

APPENDIX 4.3

Biological Resources

Local Plans and Policies

LBNL is a federal facility operated by the University of California and conducting work within the University's mission on land that is owned or controlled by The Regents of the University of California. As such LBNL is generally exempted by the federal and state constitutions from compliance with local land use regulations, including general plans and zoning. Therefore, local plans and policies of the cities of Berkeley and Oakland related to biological resources are not directly relevant to the lab projects and activities. This section summarizes relevant policies contained in both the Berkeley and Oakland General Plans, as well as other City of Berkeley and City of Oakland documents relevant to biological resources at LBNL.

Berkeley General Plan

City of Berkeley General Plan policies pertaining to natural resources that are relevant to implementation of the LBNL LRDP include the following:

Policy EM-28 Creeks and Watershed Management: Whenever feasible, daylight creeks by removing culverts, underground pipes, and obstructions to fish and animal migrations.

Policy EM-28 Natural Habitat: Restore and protect valuable, significant, or unique natural habitat areas.

Policy EM-30 Native Plants: Use native tree and plant species to enhance ecological richness.

Policy EM-31 Landscaping: Encourage drought-resistant, rodent-resistant, and fire resistant plants to reduce water use, prevent soil erosion, improve habitat, reduce fire danger, and minimize degradation of natural resources.

Policy EM-32 Inter-jurisdictional Coordination: Encourage efforts by neighboring jurisdictions and agencies, such as the East Bay Regional Parks District, University of California, Berkeley, and the Lawrence Berkeley National Laboratory, to restore historic coastal grasslands in the hill area to provide natural habitat and reduce fire danger in the area.

City of Berkeley Coast Live Oak Removal Ordinance

The Berkeley City Council adopted ordinances declaring a moratorium on the removal of coast live oak trees within the city (Ordinance No. 6321-N.S., as amended by Ordinance No. 6462-N.S. and Ordinance No. 6550-N.S.). These ordinances prohibit the removal of any single-stem coast

live oak with a circumference of 18 inches or greater, as measured at a distance of 4 feet above ground level, and the removal of any multi-stemmed coast live oak with an aggregate circumference of 26 inches or greater. Exceptions may be made if the tree poses a danger to people and/or property and the only reasonable solution is tree removal.

City of Berkeley Creek Ordinance

Title 17, Chapter 17.08 of the Berkeley Municipal Code, Preservation and Restoration of Natural Watercourses, establishes policies on the issuance of permits for culverting open creeks, the rehabilitation and restoration of open waterways, and the management of watersheds. The ordinance defines a creek as a "...naturally occurring swale or depression, which carries water either seasonally or year-round, and which appears as an aboveground creek on the Geological Survey Map and in the 1975 Berkeley creeks map prepared by the planning department to show the approximate undergrounding of the watercourse." The ordinance prohibits the filling, obliteration, obstruction, and interference with any natural watercourse in Berkeley, as well as the construction of structures within 30 feet of the centerline of a creek without a permit. The ordinance also prohibits the culverting or riprapping of a creek without a permit issued by the city engineer. No permit will be issued without the submittal of plans, and any work carried out under the permit must be supervised by the city engineer or his designee. A permit will not be granted if less destructive solutions are feasible. Such alternatives include clearing of debris within the creek channel; restoration of the creek to re-establish natural stream morphology, geometry, or channel roughness; removal of structures when feasible; and bank stabilization using bioengineering techniques.

Oakland General Plan

The Open Space, Conservation, and Recreation (OSCAR) Element of the City of Oakland General Plan was adopted in 1996. OSCAR policies pertaining to natural resources with relevance to implementation of the LBNL LRDP include the following:

Policy CO-6.1: Protect Oakland's remaining natural creek segments by retaining creek vegetation, maintaining creek setbacks, and controlling bank erosion. Design future flood control projects to preserve the natural character of creeks and incorporate provisions for creeks or divert them into concrete channels.

Policy CO-7.1: Protect native plant communities, especially oak woodlands, redwood forests, native perennial grasslands, and riparian woodlands, from the potential adverse impacts of

development. Manage development in a way which prevents or mitigates adverse impacts to these communities.

Policy CO-7.3: Make every effort to maintain the wooded or forested character of tree-covered lots when development occurs on such lots.

Policy CO-7.4: Discourage the removal of large trees on already developed sites unless removal is required for biological, public safety, or public works reasons.

Policy CO-8.1: Work with federal, state, and regional agencies on an ongoing basis to determine mitigation measures for development which could potentially impact wetlands. Strongly discourage development with unmitigatable adverse impacts.

Policy CO-9.1: Protect rare, endangered, and threatened species by conserving and enhancing their habitat and requiring mitigation of potential adverse impacts when development occurs within habitat areas.

Policy CO-11.1: Protect wildlife from the hazards of urbanization, including loss of habitat and predation by domestic animals.

Policy CO-11.2: Protect and enhance migratory corridors for wildlife. Where such corridors are privately owned, require new development to retain native habitat or take other measures which help sustain local wildlife population and migratory patterns.

The following policy is from the Land Use and Transportation Element:

Policy W3.3: Native plant communities, wildlife habitats, and sensitive habitats should be protected and enhanced.

City of Oakland Tree Ordinance

Title 12, Chapter 12.36 of the Oakland Municipal Code provides protection to coast live oaks measuring 4 inches in diameter (12 inches in circumference) and to any other tree measuring 9 inches in diameter (28 inches in circumference), when measured at a height of 4 feet above grade. Protected trees may not be removed without a tree removal permit. Permits may be issued with conditions of approval that include, but are not limited to, the protection of any other protected trees in the vicinity of the tree(s) to be removed and replacement plantings. Replacement plantings are not required for the removal of non-native species when trees are removed for the benefit of remaining trees or when there is insufficient space for a mature tree of the species being

considered. Replacement trees must be trees appropriate to the area: coast live oak, coast redwood, madrone, California buckeye, or California bay.

City of Oakland Creek Ordinance

Title 13, Chapter 13.16, City of Oakland Creek Protection, Storm Water Management, and Discharge Control Ordinance, provides a high level of protection for creeks within Oakland's city limits. The ordinance defines a creek as "...a watercourse that is a naturally occurring swale or depression, or engineered channel that carries fresh or estuarine water either seasonally or yeararound." In addition, under the ordinance definition, a creek channel must be hydrologically connected to a waterway above or below a project site, and the channel must exhibit a defined bed and bank. A creek protection permit is required whenever work is to be undertaken on a creekside property. The ordinance prohibits, among other things, the discharge of concentrated stormwater or other modification of the natural flow of water in a watercourse, development within a watercourse or within 20 feet from the top of the bank, and the deposition or removal of any material within a watercourse without a permit. Depending on the type of activity being permitted, conditions of approval may include the submittal of a creek protection plan and/or a hydrology report, revegetation with native plant species, the use of soil bioengineering techniques for bank stabilization and erosion control, and implementation of stormwater quality protection measures. The following activities, among others, are typically not permitted:

- Removal of riparian vegetation
- Culverting or undergrounding of a creek
- Moving the location of a creek
- Structures spanning a creek
- Riprap, rock gabions, or concrete within the bed or on the creek banks

The City of Oakland Creek Protection Ordinance was adopted in 1997. The ordinance is currently undergoing a clarification and revision process, and new guidelines for implementation are being developed.