNL's chief community relations official). The notice shall indicate that noise complaints resulting from construction can be directed to the contact person identified in the notice. The name and phone number of the contact person also shall be posted outside the Berkeley Lab boundaries.			

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Environmental Impact	Mitigation Measures	Monitoring Responsibility/Action Notes	Mitigation Timing	Monitoring Schedule/ Reporting Procedure
EIR Section 4.11 Noise and Vibration (cont.)				
LRDP Impact CUM-NOI-1: Implementation of the LBNL 2025 LRDP and the related VMP, combined with other concurrent construction projects in the project area, could generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance applied as the relevant threshold of significance, or applicable standards of other agencies.	Implement LRDP Mitigation Measures NOI-1a and NOI-1b, above.	See monitoring responsibility/ action notes for LRDP Mitigation Measures NOI-1a and NOI-1b, above.	See mitigation timing for LRDP Mitigation Measures NOI-1a and NOI-1b, above.	See monitoring schedule/ reporting procedures for LRDP Mitigation Measures NOI-1a and NOI-1b, above.

TABLE NOTES:

Applicable Divisions	are those LBNL organizational divisions (other than the Facilities Division) that may carry out projects or activities requiring mitigation pursuant to this MMRP.
Campus Planning	is the Operations Division unit that includes the Site & Environmental Planning group, which oversees Berkeley Lab's CEQA and MMRP programs as well as a variety of environmental issues, including those affecting campus aesthetic, biological, and cultural resources.
Facilities Division	includes the Facilities Engineering Department and provides a wide variety of campus infrastructure and operational design, maintenance, and compliance services, and it maintains the Lab's Master Specifications for design and construction.
Project Managers	oversee design and execution of all aspects of Berkeley Lab projects and are typically part of the PIMD and Facilities divisions.