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August 07, 2018

The Honorable Holly J. Mitchell
Chair, Joint Legislative Budget Committee
1020 N Street, Room 553
Sacramento, California 95814

Dear Senator Mitchell:

Pursuant to Section 67504 of the Education Code, enclosed are summaries of the *UC San Diego (La Jolla Campus) 2018 Draft Long Range Development Plan (LRDP) and Draft LRDP Environmental Impact Report (EIR)* for review by the Joint Legislative Budget Committee. Complete versions of these documents are available at the following websites:

UCSD 2018 LRDP: http://lrdp.ucsd.edu/campus/proposed/index.html

UCSD 2018 LRDP EIR: http://lrdp.ucsd.edu/campus/review/draft.html

If you have any questions regarding this report, Associate Vice President David Alcocer would be pleased to speak with you. He can be reached by telephone at (510) 987-9113, or by email at david.alcocer@ucop.edu.

Yours very truly,

Janet Napolitano
President

Enclosure

cc: Senate Budget and Fiscal Review
The Honorable Anthony J. Portantino, Chair
Senate Budget and Fiscal Review Subcommittee #1
(Attn: Ms. Anita Lee)
(Attn: Ms. Cheryl Black)

The Honorable Kevin McCarty, Chair
Assembly Budget Subcommittee #2
(Attn: Mr. Mark Martin)
(Attn: Mrs. Katie Sperla)
Ms. Jennifer Troia, Joint Legislative Budget Committee
Mr. Danny Alvarez, Secretary of the Senate
Ms. Tina McGee, Legislative Analyst's Office
Ms. Amy Leach, Office of the Chief Clerk of the Assembly
Ms. Diane Boyer-Vine, Legislative Counsel Bureau
Mr. E. Dotson Wilson, Chief Clerk of the Assembly
Mr. Jeff Bell, Department of Finance
Mr. Jack Zwald, Department of Finance
Mr. Chris Ferguson, Department of Finance
Ms. Tina McGee, Legislative Analyst's Office
Mr. Mac Taylor, Legislative Analyst's Office
Mr. Jason Constantouros, Legislative Analyst's Office
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Chief Policy Advisor and Executive Director Jenny Kao
Chief of Staff to the Chief Financial Officer Oren Gabriel

University of California San Diego

2018 Long Range Development Plan

La Jolla Campus

Draft Environmental Impact Report

SCH No. 2016111019

July 2018




VOLUME I

UNIVERSITY OF CALIFORNIA SAN DIEGO
2018 LONG RANGE DEVELOPMENT PLAN
LA JOLLA CAMPUS, CALIFORNIA

VOLUME I
DRAFT ENVIRONMENTAL IMPACT REPORT

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Executive Summary

This chapter is an executive summary of the Environmental Impact Report (EIR) for the University of California San Diego (UC San Diego) 2018 Long Range Development Plan (LRDP), prepared in compliance with the California Environmental Quality Act (CEQA).

This chapter highlights the major areas of importance in the environmental analysis for the proposed 2018 LRDP, as required by CEQA Guidelines Section 15123. It also provides a brief description of the 2018 LRDP, project objectives, alternatives to the 2018 LRDP, and areas of controversy/issues raised by agencies and interested parties known to the UC San Diego at the time of the Draft EIR preparation. In addition, this chapter provides tables summarizing: (1) the potential environmental impacts that would occur as the result of implementation of the proposed 2018 LRDP; (2) the level of impact significance before mitigation; (3) the recommended mitigation measures that would avoid or reduce significant environmental impacts; and (4) the level of impact significance after mitigation measures are implemented. A table is also provided which compares the anticipated impacts of the proposed 2018 LRDP with those of each project alternative.

OVERVIEW

As required by CEQA, this EIR (1) assesses the potentially significant direct, indirect, and cumulative environmental effects of UC San Diego's proposed 2018 LRDP; (2) identifies potential feasible means of avoiding or substantially lessening significant adverse impacts; and (3) evaluates a reasonable range of feasible alternatives to the proposed 2018 LRDP, including the required No Project Alternative. The Regents of the University of California (The Regents) is the "lead agency" for the project evaluated in this EIR and as such has the principal responsibility for approving the proposed 2018 LRDP.

Pursuant to CEQA Guidelines, this EIR is a Program EIR that evaluates the effects of the entire 2018 LRDP at a program level. This EIR will be used by The Regents to evaluate the environmental implications of implementing the 2018 LRDP. Once certified, this EIR would also be used to tier subsequent environmental analyses for future UC San Diego development projects through the plan's horizon year.

PROJECT DESCRIPTION

The UC requires that each campus in the UC system maintain an LRDP to guide capital project development and review processes. The process of periodically updating an LRDP provides The Regents an opportunity to make certain that physical plans remain solidly based on academic, research, and public service program goals. The current LRDP for the UC San Diego campus was adopted in 2004 and the campus is proposing to update the 2004 LRDP, the focus of analysis in this report.

UC San Diego's La Jolla campus is located adjacent to the communities of La Jolla and University City, within the northwest portion of the City of San Diego. UC San Diego's campus encompasses 1,158 acres and is composed of three distinct, but contiguous, geographical areas: the Scripps Institution of Oceanography (SIO) portion of the campus (178.7 acres), the West Campus (634.8 acres), and the East Campus (265.7 acres). Several non-continuous properties are also included in the campus LRDP, including the La Jolla del Sol housing complex (12 acres), surrounding beach properties consisting of the Audrey Geisel House and an adjacent coastal canyon and beachfront parcel (25.8 acres), the Gliderport, the Torrey Pines Center, and recently acquired Torrey Pines Court (41 acres).

The on-campus population at UC San Diego consists of students, academic employees (faculty), and other staff employees (including general administrative and healthcare staff). Students make up the largest group, followed by staff and faculty. As of 2015-2016, UC San Diego is the 4th largest campus in terms of student enrollment (i.e., 32,850 students) in the UC system and occupies 15.7 million GSF with a total campus population of 48,850.

UC San Diego's Strategic Plan provides a visionary basis for the academic, public service, and development aspirations identified in the 2018 LRDP. The LRDP provides a policy framework to guide the physical development of the campus based on academic, administrative, and support programs through the 2035–36 academic year (i.e., planning horizon). Minor changes to the land use categories in the 2004 LRDP are proposed to facilitate the projected growth on campus, described below.

Near-term development of the campus will continue under the 2004 LRDP until the 2018 LRDP is approved. This near-term development is projected to add an additional 3.3 million GSF of development (for a total of 19 million GSF) and increase student housing by 5,530 beds over the next several years.

Under the 2018 LRDP, the campus projects a need to accommodate a total headcount of 42,400 enrolled students, as well as 2,200 faculty and 21,000 staff/researchers, for a total campus population of 65,600. To accommodate these population projections, the campus anticipates approximately 8.9 million GSF of net new development, including 3.3 million GSF for approximately 8,900 additional (net new) housing beds, through the 2018 LRDP planning horizon.

The campus buildings growth under the 2018 LRDP would occur primarily through new construction and targeted redevelopment, including 1 million GSF of building removals as some existing structures underutilize the site and/or are obsolete and beyond their useful life. With this growth, campus student housing is projected to grow from 14,520 beds (as of the 2015–16 academic year) to 28,940 beds and overall campus space would increase from

19 million GSF to approximately 27.8 million GSF, including the near-term development under the 2004 LRDP.

As part of the LRDP approval process established by The Regents, the campus must analyze the environmental impacts of implementing the 2018 LRDP in compliance with Section 21080.09 of the CEQA. To comply with this requirement, the campus is preparing this EIR to address the long-term consequences of implementing the 2018 LRDP.

PROJECT OBJECTIVES

The fundamental purposes of the 2018 LRDP for the UC San Diego campus are to:

- Bring UC San Diego's long range land use planning up to date in light of changes in the economic, academic, and environmental landscape;
- Equip the campus with a broad, coherent, and adaptable policy framework to achieve UC San Diego's program goals with regard to the UC research and teaching mission; and
- Provide a basis for future decisions concerning land uses and capital projects for the La Jolla campus.

The key project objectives associated with the purposes of the proposed 2018 LRDP are described below:

1. Accommodate projected growth by providing approximately 8.9 million GSF of new facilities needed to expand academic and non-academic programs in support of the UC mission and its commitment to excellence in teaching, research and public service;
2. Establish two new undergraduate colleges within the larger University setting in accordance with UC San Diego's unique college system that provides undergraduate students with personalized academic services and close-knit intellectual and social environment outside of their academic department;
3. Locate buildings on campus in accordance with the character, scale, and design goals expressed in the 1989 Master Plan, Neighborhood Planning Studies, previous LRDPs, and the LRDP's guiding principles and its required elements;
4. Site future development to allow for the co-location and strengthening of campus programs, facilities, and activities, to continue the exchange of ideas between academics and scientists, and to create synergy between shared resources and services;
5. Activate and enliven the campus through strategic mixed-use and transit-oriented development, improved public spaces, expanded campus services, and additional on-campus housing to facilitate a living-learning campus environment;
6. Complete the redevelopment of the University Center on West Campus as a walkable "town center" featuring a mix of uses, urban densities, and pedestrian-activated ground floors, with connections to adjacent neighborhoods and the future light-rail transit station at Pepper Canyon;

7. Provide housing for approximately 65 percent of the eligible student population by constructing new higher-density units and replacing aging low-density units while taking into account affordability, financial feasibility, physical site constraints, and campus character;
8. Develop new faculty and staff housing to provide affordable options and remain competitive with peer academic institutions in attracting top talent;
9. Expand and enhance research and training facilities and core services at UC Health in support of the region's only academic medical center;
10. Expand multi-modal connections and Transportation Demand Management (TDM) programs to optimize trip reduction benefits of the light rail transit system, reduce automobile commuting, and coordinate with regional transportation programs;
11. Minimize environmental impacts through sustainable development practices related to campus planning, building siting, design, construction and operations; and
12. Recognize the importance of campus open spaces that form a balance with the built environment and continue to be responsible stewards of campus natural and biological resources.

IMPACT SUMMARY

This EIR contains a discussion of the potential environmental effects from implementation of the proposed 2018 LRDP, including information related to existing site conditions, analyses of the type and magnitude of individual and cumulative environmental impacts, and feasible mitigation measures that could reduce or avoid environmental impacts. In accordance with Appendices F and G of the CEQA Guidelines, the potential environmental effects of the proposed 2018 LRDP are analyzed for the following environmental issue areas:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural and Tribal Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities, Service Systems, and Energy

Tables ES-1 and ES-2, presented at the end of this section, provide a summary of the direct and cumulative environmental impacts that could result from implementation of the 2018 LRDP and, in the case of direct impacts, feasible mitigation measures that could reduce or avoid the project's environmental impacts. For each environmental issue, Table ES-1 identifies the significance of the impact before mitigation, applicable mitigation measures, and the level of impact significance after the implementation of the mitigation measures. Table ES-2 outlines whether there are cumulative impacts and if the 2018 LRDP's contribution to those cumulative impacts would or would not be considerable after the implementation of feasible mitigation measures.

ALTERNATIVES TO THE 2018 LRDP

The following alternatives were analyzed in detail in the EIR and compared to the proposed 2018 LRDP. The objective of the alternatives analysis is to consider a reasonable range of potentially feasible alternatives to foster informed decision-making and public participation. The alternatives to the proposed 2018 LRDP include:

- **No Project Alternative (2004 LRDP).** Under this alternative, the 2004 LRDP would remain as the applicable planning document for UC San Diego and, therefore, the No Project Alternative (2004 LRDP) assumes that development on the campus could continue to occur, but it would be in accordance with the 2004 LRDP, which has met many of its growth parameters in terms of GSF and student enrollment.
- **Redevelopment/Infill Only Alternative.** This alternative would be the same as the proposed 2018 LRDP (e.g., it would still provide 8.9 million GSF of net new development similar to the proposed 2018 LRDP) with the exception that it would only include redevelopment and infill projects on developed land. Thus, no undeveloped land would be directly impacted under this alternative, which would lessen or avoid impacts to biological resources as well as cultural and tribal cultural resources. However, this would reduce developable acreage in varying locations, notably in SIO (where roughly half of the potential developable land area consists of undeveloped property). Some development would likely occur at a higher density to compensate for the loss of developable area; thus, buildings may have increased height and less open space between, within and around them. This alternative could also limit co-location of research facilities and expansion of existing facilities (e.g., Birch Aquarium at SIO). In addition, the proposed housing (notably faculty and staff housing) at SIO would not be developed as planned under the proposed 2018 LRDP as such actions would be constrained to developed land.
- **Increased Housing Alternative.** This alternative would be the same as the proposed 2018 LRDP with the exception that it would involve providing an additional 3,917 beds (equivalent to an additional 1.7 million GSF) to accommodate all new faculty and staff housing needs anticipated under the proposed 2018 LRDP. By eliminating the demand for off-campus housing, this alternative would reduce the proposed 2018 LRDP's growth inducing impact and, would result in a greater trip reduction (i.e., an approximate 5,000-ADT reduction or 15 percent ADT reduction) as new faculty and staff would no longer need to commute to the campus. Thus, this alternative would include more development than the proposed 2018 LRDP (e.g., 10.6 million GSF compared to the 8.9 million GSF provided by the proposed 2018 LRDP), but would still occur within the same planned footprint as the proposed 2018 LRDP, which could result in denser campus development. In addition, while the population growth would be the same as the proposed 2018 LRDP, the children of the faculty and staff would now be living on campus rather than in off-campus housing, which would create a slightly more intensive demand on parks and recreational facilities on campus. Also, the increased development and more faculty, staff, and their children living on campus than off campus would result in a slightly more intensive demand on fire, police protection, utilities, service systems, and energy compared to the proposed 2018 LRDP.

- **Reduced Project Alternative.** This alternative would be the same as the proposed 2018 LRDP with the exception that it would not allow the campus to build any more housing beds for future students, faculty or staff beyond what is being built in the near-term to help address the development intensity impacts associated with the proposed 2018 LRDP. Under this alternative, the campus would construct 5.6 million GSF of development compared to the 8.9 million GSF required under the proposed 2018 LRDP (thus, providing approximately 37 percent less GSF than the proposed 2018 LRDP). The development would occur within the same footprint as the proposed 2018 LRDP. Also, there would be the same student enrollment levels and academic uses, but instead of reducing ADTs by housing future students, faculty and staff on campus, the ADT would increase (by nearly 60 percent) because the 8,900 new housing beds anticipated under the proposed 2018 LRDP would not be constructed on campus. Instead the associated students, faculty and staff would reside off campus and commute from other areas in the region rather than living on campus.

Detailed descriptions and an analysis of potential impacts of each alternative compared to the proposed 2018 LRDP's impacts are presented in Chapter 5.0, as well as a discussion of the project alternatives considered but rejected from further consideration. Table ES-3 provides a summary comparison of the alternatives with the proposed 2018 LRDP with the purpose of highlighting whether each alternative would result in a similar, greater, or lesser impact, than the proposed 2018 LRDP with regard to potentially significant impacts. The environmentally superior alternative would be the No Project Alternative (2004 LRDP) which would avoid all environmental impacts associated with implementation of the 2018 LRDP but would also not achieve many of the project objectives.

Excluding the No Project Alternative (2004 LRDP), the Redevelopment/Infill Only Alternative would be the environmentally superior alternative because it would result in less impacts than the proposed 2018 LRDP related to: aesthetics, biological resources, and cultural and tribal cultural resources (with the exception of historical resources, which would be a similar significant and unavoidable impact as the proposed 2018 LRDP, and paleontological resources, which would be a similar less than significant impact after mitigation). Furthermore, the Redevelopment/Infill Only Alternative would not result in any greater impacts than the proposed 2018 LRDP (just similar or less impacts). However, given the restriction of new development to currently developed areas of the campus, there are a number of key project objectives the Redevelopment/Infill Only Alternative would only be able to partially meet.

ISSUES RAISED BY AGENCIES AND THE PUBLIC

This EIR addresses issues associated with the proposed 2018 LRDP that are known to the lead agency at the time of the preparation of this EIR and/or were raised by agencies or interested parties during the NOP review period and open houses. Not all the issues or concerns raised are necessarily covered by CEQA; only those topics that are required by the CEQA Guidelines are addressed herein and others may need to be addressed outside of the CEQA process. The issues raised include:

Aesthetics

- Address future development setbacks from the street and buffer with trees/ greenery
- Assess heights and setbacks from with regard to surrounding community, and aesthetics along North Torrey Pines Road
- Consider value of using natives in landscaping (noted benefits of water use, cost of maintenance, sustainability, educational value)
- Address impacts of removing trees throughout campus
- Consider encouraging taller or higher buildings on campus to provide more office space
- Consider keeping neighboring development at three stories or less

Air Quality

- Evaluate air pollution and dust from construction that impacts neighbors

Biological Resources

- Address the biological resource setting, impact analysis, and mitigation
- Preserve older stands of trees

Cultural and Tribal Cultural Resources

- Consider maintaining historic value of the Gliderport
- Evaluate preservation of remaining historic buildings, including Camp Matthews buildings and SIO cottages
- Consider adding interpretive signage near Camp Matthews buildings
- Consult with Kumeyaay tribe on Native American matters
- Address AB 52 and SB 18, and prepare a cultural resource assessment

Greenhouse Gas Emissions

- Address the City's Climate Action Plan
- Consider using rooftops and other space for organic food production

Hazards/Hazardous Materials

- Address hazards associated with contaminated sites

Hydrology/Water Quality

- Dramatically increase water recycling and reuse
- Avoid excessive paving due to its effects on stormwater

Noise

- Assess construction noise impacts on neighbors
- Assess general traffic noise impacts on neighbors

Land Use and Planning

- Review and reference the City's 2016 University Community Plan Amendment

Population/Housing

- Address 2018 LRDP's impact on property values of neighboring homes
- Address the Blackhorse Farms housing lease and the fact that campus growth projections are higher than at the time of the lease
- Discuss future project impacts with Blackhorse Farms homeowners

Public Services

- Address potential lack of study space when student population increases
- Assess impacts to fire and paramedic services response times and the need for new fire station
- Address potential impacts to surrounding public schools from campus population increases and additional family housing, such as on Doyle Elementary School

Recreation

- Discussion continuation of full use of Gliderport, including providing a solution to conflicts between campus construction staging, other temporary uses and Gliderport activities
- Discuss reducing or discouraging student parking at the City portion of the Gliderport

Transportation/Traffic

- Address traffic along North Torrey Pines Road
- Locate temporary access for construction workers to another area of campus other than North Torrey Pines Road
- Consider adding on-campus mixed use (particularly grocery store/market) to reduce student car trips off campus
- Address the prohibition of cars for students, in particular in-coming freshman
- Prepare a traffic impact study that assesses impacts to state highway system
- Note that a Caltrans ROW encroachment permit is required for work within the state right-of-way
- Emphasize multi-modal connections when considering improvements to the local circulation system and as traffic mitigation

- Evaluate project's relationship to Regional Plan, Smart Growth, specific transit services, Transportation Demand Management strategies, and other SANDAG resources

Utilities, Service Systems and Energy

- Consider dramatically increasing water recycling and reuse
- Enforce waste reduction and recycling for dining halls and other university facilities
- Address water and sewer infrastructure capacity
- Address impacts on water supply

Project Alternatives

- Consider a reduced density alternative
- Consider providing remote or online education as tools to accommodate growth

Appendix A of this EIR includes all of the comment letters and testimony received during the circulation of the NOP in November 2016 and at the 2017 open houses.

Table ES-1
Environmental Impacts and Mitigation Measures

ISSUE: 3.1 AESTHETICS IMPACTS		Significance Before Mitigation	Significance After Mitigation
Scenic Vistas:	**Implementation of the 2018 LRDP could potentially have a substantial adverse effect on a scenic vista.**	**PS**	**LS**
Mitigation Measure(s)			
Aes-1: For projects with potential to adversely affect a scenic vista or sensitive views denoted by the Visual Sensitive Zone or a KVP, UC San Diego staff, in coordination with the campus Design Review Board, Campus Architect, and other relevant campus committees, shall implement the following design requirements at the project planning and design phases to reduce impacts to scenic vistas and sensitive views on the campus and the surrounding area, as applicable: i. Future development in the vicinity of KVP 1 in the SIO Upper Mesa shall allow for a westward view corridor through the site as recommended in the SIO Planning Study; ii. Buildings shall be sited to blend or step with the slope or natural topography; iii. Roof-mounted equipment shall be on the ground or mounted so that views are not obstructed; iv. Building mass and/or proportion shall be altered to reduce obstruction of the sensitive landscape or scenic vista; v. Exterior treatments and/or colors shall be selected that reduce visibility or contrast with surrounding visual character so as not to detract from sensitive vistas; vi. Viewing areas and/or windows within or through the potential development shall be provided to enhance viewing opportunities; and vii. Landscape shall be designed consistent with the physical setting and in a manner that reduces obstructions of scenic vistas. To determine if an impact will be less than significant with incorporation of the above measures, a site-specific visual analysis shall be conducted at the planning and design phases by the project design team. The analysis shall include visual aids such as a topographic cross-section, architectural rendering, or a massing model photo simulation(s) prepared to illustrate the extent to which the proposed building(s) would obstruct the scenic view. Topographic cross-sections that include the height of the proposed building(s) and proposed grading are commonly used to illustrate the extent of potential line-of-sight obstructions resulting from the future development of a project.		
Visual Character and Quality:	**Implementation of the 2018 LRDP could potentially substantially degrade the existing visual character or quality of the project site and its surroundings.**	**PS**	**LS**
Mitigation Measure(s)			

S = Significant; LS = Less than Significant; PS = Potential Significant; SU = Significant/Unavoidable

Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

Aes-2: Prior to project design approval, any proposed project that would have the potential to substantially degrade the visual character of the campus shall undergo design review by the UC San Diego Design Review Board (DRB) to ensure that the design is consistent with the visual landscape and/or the character of the surrounding development. The design review process shall evaluate and incorporate, where appropriate, factors including but not necessarily limited to: building mass and form, building proportion, roof profile, architectural detail and fenestration, texture, color, type and quality of building materials, and landscaping.

Aes-3: Projects within SIO and the PDZ shall be reviewed by the DRB, Campus Architect and other relevant campus committees at the conceptual design stage to ensure projects are designed to incorporate pedestrian scale features. Projects in SIO and the PDZ shall include the following design features along the facades of proposed structures facing the public realm, as applicable:

i. Pedestrian-oriented architectural details and scale;
ii. Proportional building mass, form, and roof profiles;
iii. Building setbacks, fenestration, and visual reliefs;
iv. Use of high-quality building materials;
v. Welcoming and wayfinding elements;
vi. Pedestrian connections and pathways;
vii. Pedestrian furniture and signage;
viii. Landscape buffers; and
ix. Limited use of walls or pedestrian barriers

Lighting and Glare	**Implementation of the 2018 LRDP would have the potential to create new sources of substantial light or glare on campus or in the immediate vicinity, which could adversely affect daytime and nighttime views in this area.**	**PS**	**LS**
Mitigation Measure(s)			
Aes-4: Projects that include development or alteration of a parking area, parking structure, or road that could result in the prolonged or excessive repetitive exposure of residential areas or other light sensitive uses, to glare from vehicle headlights shall be designed to shield direct glare from such uses. If shielding cannot be implemented through design modifications during the conceptual design phase, then walls, landscaping, or other glare barriers shall be provided as appropriate to shield direct glare into the nearby light sensitive uses.			

S = Significant; LS = Less than Significant; PS = Potential Significant; SU = Significant/Unavoidable

Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

Consistency with Applicable Air Quality Plan	**Implementation of the 2018 LRDP would not conflict with or obstruct implementation of the applicable air quality plan.**	**LS**	**LS**
Mitigation Measure(s)			
No mitigation is required.			
Consistency with Air Quality Standards	**Implementation of the 2018 LRDP due to construction and operational activities could violate any air quality standard or contribute substantially to an existing or projected air quality violation.**	**PS**	**SU**
Mitigation Measure(s)			

Construction Emissions

AQ-2A: Implement Measures to Control PM Emissions Generated by Construction Activities. UC San Diego shall require by contract specification that contractors implement the following measures during all phases of construction of individual projects developed under the proposed 2018 LRDP:

- Water the grading areas a minimum of twice daily to minimize fugitive dust;
- Stabilize graded areas as quickly as possible to minimize fugitive dust;
- Apply chemical stabilizer or pave the last 100 feet of internal travel path within the construction site prior to public road entry;
- Install wheel washers adjacent to a paved apron prior to vehicle entry on public roads;
- Remove any visible track-out into traveled public streets via regular street sweeping;
- Wet wash the construction access point at the end of each workday if any vehicle travel on unpaved surfaces has occurred;
- Provide sufficient perimeter erosion control to prevent washout of silty material onto public roads;
- Cover haul trucks or maintain at least 12 inches of freeboard to reduce blow-off during hauling;
- Suspend all soil disturbance and travel on unpaved surfaces if winds exceed 25 mph;
- Cover/water onsite stockpiles of excavated material;
- Enforce a 15-mph speed limit on unpaved surfaces;
- On dry days, dirt and debris spilled onto paved surfaces shall be swept up immediately to reduce re-suspension of particulate matter

S = Significant; LS = Less than Significant; PS = Potential Significant; SU = Significant/Unavoidable

Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

caused by vehicle movement. Approach routes to construction sites shall be cleaned daily of construction-related dirt in dry weather;

- Disturbed areas shall be hydroseeded, landscaped, or developed as quickly as possible to reduce dust generation; and
- Limit the daily grading volumes/area to extent feasible.

AQ-2B: Minimize Off-Road Construction Equipment Emissions. UC San Diego shall require by contract specification that the construction contractor use off-road construction diesel engines that meet, at a minimum, the Tier 4 interim California Emissions Standards, unless such an engine is not available for a particular item of equipment. Tier 3 engines will be allowed on a project-by-project basis when the contractor has documented that no Tier 4 interim equipment or emissions equivalent retrofit equipment is available or feasible for the project.

Although UC San Diego's extensive Transportation Demand Management (TDM) system and trip reductions associated with the future Mid-Coast trolley service would minimize vehicle trips, there are no feasible mitigation measures to address operational mobile-source PM_{10} emissions because UC San Diego has no ability to control brake and tire emissions produced by vehicles accessing the campus. Therefore, long-term operational impacts would remain significant and unavoidable.

Mitigation Measure AQ-2B would reduce construction-related NO_x emissions, to the extent feasible, but cannot be assured on all construction projects because UC San Diego has no control over whether every contractor can locate and secure Tier 4 interim equipment. Because full compliance with Mitigation Measure AQ-2B cannot be assured, the proposed 2018 LRDP's significant impact due to exceedance of the thresholds would remain significant and unavoidable.

Cumulative Increase in Criteria Pollutant Emissions	**Implementation of the 2018 LRDP could result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard.**	**PS**	**SU**

Mitigation Measure(s)

Although UC San Diego's extensive TDM system and trip reductions associated with the future Mid-Coast trolley service would minimize vehicle trips, there are no feasible mitigation measures to address operational mobile-source PM_{10} emissions because UC San Diego has no ability to control brake and tire emissions produced by vehicles accessing the campus. Therefore, long-term operational impacts would remain cumulatively significant and unavoidable.

Mitigation Measure AQ-2B would reduce construction-related NO**x** emissions, to the extent feasible, but cannot be assured on all construction projects because UC San Diego has no control over whether every contractor can locate and secure Tier 4 interim equipment. Because full compliance with Mitigation Measure AQ-2B cannot be assured, the proposed 2018 LRDP's significant impact due to exceedance of the thresholds would remain cumulatively significant and unavoidable.

S = Significant; LS = Less than Significant; PS = Potential Significant; SU = Significant/Unavoidable

Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

CO Hotspots	**Implementation of the 2018 LRDP would not expose sensitive receptors to substantial pollutant concentrations resulting in a CO hotspot.**	**LS**	**LS**
Mitigation Measure(s)			
No mitigation is required.			
Toxic Air Contaminant Emissions	**Implementation of the 2018 LRDP could expose sensitive receptors to toxic air contaminant emissions.**	**PS**	**SU**
Mitigation Measure(s)			
Mitigation Measure AQ-2B would reduce construction-related toxic air contaminant emissions, to the extent feasible, but cannot be assured on all construction projects because UC San Diego has no control over whether every contractor can locate and secure and use Tier 4 interim equipment. Besides continuing to implement its extensive TDM system and trip reductions anticipated when the Mid-Coast trolley service arrives to campus in 2021, UC San Diego does not have an ability to directly control mobile source emissions. Therefore, the construction and operational impacts exposing sensitive receptors to toxic air contaminants would remain significant and unavoidable.			
ISSUE: 3.3 BIOLOGICAL RESOURCES		**Significance Before Mitigation**	**Significance After Mitigation**
Candidate, Sensitive, or Special-Status Plant Species	**Implementation of the proposed 2018 LRDP could have potential direct impacts on candidate, sensitive, or special-status species.**	**PS**	**LS**
Mitigation Measure(s)			
Bio-1A: During the project planning phase, updated sensitive plant surveys shall be conducted for all project sites that support potential habitat for sensitive plant species and that have not been surveyed within the preceding year. Sensitive plant surveys shall be conducted by a qualified biologist retained by UC San Diego during the appropriate season for detecting the species as part of the project design phase. If site-specific surveys are not required because a survey was conducted less than one year ago, impact assessment and minimization/mitigation requirements shall be based on the most recent available survey. If sensitive plant species are observed, they shall be avoided if possible. If impacts cannot be avoided, the impacts to those species must be evaluated and any significant impacts shall be mitigated through conservation of habitat that supports the impacted species in accordance with Mitigation Measure Bio-3C.			

S = Significant; LS = Less than Significant; PS = Potential Significant; SU = Significant/Unavoidable

Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

Bio-1B: If additional barrel cactus are observed during updated sensitive plant surveys conducted under Mitigation Measure Bio-1A, mitigation for impacts to San Diego barrel cactus shall occur through preservation of habitat on UC San Diego that supports this species and salvage and translocation of any impacted San Diego barrel cactus within the project site(s) to appropriate locations within the Ecological Reserve.			
Candidate, Sensitive, or Special-Status Animal Species	**Implementation of the proposed 2018 LRDP could have direct and indirect impacts on the coastal California gnatcatcher, least Bell's vireo, and other sensitive animal species, as well as bird nests.**	**PS**	**LS**
Mitigation Measure(s)			
Coastal California Gnatcatcher **Bio-2A:** During the project planning process, a project site shall be reviewed to determine if it would directly impact Diegan coastal sage scrub or indirectly impact the costal California gnatcatcher by being located within 500 feet of Diegan coastal sage scrub based on a review of Figures 3.3-1 through 3.3-3. If the potential for impacts exists, three surveys shall be conducted seven to 10 days apart in accordance with the current USFWS protocol for NCCP-enrolled agencies to determine presence/absence of the species. Surveys may be conducted either on a project-specific basis, or on a programmatic level in portions of UC San Diego likely to be subject to disturbance in the relatively near future. The permittee must submit a 15-day pre-survey notification to the USFWS Carlsbad Permits Division, including an explanation that three surveys shall be conducted and specifying that UC San Diego shall mitigate all impacts to Diegan coastal sage scrub at a 2:1 ratio through on-site preservation in the Ecological Reserve, regardless of whether the impacted area is occupied by coastal California gnatcatcher. Documentation of the survey results shall be provided to USFWS in accordance with current protocol survey guidelines. **Bio-2B:** If Diegan coastal sage scrub habitat within a project site is determined to be occupied by coastal California gnatcatcher based on surveys conducted in accordance with Mitigation Measure Bio-2A, UC San Diego shall contact USFWS to discuss project permitting options, which could be accomplished through Section 7 or Section 10(a) of the FESA. Impacts to the coastal California gnatcatcher and gnatcatcher-occupied habitat shall be avoided/mitigated by the following measures (additional measures may be required as a result of the consultation/permitting process): i. Diegan coastal sage scrub occupied by coastal California gnatcatcher shall not be removed during the coastal California gnatcatcher breeding season (February 15 through August 31). If coastal California gnatcatchers are not present, then only mitigation for the habitat loss shall be required as described in mitigation measures Bio-3C and habitat clearing can occur at any time of the year following the survey. ii. If construction activities commence during the coastal California gnatcatcher breeding season (February 15 through August 31) and coastal California gnatcatchers are found within 500 feet of the grading limits based on the surveys required in Mitigation Measure Bio-2A, a qualified acoustician shall be consulted to identify appropriate measures for reducing construction noise levels to 60 dB(A) hourly L_{eq} or ambient, whichever is higher, during the part of the breeding season when active nests are most likely. If noise reduction measures are determined necessary, the construction contractor shall implement the measures and the acoustician shall confirm, through field measurements, that the attenuation measures are effective at maintaining noise at or below the specified threshold.		

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Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

iii. Impacts to Diegan coastal sage scrub (regardless of coastal California gnatcatcher occupancy) shall be mitigated at a 2:1 ratio by preserving areas in the Ecological Reserve as described in Mitigation Measure Bio-3C.

Least Bell's Vireo

Bio-2C: During the project planning process, when a project is proposed that shall directly or indirectly impact least Bell's vireo-suitable habitat (southern willow scrub and mulefat scrub), surveys to determine presence or absence of the species shall be required. If occupied least Bell's vireo habitat could be directly or indirectly impacted by a project, it shall be avoided to the maximum extent feasible. If impacts cannot be avoided, UC San Diego shall contact USFWS and CDFW to discuss project permitting options and the following requirements shall apply:

i. Occupied least Bell's vireo habitat will not be removed during the vireo breeding season (March 15 through September 15). If vireos are not present, then only mitigation for the habitat loss shall be required as described in Mitigation Measure Bio-3E.

ii. If construction activities commence during the least Bell's vireo breeding season (March 15 through September 15) and least Bell's vireo are found within 500 feet of the grading limits based on the survey to determine presence/absence described above, a qualified acoustician shall be consulted to identify appropriate measures for reducing construction noise levels to 60 dB(A) hourly L_{EQ} or ambient, whichever is higher, during the part of the breeding season when active nests are most likely. If noise reduction measures are determined necessary, the construction contractor shall implement the measures and the acoustician shall confirm, through field measurements, that the attenuation measures are effective at maintaining noise at or below the specified threshold.

iii. Impacts to wetland habitats (regardless of least Bell's vireo occupancy) shall be mitigated at a 3:1 ratio through one or more of the following: creation, restoration, enhancement, and/or preservation of habitat in the Ecological Reserve, or through purchase of credits at an approved wetland mitigation bank, as described under Mitigation Measure Bio-3D.

Nesting Raptors and Birds

Bio-2D: If project construction is scheduled to commence during the raptor nesting season (generally January 15 through July 31), pre-construction surveys for raptor nests shall be performed by a qualified biologist within 500 feet of project construction activities no more than seven days prior to the initiation of construction. Construction activities within 500 feet of an identified active raptor nest shall not commence during the breeding season until a qualified biologist determines that the nest is no longer active and any young birds in the area have adequately fledged and are no longer reliant on the nest. Trees with inactive nests can be removed outside the breeding season without causing an impact.

Bio-2E: No grubbing, trimming, or clearing of vegetation (including brush management) from project sites shall occur during the general avian breeding season (February 15 through August 31). If grubbing, trimming, or clearing cannot feasibly occur outside of the general avian breeding season, a qualified biologist shall perform a pre-construction nesting bird survey no more than seven days prior to the commencement of vegetation clearing or grubbing to determine if active bird nests are present in the affected areas. Should an active migratory bird nest be located, the project biologist shall direct vegetation clearing away from the nest until it has been determined by the project biologist that the young have fledged, or the nest has failed. If there are no nesting birds (includes nest building or other breeding/nesting behavior) within the survey area, clearing, grubbing, and grading shall be

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Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

allowed to proceed.			
Riparian Habitat and Other Sensitive Natural Communities	**Implementation of the proposed 2018 LRDP could have direct and indirect impacts on southern willow scrub, Diegan coastal sage scrub (including disturbed), and non-native grassland (including disturbed).**	**PS**	**LS**
Mitigation Measure(s)			
Planning and Design Measures **Bio-3A:** For projects for which the site is mapped as supporting a sensitive vegetation type and vegetation mapping has not been conducted on the site in the preceding five years, updated vegetation mapping shall be conducted by a qualified biologist as part of the project planning and environmental review process. **Bio-3B:** During the project planning phase, site plans shall be designed to minimize impacts to sensitive vegetation communities, to the extent feasible. Such minimization efforts include the following: i. Use of retaining walls to minimize grading impacts, to the extent that this is possible from an engineering and visual impact standpoint. ii. Locations, widths, design features, and construction methods of any new trails or overlook areas shall carefully consider how to avoid and minimize impacts to sensitive vegetation communities (e.g., routing trails along canyon rims rather than through canyons, cantilevered overlook platforms, using bridges to avoid wetland vegetation communities, clearing trails by hand). iii. To the extent practicable, a 50-foot-wide buffer shall be provided between permanent development and wetland vegetation. **Direct Impacts** *Upland Habitats* **Bio-3C:** Impacts to sensitive upland vegetation communities shall be mitigated through the preservation of habitat, habitat creation, and/or enhancement, or combination thereof on the UC San Diego campus. Upland impacts can be mitigated for off UC San Diego through habitat acquisition and preservation or purchase of credits from an approved conservation bank. Mitigation for impacts to upland communities shall be in-kind, except for non-native grassland, which can be mitigated either in-kind or out-of-kind with a native vegetation community. *Riparian Habitats* **Bio-3D:** Mitigation required for wetland habitat impacts shall be accomplished at a ratio of 3:1 and must incorporate a minimum 1:1 creation component to ensure no net-loss of these communities. The exception shall be where 1:1 creation is not required by the wetland permitting authorities and the no net loss of functions and values directive is met through other types of approved mitigation. Wetland mitigation shall occur through creation,		

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Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

restoration, enhancement, and/or preservation, or combination thereof, or through purchase of credits at an approved wetland mitigation bank.

i. A detailed wetland restoration plan shall be prepared for all projects requiring wetland mitigation. The plan shall include, at a minimum, the proposed location of the mitigation area(s), site preparation, plant palette, success criteria, monitoring requirements, and other details of the habitat restoration effort, and be prepared by a qualified biologist. The plan shall be subject to approval by the corresponding regulatory permitting agencies (i.e., ACOE, RWQCB, CDFW, and CCC [for projects within the Coastal Zone]) as part of the wetland permitting process.

ii. UC San Diego may choose to mitigate wetland impacts on a project-by-project basis, or create an advance wetland mitigation area, whereby wetland habitat is created or enhanced in advance of anticipated impacts. Mitigation activities shall be undertaken only where the habitat would be considered to be viable in the long-term, given the other surrounding uses planned by the proposed 2018 LRDP. Any Open Space Preserve areas that are used as wetland habitat mitigation shall be redesignated as Ecological Reserve and be included in long-term management conducted pursuant to UC San Diego's HMP.

Indirect Impacts

Construction Measures

Bio-3E: Prior to construction, a pre-construction meeting shall be held between the Project Manager, qualified Biologist, Environmental Planner, and construction crews to ensure crews are informed of the sensitivity of habitats in the Open Space Preserve and adjacent undeveloped lands.

i. Prior to commencement of clearing or grading activities, fencing (e.g., silt fencing, orange construction fencing, and/or chain-link fencing as determined by campus planning) shall be installed around the approved limits of disturbance to prevent errant disturbance of sensitive biological resources by construction vehicles or personnel. Installation of fencing to demarcate the approved limits of disturbance shall be verified by the project biologist prior to initiation of clearing or grading activities. All movement of construction contractors, including ingress and egress of equipment and personnel, shall be limited to designated construction zones. This fencing shall be removed upon completion of all construction activities.

ii. No temporary storage or stockpiling of construction materials shall be allowed within the Ecological Reserve or Restoration Lands, and all staging areas for equipment and materials shall be located at least 50 feet from the edge of these areas. This prohibition shall not be applied to facilities that are planned to traverse Ecological Reserve or Restoration Lands (e.g., trails and utilities). Staging areas and construction sites in proximity to the Ecological Reserve or Restoration Lands shall be kept free of trash, refuse, and other waste; no waste dirt, rubble, or trash shall be deposited in these areas.

iii. Equipment to extinguish small brush fires (e.g., from trucks or other vehicles) shall be present on site during all phases of project construction activities, along with personnel trained in the use of such equipment. Smoking shall be prohibited in construction areas adjacent to flammable vegetation.

iv. Temporary night lighting shall not be used during construction unless determined to be absolutely necessary. If night lighting is necessary, lights shall be directed away from sensitive vegetation communities and shielded to minimize temporary lighting of the surrounding habitat.

Bio- 3F: During project construction, a biological monitor shall visit the site weekly during site preparation and rough grading activities, and monthly

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Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

following completion of rough grading, until construction is completed. During site visits, the monitor shall be responsible for ensuring that the construction activities and staging areas are restricted to the approved limits of work, and protective fencing is adequately maintained. The monitor shall be responsible for ensuring that the contractor adheres to the other provisions described above. The monitor, in cooperation with the on-site construction manager, shall have the authority to halt construction activities in the event that these provisions are not met. Monitors shall submit regular reports to the UC San Diego Campus Planning Office during construction documenting the implementation of construction measures Bio-3E.

Operational Measures

Bio 3G: The following best management practices shall be implemented for each project that would remove or install tree species on UC San Diego that may be used as host trees by SHBs

i. Trees to be planted on UC San Diego shall be obtained from a reliable source and be free of sign of SHB infestation.

ii. An education program for on-site workers responsible for tree installation shall be implemented. The program shall describe the signs of SHB infestation (e.g., sugary exudate on trunks or branches, and SHB entry/exit holes [approximately the size of the tip of a ballpoint pen]).

iii. Sign of SHB infestation shall be reported to CDFW and UC Riverside's Eskalen Lab (www.eskalenlab.ucr.edu) by the UC San Diego Project Manager and/or the project biologist.

iv. Trees with sign of SHB infestation shall be pruned or removed, as appropriate, and potential host materials shall be chipped to less than one inch prior to composting on site or transfer to a landfill.

v. Equipment that is used to prune or remove SHB-infected trees shall be disinfected prior to additional use.

vi. Biologists monitoring mitigation sites shall be knowledgeable regarding sign of SHB infestation.

Bio-3H: Areas selectively thinned for brush management shall be monitored by a qualified biologist for establishment of invasive plant species pursuant to the HMP.

Bio-3I: Landscaping adjacent to the Open Space Preserve shall comply with the following requirements to prevent the introduction of invasive species:

i. Appropriate landscaping shall be selected based on the vegetation communities within the portion of the Open Space Preserve adjacent to the project. In areas supporting native (or disturbed native) vegetation communities, revegetation of impacted slopes shall be with appropriate native plant materials. In particular, where the Open Space Preserve is disturbed by construction of the Campus Meander, installation of native plants such as lemonadeberry, toyon, deerweed (*Acmispon glaber*), monkey flower (*Diplacus aurantiacus*), and sages (*Salvia* spp.) are recommended to make the Open Space Preserve more impenetrable to people while reinforcing the boundaries and edges of the Campus Meander (The Harrison Studio 1997).

ii. Only non-invasive plant species shall be included in the landscape plans for projects (species not listed on the California Invasive Plant Inventory prepared by the Cal-IPC [2006]). A qualified landscape architect and/or qualified biologist shall review landscape plant palettes prior to implementation to ensure that no invasive species are included.

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Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

Bio-3J: Permanent lighting within or adjacent to the Ecological Reserve and Restoration Lands shall be selectively placed, shielded, and directed to minimize potential impacts to sensitive species. In addition, lighting from buildings or parking lots/structures abutting the Ecological Reserve shall be shielded and/or screened by vegetation to the extent feasible.

Bio- 3K: The following best management practices shall be implemented by the campus along areas that interface with the Open Space Preserve to address runoff/water quality impacts from landscaping:

i. Integrated Pest Management principles (University of California Integrated Pest Management Program) shall be implemented to the extent practicable for areas in and adjacent to the Open Space Preserve for chemical pesticides, herbicides, and fertilizers. Examples of such measures may include, but are not limited to, alternative weed/pest control measures (e.g., removal by hand) and proper application techniques (e.g., conformance to manufacturer specifications and legal requirements).

ii. Irrigation for project landscaping shall be minimized and controlled in areas in and adjacent to the Open Space Preserve through efforts such as designing irrigation systems to match landscaping water needs, using sensor devices to prevent irrigation during and after precipitation, and using automatic flow reducers/shut-off valves that are triggered by a decrease in water pressure from broken sprinkler heads or pipes.

Bio-3L: Signage and fencing shall be installed along the edge of the Ecological Reserve to protect sensitive habitats from human disturbance with the following techniques:

i. Projects adjacent to the Ecological Reserve shall install open space signage along the boundary of the reserve, indicating the presence of lands supporting sensitive habitat.

ii. Projects adjacent to the Ecological Reserve shall install fencing or other visual/physical barriers (such as appropriate landscaping) to discourage human encroachment into the Open Space Preserve in areas where trespass is likely to occur (gradual slopes; areas of low, open vegetation; areas of previous disturbance, etc.).

Bio-3M: Maintenance of storm water facilities shall be conducted in a manner to minimize impacts to adjacent sensitive habitats. Maintenance will be overseen by a qualified Biologist and occur outside the general bird breeding season which extends from February 15 through August 31.

Wetlands	**Implementation of the proposed 2018 LRDP could have adverse direct and indirect impacts to federal jurisdictional wetlands.**	**PS**	**LS**
Mitigation Measure(s)			
Bio-4A: During the project planning process, if a project has vegetation mapped as potential wetlands or the project site contains or is located immediately adjacent to a natural drainage course, a qualified biologist shall conduct a jurisdictional delineation. The jurisdictional delineation shall use current regulatory guidance to identify the presence of potential regulated waters and wetlands in the project vicinity. If there is potential for the project to adversely affect wetlands or waters, impacts shall be avoided and minimized during project design process, to the extent practicable, and unavoidable impacts shall be mitigated through implementation of mitigation measure Bio-3D, and conformance with applicable wetland permit conditions.			

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Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

ISSUE: 3.4 CULTURAL AND TRIBAL CULTURAL RESOURCES		Significance Before Mitigation	Significance After Mitigation
Built Environment Resources	**Implementation of the 2018 LRDP could result in a significant impact if alteration of historical resources would cause substantial adverse change in their significance.**	**PS**	**SU**
Mitigation Measure(s)			
Standard Mitigation Measures **Cul-1A:** Compliance with the Standards. When a development project is initiated, UC San Diego shall first determine, as early as possible in the planning process, whether the project may have a substantial adverse impact on a historical resource (individual resource, district, or landscape) based on information contained in this EIR and its appendices. If the project may result in impacts to an individual historical resource, then UC San Diego shall retain the services of a qualified historic preservation professional. The UC San Diego-retained historic preservation professional shall be tasked with determining whether the project meets the Secretary of the Interior's Standards for Rehabilitation, as defined in 36 CFR Part 67.7 as described below. i. The consultant shall evaluate the project and prepare a memorandum or equivalent level of documentation indicating whether the project meets the Standards. If the project meets the Standards, then any potential impacts are presumed fully mitigated per the CEQA Guidelines, and no additional action is necessary. ii. If a project involving historical resources does not meet the Standards, then UC San Diego shall attempt to bring the project into compliance with the Standards. UC San Diego shall consider means of reducing the impact to a level of less than significant by redesigning or modifying the project, or undertaking other measures deemed feasible and prudent to meet the Standards as noted below in Cul-1B. **Cul-1B:** Project Redesign. For projects involving historical resources that do not comply with the Standards, UC San Diego shall consider means of reducing the impact to a level of less than significant by redesigning the project or undertaking other measures deemed feasible and prudent. i. If the project can be redesigned to meet the Standards, then any potential impacts are presumed to be fully mitigated per the CEQA Guidelines, and no additional action is necessary. ii. If the project cannot be redesigned to meet the Standards, then UC San Diego shall apply the appropriate series of mitigation measures depending on the resource type to lessen the impact(s) to the historical resource; however, impacts would be considered significant and unavoidable. **Measures for Non-Compliance with Standards** The following measures shall be applied to all projects that result in the alteration of historic resource(s) that cannot be mitigated through Standards		

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Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

compliance described in Cul-1A and Cul-1Bi:

Cul-1C: HABS or HALS Documentation. If a project undertaken as part of implementation of the 2018 LRDP would result in the unavoidable demolition or alteration of a historical resource that cannot be mitigated through Standards compliance, then UC San Diego shall prepare archival HABS or HALS Level I documentation, as appropriate, for any historical resource that would be impacted by the project. Documentation of the existing conditions shall be undertaken prior to the commencement of construction. If requested, copies of HABS/HALS documentation shall be provided to the La Jolla Historical Society, the San Diego History Center, and other interested parties to be identified.

HABS or HALS Level I documentation may consist of the following:

- architectural and historical narrative;
- archival drawings;
- if adequate archival drawings are not available, measured drawings would be produced; and
- large-format photography.

Cul-1D: Relocation. If a project would result in the unavoidable demolition or removal of a historical resource, then UC San Diego shall consider relocating the historical resource to an appropriate receiver site, if any such site is available. When considering relocation, UC San Diego shall take into account the importance of setting to the significance of the historical resource; whether the proposed receiver site is compatible with the character and significance of the historical resource being considered for relocation; and whether the resource will retain its eligibility for the CRHR subsequent to its relocation. For historic district contributors, the receiver site should fall within the district boundaries to retain the associative qualities between the contributor and the district within which it is located.

Supplemental Measures

Supplemental mitigation measures (Cul-1E, Cul-1F, and Cul-1G) shall be applied in addition to the aforementioned standard mitigation programs for individual projects, as deemed appropriate, depending on the extent of the project impacts. The need for additional mitigation measures shall be determined on a project-specific basis and may require input from a qualified historic preservation professional. Nonetheless, implementation of these supplemental mitigation measures would not reduce significant impacts to below a level of significance.

Cul-1E: Interpretation/Commemoration. If a project would substantially alter a historical resource, then UC San Diego shall prepare an interpretive plan for the La Jolla Campus, a district/neighborhood, or a specific building/use focusing on its architectural and developmental legacy. This plan shall be used as part of community outreach efforts and on-campus orientation and tours. Interpretive displays in the public areas of significant buildings, landscapes, and sites shall be considered and installed as deemed appropriate.

Cul-1F: Registration. If a project would substantially alter a historical resource, then UC San Diego shall nominate another historical resource that is eligible for the NRHP or CRHR to the appropriate registration program. UC San Diego shall nominate a resource that shares similar contextual qualities to the resource that is being significantly impacted by the project.

Cul-1G: Salvage. If a project would substantially alter a historical resource, then UC San Diego, through careful methods of deconstruction to avoid damage and loss, shall salvage character-defining features and materials for educational and interpretive purposes on campus, or for reuse in

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Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

new construction on campus in a way that interprets and commemorates their original use and significance. After implementation of the above mitigation measures (i.e., Cul-1A through Cul-1G) to reduce project-level impacts, unless a historic resource is relocated to an appropriate receiver site, demolition would be considered a significant and unavoidable impact.			
Archaeological Resources	**Implementation of the 2018 LRDP could result in impacts to recorded archaeological resources and unrecorded subsurface archaeological resources resulting from land disturbance associated with project development under the proposed 2018 LRDP.**	**PS**	**LS**
Mitigation Measure(s)			
Recorded Archaeological Resources **Cul-2A:** Evaluation. As early as possible in the project planning process, UC San Diego shall define the project's Area of Potential Effects (APE) for archaeological resources based on the extent of ground disturbance and site modification anticipated for the project. If, based on the APE, it is determined that the project may affect a recorded significant or potentially significant archaeological resource, then UC San Diego shall implement the measures listed below. When determining if a project may affect a recorded archaeological resource that has undefined boundaries, a buffer of appropriate size for the resource shall be considered. i. If the resource or a portion thereof has been determined to be significant, UC San Diego shall implement mitigation measure Cul-2B.; ii. If a determination has not been made regarding the resource's significance (or a portion thereof), the locus shall be evaluated by a qualified UC San Diego-retained archaeologist through testing and other appropriate means, who will determine if it qualifies as a unique archaeological resource under the criteria of CEQA Guidelines Section 15064.5. This evaluation shall also determine the extent of the resource, if not already established. The qualified archaeologist shall be responsible for submitting appropriate records to the SCIC at San Diego State University and the San Diego Museum of Man. **Cul-2B:** Avoidance. If a project is anticipated to impact a significant (unique) archaeological resource, UC San Diego shall consult with the qualified archaeologist to consider means of avoiding or reducing ground disturbance within the site boundaries, including minor modifications of building footprint, landscape modification, the placement of protective fill, or other means that will permit avoidance or substantial preservation in place of the resource. If the project cannot avoid ground disturbance within the site boundaries, UC San Diego shall implement mitigation measure Cul-2C. **Cul-2C:** Documentation and Treatment. For a project anticipated to impact a significant (unique) archaeological resource under measure Cul-2A, and where avoidance is not feasible, a qualified archaeologist, in consultation with UC San Diego, shall: i. Prepare a research design and archaeological data recovery plan for the recovery that will capture those categories of data for which the site		

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Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

is significant, and implement the data recovery plan prior to or during development of the site.

ii. If the site contains human remains, as part of the data recovery, consultation with the appropriate parties such as the Medical Examiner, NAHC, Most Likely Descendant (MLD), Kumeyaay, and/or Museum of Man, shall be conducted. Such consultation may include a pre-excavation agreement with the MLD.

iii. Perform appropriate technical analyses, prepare a full written report and file it with the SCIC, and provide for the permanent curation of recovered materials.

iv. If, in the opinion of the qualified archaeologist and in light of the data available, the significance of the site is such that data recovery cannot capture the values that qualify the site for inclusion on the CRHR, the campus shall reconsider project plans in light of the high value of the resource, and implement more substantial modifications to the proposed project that would allow the site to be preserved intact, such as project redesign, placement of fill, or project relocation or abandonment.

Unrecorded Archaeological Resources

Cul-2D: Unknown Resources. For areas between recorded sites ("unknown resources") the following shall apply:

i. *SIO.* If a project is proposed in:

a. a previously developed site, the prior grading plans shall be viewed to determine if prior grading activity has removed two or more feet of soil.

- If two or more feet of soil have been previously removed, no further work is required.
- If not, a qualified archaeologist shall monitor grading activities during the removal of the top two to three feet of soil.
- If the project site is within an area of natural deposition, then a qualified archaeologist shall monitor all grading activities.

b. a previously undeveloped area, a qualified archaeologist shall monitor grading activities during the removal of the top two to three feet of soil on mesas, cliffs, and other flat areas, and during all grading activities within areas of natural deposition.

ii. *West Campus and East Campus*. If the project is proposed:

a. in an area of natural deposition and is adjacent to recorded sites, a qualified archaeologist shall monitor all grading activities.

b. on a mesa top in a previously developed site (including parking lots, utility corridors, eucalyptus grove reserve, recreation fields, ornamental landscaping) and if previously recorded sites are adjacent, the prior grading plans shall be viewed to determine if prior grading activity has removed two or more feet of soil.

- If two or more feet of soil have been previously removed, no further work is required.
- If not, a qualified archaeologist shall monitor grading activities during the removal of the top two to three feet of soil.

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Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

c. on a mesa top in an undeveloped area of the campus, a cultural survey shall be completed by a qualified archaeologist as part of the project-specific CEQA document (i.e., during schematic design).

- If ground visibility is good and the survey is negative, no additional work is required.
- If ground visibility is poor due to high grasses/brush, a CEQA mitigation measure shall be included requiring a subsequent survey after brush removal is completed to confirm survey results. If the second survey is negative, no additional work is required.

d. In all cases, if cultural resources are located during survey/monitoring activities described above, recommendations of the UC San Diego-retained qualified archaeologist shall be implemented in accordance with measures Cul-2A, Cul-2B, and Cul-2C, as described above.

e. In all cases, monitoring will cease if grading reaches underlying formational material (Lindavista [Very Old Paralic], Bay Point [Old Paralic], Scripps, Ardath Shale), regardless of how shallow or in what location it is found.

f. All monitoring shall be conducted in accordance with measure Cul-2E.

Cul-2E: Construction Monitoring.

i. Prior to beginning any work that requires monitoring:

a. a preconstruction meeting shall be held that includes the qualified archaeologist, Project Manager and/or Grading Contractor, and other appropriate personnel so the archaeologist can make comments and/or suggestions concerning the archaeological monitoring program to the Project Manager and/or Grading Contractor.

b. the qualified archaeologist shall (at that meeting or subsequently) submit to the Project Manager a copy of the site/grading plan (reduced to 11 x 17 inches) that identifies areas to be monitored as well as areas that may require delineation of grading limits.

c. the archaeologist shall also coordinate with the Project Manager on the construction schedule to identify when and where monitoring is to begin and including the start date for monitoring.

ii. The qualified archaeologist shall be present during grading/excavation as detailed in Cul-2D and shall document such activity on a standardized form. A record of activity shall be sent to the Environmental Planner and Project Manager each month.

iii. Discoveries

a. Discovery Process – In the event of a discovery, and when requested by the qualified archaeologist, or the Archaeological Principal Investigator (PI) if the archaeological monitor is not qualified as a PI, the Environmental Planner and Project Manager shall be contacted and shall divert, direct, or temporarily halt ground-disturbing activities in the area of discovery to allow for preliminary evaluation of potentially significant archaeological resources. The PI shall also immediately notify Campus Planning of such findings at the time of discovery.

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Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

b. Determination of Significance – The significance of the discovered resources shall be determined by the PI in consultation with Campus Planning and the Native American Community, as appropriate. Campus Planning must concur with the evaluation before grading activities will be allowed to resume. For archaeological resources considered significant by the PI, a Research Design and Data Recovery Program shall be prepared, approved by Campus Planning, and carried out to mitigate impacts before ground-disturbing activities in the area of discovery will be allowed to resume. iv. If human remains are discovered, work shall halt in that area and the procedures detailed in the California Health and Safety Code (Section 7050.5) and the California PRC (Section 5097.98) and will be followed. v. Notification of Completion – The qualified archaeologist shall notify Campus Planning, as appropriate, in writing of the end date of monitoring. vi. Handling and Curation of Significant Artifacts and Letter of Acceptance a. The qualified archaeologist shall ensure that all significant cultural remains collected are cleaned, catalogued, and permanently curated with an appropriate institution; that a letter of acceptance from the curation institution has been submitted to Campus Planning; that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate. b. Curation of artifacts associated with the survey, testing, and/or data recovery for this project shall be completed in consultation with Campus Planning and the Native American representative, as applicable. vii. Final Results Reports (Monitoring and Research Design and Data Recovery Program) – Prior to completion of the project, two copies of the Final Results Report (even if no significant resources were found) and/or evaluation report, if applicable, which describe the results, analysis, and conclusions of the archaeological monitoring program (with appropriate graphics) shall be submitted to Campus Planning for approval. For significant archaeological resources encountered during monitoring, the Research Design and Data Recovery Program shall be included as part of the Final Results Report. viii. Recording Sites with State of California Department of Park and Recreation – The qualified archaeologist shall record (on the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B) any significant or potentially significant resources encountered during the Archaeological Monitoring Program and submit such forms to the SCIC with the Final Results Report.			
Paleontological Resources	**Implementation of the 2018 LRDP would potentially impact significant paleontological resources.**	**PS**	**LS**
Mitigation Measure(s)			
Cul-3: Construction Monitoring. Grading and excavation equating to 1,000 cubic yards or more at depths of 10 feet or greater within highly sensitive geologic formations (i.e., Ardath Shale, Scripps Formation, and Old Paralic Deposits) shall require monitoring by a qualified paleontologist,			

S = Significant; LS = Less than Significant; PS = Potential Significant; SU = Significant/Unavoidable

Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

including the following measures:

i. Prior to beginning any work that requires paleontological monitoring:

   a. a preconstruction meeting shall be held that includes the qualified paleontologist, Construction Manager and/or Grading Contractor, and other appropriate personnel so the qualified paleontologist can make comments and/or suggestions concerning the monitoring program to the Construction Manager and/or Grading Contractor.

   b. the qualified paleontologist shall (at that meeting or subsequently) submit to the Project Manager a copy of the site/grading plan (reduced to 11 x 17 inches) that identifies areas to be monitored as well as areas that may require delineation of grading limits.

   c. the qualified paleontologist shall also coordinate with the Project Manager on the construction schedule to identify when and where monitoring is to begin and to specify the start date for monitoring.

iii. The qualified paleontologist shall document monitoring activity on a standardized form. A record of daily activity shall be sent to Campus Planning and the Project Manager each month.

iii. The qualified paleontologist shall be present initially during all earth-moving activities. After 50 percent of the excavations are complete within the unit, if no significant fossils have been recovered, the level of monitoring may be reduced or suspended entirely at the qualified paleontologist's discretion and in consultation with Campus Planning. These deposits may be included in those identified as Undifferentiated Tertiary Sedimentary deposits in Figure 3.5-1.

iv. Discoveries

   a. Discovery Process – In the event of a discovery, and when requested by the qualified paleontologist, the Project Manager shall be contacted and shall divert, direct, or temporarily halt ground-disturbing activities in the area of discovery to allow for preliminary evaluation of potentially significant paleontological resources. The paleontologist shall also immediately notify Campus Planning of such findings at the time of discovery.

   b. Determination of Significance – The significance of the discovered resources shall be determined by the paleontologist in consultation with the Project Manager and Campus Planning, who must concur with the evaluation before grading activities will be allowed to resume.

   c. Documentation and Treatment of Finds – Based on the scientific value and/or uniqueness of the find, the qualified paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the fossil. If treatment and salvage are required, recommendations shall be consistent with Society of Vertebrate Paleontology 2010 guidelines and currently accepted scientific practice. Work in the affected area may resume once the fossil has been assessed and/or salvaged and a paleontological monitor is present.

v. Notification of Completion – The paleontologist shall notify Campus Planning in writing of the end date of monitoring.

vi. Handling and Curation of Significant Paleontological Specimens and Letter of Acceptance – The paleontologist shall ensure that all

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Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

significant fossils collected are appropriately prepared and permanently curated with an appropriate institution, and that a letter of acceptance from the curation institution has been submitted to Campus Planning. vii. Final Results Reports (Monitoring and Research Design and Recovery Program) – Prior to completion of the project, two copies of the Final Results Report (even if no significant resources were found) and/or evaluation report, if applicable, which describe the results, analysis, and conclusions of the Paleontological Monitoring Program (with appropriate graphics) shall be submitted to Campus Planning for approval.			
Human Remains	**Implementation of the 2018 LRDP could result in disturbance of human remains and of potential human remains in unrecorded subsurface sites.**	**PS**	**LS**
Mitigation Measure(s)			
The identification of human remains during construction activities would occur through implementation of Mitigation Measure Cul-2D and treatments under the California PRC and Health and Safety Code are specified under Mitigation Measure Cul-2E. NO additional mitigation is required.			
Tribal Cultural Resources	**Implementation of the 2018 LRDP could result in disturbance of TCRs.**	**PS**	**LS**
Mitigation Measure(s)			
If development is proposed that would affect identified TCRs, UC San Diego will enter into consultation with Native American tribes pursuant to PRC Section 21084.3.2. Mitigation measures considered under this consultation will include, but will not be limited to, preservation in place, treatment of the resource with appropriate dignity, or other measures requested by the tribe. The consultation would conclude when (1) the parties agree to measures to mitigate or avoid the significant effect, or (2) either UC San Diego or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. If UC San Diego determines that a construction project would have a significant impact on a TCR, the following mitigation measures will be implemented as appropriate: **Cul-5A:** Avoidance and Preservation. If a project is anticipated to cause a substantial adverse change to the significance of a TCR, UC San Diego will consult with the Native American tribe to determine any feasible means of avoiding or reducing any disturbance, including modifications of building footprint, landscape modification, the placement of protective fill, or other means that will permit avoidance or substantial preservation in place of any physical manifestations of the TCR. If the project cannot feasibly avoid disturbance of the TCR, UC San Diego shall implement measure Cul-5B.			

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Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

Cul-5B: Monitoring. Activities with the potential to cause a substantial adverse change to the significance of a TCR shall be monitored by a Native American tribal representative. Where the TCR is also considered a historical resource under CEQA, monitoring by a qualified archaeologist may also be required.

i. Prior to any work that requires monitoring:

a. UC San Diego shall enter into a Tribal Monitoring Agreement with the tribe. This agreement will specify procedures for the proper treatment of any tribal cultural resources and/or Native American human remains discovered during the monitoring. The agreement will also specify the roles and authorities of the Native American monitors and other participants.

b. A preconstruction meeting shall be held that includes the tribal representative, archaeologist, Construction Manager and/or Grading Contractor, and other appropriate personnel so the tribal representative can make comments and/or suggestions concerning the Archaeological Monitoring Program to the Construction Manager and/or Grading Contractor.

ii. Discoveries

a. Discovery Process – In the event of a discovery, the tribal representative, in consultation with the Construction Project Manager, may divert, direct, or temporarily halt ground-disturbing activities in the area of discovery to allow for preliminary evaluation of potentially significant tribal cultural resources. The tribal representative shall also immediately notify Campus Planning of such findings at the time of discovery.

b. Determination of Significance – The significance of the discovered resources shall be determined by the tribal representative in consultation with Campus Planning and the Native American Community, as appropriate. Campus Planning must concur with the evaluation before grading activities will be allowed to resume.

c. If human remains are discovered, work shall halt in that area and the procedures detailed in the California Health and Safety Code (Section 7050.5) and the California PRC (Section 5097.98) and will be followed.

iii. Notification of Completion – The tribal representative shall notify Campus Planning, as appropriate, in writing of the end date of monitoring.

Cul-5C: Repatriation. All materials associated with a TCR that are removed from their original context shall be returned to the tribe. If the materials are to be reburied on UC San Diego property, UC San Diego shall enter into an agreement with the tribe on an appropriate reburial location. The location shall be one that will not be subjected to ground-disturbing activities in the future. The reburial location will be documented as a reinternment location, and the tribe may file it as such with the NAHC, County, City, and the California Historical Resources Information System. The site of any reburial of Native American human remains shall be kept confidential and not be disclosed pursuant to the California Public Records Act, California Government Code §§ 6254.10, 6254(r).

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Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

ISSUE: 3.5 GEOLOGY AND SOILS		Significance Before Mitigation	Significance After Mitigation
Exposure to Seismic-Related Hazards	**Implementation of the 2018 LRDP would not expose people or structures to potential substantial adverse effects of a rupture of a known earthquake fault, strong seismic ground shaking, seismic related ground failure, liquefaction, or landslides.**	**LS**	**LS**
Mitigation Measure(s)			
No mitigation is required.			
Soil Erosion or Topsoil Loss	**Implementation of the 2018 LRDP could result in minimal amounts of increased erosion associated with construction activities.**	**LS**	**LS**
Mitigation Measure(s)			
No mitigation is required.			
Geologic Stability	**Implementation of the 2018 LRDP would not expose people or structures to hazards associated with soil that is unstable or that would become unstable and potentially result in a landslide, lateral spreading, subsidence, liquefaction, or collapse.**	**LS**	**LS**
Mitigation Measure(s)			
No mitigation is required.			
Expansive Soils	**Implementation of the 2018 LRDP would not result in construction located on expansive soils.**	**LS**	**LS**
Mitigation Measure(s)			

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Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

No mitigation is required.			
ISSUE: 3.6 GREENHOUSE GAS EMISSIONS		**Significance Before Mitigation**	**Significance After Mitigation**
Generate GHG Emissions	**Implementation of the 2018 LRDP would generate GHG emissions that may have a significant impact on the environment.**	**PS**	**LS**
Mitigation Measure(s)			
GHG-1A: Decarbonization of the Cogeneration Plant. UC San Diego shall decarbonize of the cogeneration plant after 2032. Decarbonization could take one of the several paths, including electrification, biomass, complete conversion to directed biogas possibly augmented with renewably-produced hydrogen (if available), or new technology. **GHG-1B:** Electric Charging Stations. UC San Diego shall continue to expand and update the on-campus alternative fueling infrastructure by installing electric vehicle chargers by 2035 to be available for campus fleet and public charging. **GHG-1C:** Annual Inventory Updates and Carbon Credit Purchase. UC San Diego shall continue to prepare annual inventory updates to monitor and track campus emissions relative to the trajectory analyzed in this EIR. The annual inventory updates may be completed in conjunction with the annual reporting completed for the TCR and supplemented to include all sources (e.g., solid waste, water, and area sources) consistent with the methodology used to develop the proposed 2018 LRDP inventory and forecasts. If, based on the annual inventory updates, UC San Diego determines that credits are required to achieve a campus-wide emission rate of no more than 2.36 MT CO2e per service population by 2035, they shall be purchased, in an amount sufficient to ensure that campus-wide emissions achieve that target rate, from the California Air Pollution Control Officers Association (CAPCOA) GHG Reduction Exchange program, American Carbon Registry (ACR) Climate Action Reserve (CAR), or other similar carbon credit registry consistent with policy recommendations included within ARB's 2017 Climate Change Scoping Plan Update.			
Consistency with Applicable Plan	**Implementation of the 2018 LRDP would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.**	**LS**	**LS**
Mitigation Measure(s)			
No mitigation is required.			

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Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

ISSUE: 3.7 HAZARDS AND HAZARDOUS MATERIALS		Significance Before Mitigation	Significance After Mitigation
Transport, Use, and Disposal of Hazardous Materials	**Implementation of the 2018 LRDP could result in a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials.**	**LS**	**LS**
Mitigation Measure(s)			
No mitigation is required.			
Accidental Releases	**Implementation of the 2018 LRDP could result in the release of hazardous materials into the environment through reasonably foreseeable accidents.**	**LS**	**LS**
Mitigation Measure(s)			
No mitigation is required.			
Hazards to Nearby Schools	**Implementation of the 2018 LRDP would not result in activities that emit hazardous emissions or handle hazardous materials, substances or waste within one-quarter mile of an existing or proposed school.**	**LS**	**LS**
Mitigation Measure(s)			
No mitigation is required.			
Listed Hazardous Materials Sites	**Implementation of the 2018 LRDP could result in activities located on a listed hazardous materials site creating a significant hazard to the public or environment.**	**PS**	**LS**
Mitigation Measure(s)			

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Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

Haz-4A: During project planning, EH&S shall be consulted in order to identify if any past contamination, USTs, ASTs, or other contamination could potentially occur in areas to be impacted. EH&S will consider the cases on file at the County of San Diego DEH and information on historical uses in the area to be impacted such as old maps and photos. If EH&S determines that there is limited potential for contamination to occur on site, no additional mitigation is necessary. If it is determined that contamination has potential to exist on a project site, Mitigation Measure Haz-4B shall be implemented.

Haz-4B: If contamination exists on a proposed project site and if it poses a risk to human health or the environment, actions shall be taken prior to any construction, pursuant to applicable regulations, to remove or otherwise remediate the contamination through appropriate measures such as natural attenuation, active remediation, and engineering controls. Assessment and remediation activities shall incorporate the following conditions:

i. All assessment and remediation activities shall be conducted in accordance with a work plan that is approved by the regulatory agency having oversight of the activities.

ii. It may be necessary to excavate existing soil within the project site, or to bring fill soils into the site from off-site locations. At sites that have been identified as being contaminated or where soil contamination is suspected, appropriate sampling and classification are required prior to disposal of excavated soil. Contaminated soil shall be properly disposed of at an approved off-site facility. Fill soils also shall be sampled to ensure that imported soil parameters are within acceptable levels.

iii. Caution shall be taken during excavation activities near existing groundwater monitoring wells, so that they are not damaged. Existing groundwater monitoring wells may have to be abandoned and reinstalled if they are located in an area that is undergoing redevelopment.

Haz-4C: In the event that USTs, not identified in consultation with EH&S, or undocumented areas of contamination are encountered during construction or redevelopment activities, work shall be discontinued until appropriate health and safety procedures are implemented. Either the County of San Diego DEH or the San Diego RWQCB, depending on the nature of the contamination, must be notified regarding the contamination. Each agency and program within the respective agency has its own mechanism for initiating an investigation. The appropriate program (e.g., the DEH Local Oversight Program for tank release cases, the County of San Diego DEH Voluntary Assistance Program for non-tank release cases, the RWQCB for non-tank cases involving groundwater contamination) will be selected based on the nature of the contamination identified. The contamination remediation and removal activities will be conducted in accordance with pertinent regulatory guidelines, under the oversight of the appropriate regulatory agency.

Hazards from Nearby Airports	**Implementation of the 2018 LRDP would not result in an aircraft safety hazard for people residing or working in the project area.**	**LS**	**LS**
Mitigation Measure(s)			
No mitigation is required.			

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Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

Emergency Response and Evacuation Plans	**Implementation of the 2018 LRDP could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.**	**PS**	**LS**
Mitigation Measure(s)			
Haz-6A: In the event that the construction of a project requires a lane or roadway closure on campus, prior to construction the contractor and/or Project Manager shall ensure that the UC San Diego Fire Marshal and campus community at large are notified. If determined necessary by the UC San Diego Fire Marshal, local emergency services will be notified by the Fire Marshal of the closure.			
Wildland Fires	**Implementation of the 2018 LRDP would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires.**	**LS**	**LS**
Mitigation Measure(s)			
No mitigation is required.			
ISSUE: 3.8 HYDROLOGY AND WATER QUALITY		**Significance Before Mitigation**	**Significance After Mitigation**
Site Drainage and Hydrology	**Implementation of the 2018 LRDP could substantially alter drainages and hydrology, which could increase runoff volumes resulting in flooding, exceedance of the existing storm water drainage system, and erosion if not properly controlled.**	**LS**	**LS**
Mitigation Measure(s)			
No mitigation is required.			
Water Quality	**Implementation of the 2018 LRDP would have the potential to generate pollutants during construction and post-construction activities that could impact downstream water quality if not properly controlled.**	**LS**	**LS**

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Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

Mitigation Measure(s)			
No mitigation is required.			
Seiches, Tsunamis, or Mudflows	**Implementation of the 2018 LRDP could expose people or structures to inundation as a result of tsunami or mudflow.**	**LS**	**LS**
Mitigation Measure(s)			
No mitigation is required.			
ISSUE: 3.9 LAND USE AND PLANNING		**Significance Before Mitigation**	**Significance After Mitigation**
Conflict with Applicable Land Use Plans, Policies, and Regulations	**Implementation of the 2018 LRDP would not result in inconsistencies with applicable land use plans, policies, and regulation.**	**LS**	**LS**
Mitigation Measure(s)			
No mitigation is required.			
ISSUE: 3.10 NOISE		**Significance Before Mitigation**	**Significance After Mitigation**
Exceed Noise Standards	**Implementation of the 2018 LRDP would increase traffic volumes on local roadways, establish new noise-sensitive land uses near transportation noise sources, and construct buildings that would feature stationary noise sources, all of which could expose NSLU to noise levels in excess of standards.**	**PS**	**LS**
Mitigation Measure(s)			
Operational Noise			

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Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

Vehicle Traffic Noise

Noi-1A: If new on-campus NSLUs, such as campus housing, temporary lodging, classrooms, child development centers, libraries and related learning spaces, or inpatient medical care facilities, are proposed within the predicted 65 dBA CNEL transportation noise contour noted in Table 3.10-10, the following step(s) shall be taken to ensure that interior noise impacts would be less than significant:

i. A site-specific analysis shall be conducted by a qualified acoustician to demonstrate that the sound level in all habitable rooms will be 45 dBA CNEL or less. Noise reduction measures for structures shall be identified and integrated into the project design.

ii. A site-specific analysis shall be conducted by a qualified acoustician to demonstrate that the sound level in affected classrooms shall not exceed 50 dBA CNEL (65 dBA CNEL outside at building facade). Noise reduction measures for structures shall be identified and integrated into the project design.

Rail Noise

Noi-1B: If new on-campus NSLUs, such as campus housing, temporary lodging, classrooms, child development centers, libraries and related learning spaces, or inpatient medical care facilities, are proposed within 150 feet of an on-campus segment of the Mid-Coast Corridor Trolley line, the following step(s) shall be taken to ensure that interior noise impacts would be less than significant:

i. A site-specific analysis shall be conducted by a qualified acoustician to demonstrate that the sound level in all habitable rooms will be 45 dBA CNEL or less. Noise reduction measures for structures shall be identified and integrated into the project design.

ii. A site-specific analysis shall be conducted by a qualified acoustician to demonstrate that the sound level in affected classrooms shall not exceed 50 dBA CNEL (65 dBA CNEL outside at building facade). Noise reduction measures for structures shall be identified and integrated into the project design.

Stationary Noise Sources

Noi-1C: If new or modified stationary noise sources (including, major HVAC systems, utility plants, ventilated parking structures, or similar facilities with noise-producing operating mechanical equipment) are proposed in the vicinity of NSLUs (existing and future) or NSLUs are proposed in the vicinity of existing stationary sources, the project shall incorporate the following screening distances between the NSLU and the stationary noise source to avoid potential noise impacts.

i. Constructing new ventilated utility plants at least 500 feet from existing or proposed NSLU

ii. Constructing new ventilated parking structures at least 250 feet from existing or proposed NSLU

iii. Positioning new and renovated major outdoor HVAC equipment, not shielded by a noise-reducing barrier or other means, at least 100 feet from existing or proposed NSLU.

Should the NSLU already be exposed to noise in excess of stated thresholds in Table 3.10-8, then the new or renovated stationary noise source(s) shall be evaluated in a preliminary noise assessment as noted in Noi-1D.

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Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

Noi-1D: If the screening distances noted in Noi-1C cannot be achieved, a preliminary noise assessment shall be conducted by a qualified acoustician to determine if there would be the potential for exterior noise impacts to NSLUs using the sample analysis techniques contained in Appendix I or comparably equivalent methods for assessing the potential for exceeding the noise criteria outlined in Table 3.10-8. If the preliminary noise assessment predicts the potential for impacts, a project-specific noise analysis shall be conducted in accordance with Noi-1E.

Noi-1E: If the potential for noise impacts is determined in accordance with Noi-1D, a project-specific noise analysis shall be conducted by a qualified acoustician to determine if the future stationary source would expose NSLU(s) to noise in excess of 65 dBA CNEL at the building facade.

i. The analysis shall also demonstrate that the sound level in all habitable rooms will be 45 dBA CNEL or less and/or that the interior noise level within classrooms shall also not exceed 50 dBA CNEL.

ii. If the stated interior noise standards cannot be achieved through standard construction techniques, noise reduction measures shall be specified in the detailed noise analysis and incorporated into the stationary noise source or NSLU to ensure compliance with the stated standards.

Construction Noise

Noi-1F: If project construction activities resulting from implementation of the 2018 LRDP are proposed less than 150 feet of NSLU, or may involve the use of vibratory or impact-type pile drivers, impact-type equipment (including but not limited to: clam shovels, hydra break rams, hoe rams, and jackhammers), concrete saws, pavement scarifiers, sand blasters, or vibrating hoppers, mitigation shall be integrated into the project's construction specifications to minimize temporary noise caused by construction activities to less than significant levels:

i. Require the construction contractor to work with proper administrative controls on equipment operation periods so as not to exceed a 12-hour average sound level of 75 dBA L_{eq} at any NSLU between 7:00 a.m. and 7:00 p.m. Monday through Saturday.

ii. Outfit construction equipment with properly maintained, manufacturer-approved or recommended sound abatement means on air intakes, combustion exhausts, heat dissipation vents, and the interior surfaces of engine hoods and power train enclosures.

iii. Locate (to the extent practical) steady-state, continuously operating stationary construction equipment such as generators, pumps, and air compressors at least 150 feet from nearby NSLUs. If this screening distance cannot be achieved in the field, consider deployment of temporary noise walls or acoustical blankets/curtains that would block direct sound paths between the operating equipment and the receptor(s) of concern.

iv. Position (to the extent practical) construction laydown and vehicle staging areas as far from NSLUs as feasible.

v. Inform, whenever possible and preferably with at least a two week advanced notice, all neighboring NSLUs expected to be exposed to elevated noise levels that a construction project would commence.

vi. Where NSLU are expected to be less than 100 feet away, schedule anticipated loud construction activities, which could involve impact-type equipment and processes such as pile driving, jackhammering, pavement breaking, compactors, etc., to not coincide with any finals week of classes and recognized holidays. Adjust hours or days of the construction activity to occur before or after these noise-sensitive periods of the UC San Diego academic year.

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Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

Excessive Groundborne Vibration or Noise	**Implementation of the 2018 LRDP could result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.**	**PS**	**LS**
Mitigation Measure(s)			
Noi-2A: When a new vibration-sensitive receptor is expected within the applicable screening distance per Table 3.10-16, or if the new receptor involves activities that are vibration-sensitive at a level more stringent than VC-A as appearing in Table 3.10-15, UC San Diego shall retain a qualified acoustician to prepare a vibration analysis to assess whether there is the potential for project-specific vibration impacts. If impacts are anticipated, the acoustician shall prepare a vibration mitigation program that identifies project design features to reduce trolley vibration impacts on the new vibration-sensitive land use. The vibration mitigation shall be incorporated into the final project design. **Noi-2B:** Prior to the commencement of construction of projects that would involve heavy earth-moving equipment or impact-type pile driving within the applicable screening distance per Table 3.10-16, or if the existing receptor involves activities that are vibration-sensitive at a level more stringent than VC-A as appearing in Table 3.10-15, UC San Diego shall retain a qualified acoustician to prepare a construction vibration mitigation program to be implemented by the construction contractor(s). The construction vibration mitigation program shall identify and require measures to reduce vibration resulting from construction activities to the maximum extent practicable, as well as detail construction activity notification and monitoring processes that include, but are not limited to, the following: i. Vibration monitoring shall be performed during construction to establish the level of vibration produced by high impact activities. Monitoring shall be conducted when any construction activity would occur within the above-described screening distances noted in Table 3.10-16. Monitoring shall be conducted using portable vibration-monitoring instrumentation that provides a calibrated record of local ground movement/accelerations. If construction vibration exceeds the appropriate threshold, work should be stopped and resumed when alternative work methods and equipment can be implemented. Baseline vibration levels at specified locations shall be established prior to the construction activity. ii. Building occupants of vibration-sensitive land uses within the applicable screening distance per Table 3.10-16 shall be notified at least two weeks prior to the start of construction.		
Permanent Increases in Ambient Noise	**Implementation of the 2018 LRDP could result in substantial permanent increase in ambient noise levels in the project vicinity.**	**PS**	**LS**
Mitigation Measure(s)			

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Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

Implementation of Mitigation Measures Nio-1A (Vehicle Traffic Noise), Noi-1B (Rail Noise), and Noi-1C (Stationary Sources) is required.			
Temporary Increases in Ambient Noise	**Implementation of the 2018 LRDP could result in substantial temporary or periodic increase in ambient noise levels in the project vicinity.**	**PS**	**LS**
Mitigation Measure(s)			
Implementation of Mitigation Measure Noi-1F (Construction Equipment) is required.			
ISSUE: 3.11 POPULATION AND HOUSING		**Significance Before Mitigation**	**Significance After Mitigation**
Direct and Indirect Inducement of Substantial Population Growth	**Implementation of the 2018 LRDP would not directly or indirectly induce substantial population growth in the project area.**	**PS (Direct)/ LS (Indirect)**	**SU (Direct)/LS (Indirect)**
Mitigation Measure(s)			
Because the proposed 2018 LRDP includes direct campus population growth as an essential objective of the LRDP, no mitigation is feasible to avoid or reduce this impact. Therefore, the impact is considered significant and unavoidable.			
Displacement of Housing or People	**Implementation of the 2018 LRDP could result in a temporary displacement of existing on-campus housing or people.**	**LS**	**LS**
Mitigation Measure(s)			
No mitigation is required.			
ISSUE: 3.12 PUBLIC SERVICES		**Significance Before Mitigation**	**Significance After Mitigation**
Fire Protection Facilities	**Implementation of the 2018 LRDP would not result in increased demand for fire services that would require new facilities beyond those that are already planned and would not result in a new**	**LS**	**LS**

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Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

	significant physical impact to the environment.		
Mitigation Measure(s)			
No mitigation is required.			
Police Protection Facilities	**Implementation of the 2018 LRDP would not result in increased demand for police service that would require new facilities that could result in a significant physical impact to the environment.**	**LS**	**LS**
Mitigation Measure(s)			
No mitigation is required.			
Public Schools Facilities	**Implementation of the 2018 LRDP could contribute to demand for local public schools; however, new or altered school facilities would not be necessary.**	**LS**	**LS**
Mitigation Measure(s)			
No mitigation is required.			
ISSUE: 3.13 RECREATION		**Significance Before Mitigation**	**Significance After Mitigation**
Deterioration of Parks and Recreational Facilities	**Implementation of the 2018 LRDP would increase the use of parks and recreational facilities that may result in substantial physical deterioration of the facilities.**	**LS**	**LS**
Mitigation Measure(s)			
No mitigation is required.			
Construction of New	**Implementation of the 2018 LRDP would include the construction and expansion of recreational facilities that may have an adverse**	**LS**	**LS**

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Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

Recreational Facilities	**physical effect on the environment.**		
Mitigation Measure(s)			
No mitigation is required.			
ISSUE: 3.14 TRANSPORTATION/TRAFFIC		**Significance Before Mitigation**	**Significance After Mitigation**
Compliance with Measure of Effectiveness for Circulation System Performance	**Implementation of the proposed 2018 LRDP would cause a conflict with an applicable plan or policy establishing measures of effectiveness for performance of the circulation system.**	**PS**	**SU**
Mitigation Measure(s)			

Tra-1A-OPT2 UC San Diego shall work with the City of San Diego and Caltrans to fund and install 100 percent of needed improvements to impacted intersections within the Regents Road (from Health Sciences Drive to Regents Park Row) and La Jolla Village Drive (from Torrey Pines Road to Regents Road, and Genesee Avenue to I-805) transportation corridors, which will address impacted street segments, freeway mainline segments, and freeway ramp meters within those corridors. These improvements shall be implemented in three phases over the course of first five years of the proposed 2018 LRDP (i.e., 2019 to 2023) as described below.

i. Phase 1: Regents Road Corridor (Health Sciences Drive to Regents Park Row) Intersection Improvements:

a. #26. Regents Road / Health Sciences Drive

- Implement Adaptive Traffic Signal Control at this intersection according to City of San Diego requirements. If necessary, upgrade and/or repair signal interconnect, communications, detection and controller equipment.
- Retrofit with high visibility crosswalks and bicycle intersection crossing markings.

b. #27. Regents Road / Eastgate Mall

- Implement Adaptive Traffic Signal Control at this intersection according to City of San Diego requirements. If necessary, upgrade and/or repair signal interconnect, communications, detection and controller equipment.

c. #28. Regents Road / Executive Drive

- Implement Adaptive Traffic Signal Control at this intersection according to City of San Diego requirements. If necessary,

S = Significant; LS = Less than Significant; PS = Potential Significant; SU = Significant/Unavoidable

Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

upgrade and/or repair signal interconnect, communications, detection and controller equipment.

- Retrofit with high visibility crosswalks and bicycle intersection crossing markings.

d. #29. Regents Road / Regents Park Row

- Implement Adaptive Traffic Signal Control at this intersection according to City of San Diego requirements. If necessary, upgrade and/or repair signal interconnect, communications, detection and controller equipment.

ii. Phase 2: La Jolla Village Drive Corridor (Torrey Pines Road to Regents Road) Intersection Improvements:

a. #20. Torrey Pines Road / La Jolla Village Drive

- Implement Adaptive Traffic Signal Control at this intersection according to City of San Diego requirements. If necessary, upgrade and/or repair signal interconnect, communications, detection and controller equipment.
- Relocate the pedestrian crossing from the east leg to the west leg of the intersection and implement signal phasing modification to improve operations.
- Retrofit with high visibility crosswalks.

b. #30. La Jolla Village Drive / La Jolla Scenic Drive

- Implement Adaptive Traffic Signal Control at this intersection according to City of San Diego requirements. If necessary, upgrade and/or repair signal interconnect, communications, detection and controller equipment.

c. #31. La Jolla Village Drive / Gilman Drive EB Ramps

- Signalize the intersection and install a protected southbound left-turn phase.
- Implement Adaptive Traffic Signal Control at this intersection according to City of San Diego requirements.
- Re-stripe the eastbound ramp approach to provide a shared left-right lane and an exclusive right-turn lane.
- Install Transit Signal Priority Control.
- Retrofit with high visibility crosswalks.

d. #32. La Jolla Village Drive / Gilman Drive WB Ramps

- Implement Adaptive Traffic Signal Control at this intersection according to City of San Diego requirements. If necessary, upgrade and/or repair signal interconnect, communications, detection and controller equipment.
- Retrofit with high visibility crosswalks.

S = Significant; LS = Less than Significant; PS = Potential Significant; SU = Significant/Unavoidable

Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

e. #33. La Jolla Village Drive / Villa La Jolla Drive

- Implement Adaptive Traffic Signal Control at this intersection according to City of San Diego requirements. If necessary, upgrade and/or repair signal interconnect, communications, detection and controller equipment.
- Install Transit Signal Priority Control.

f. #34. La Jolla Village Drive / I-5 SB ramps

- Implement Adaptive Traffic Signal Control at this intersection according to City of San Diego requirements. If necessary, upgrade and/or repair signal interconnect, communications, detection and controller equipment.
- Install Transit Signal Priority Control

g. #35. La Jolla Village Drive / I-5 NB ramps

- Implement Adaptive Traffic Signal Control at this intersection according to City of San Diego requirements. If necessary, upgrade and/or repair signal interconnect, communications, detection and controller equipment.
- Install Transit Signal Priority Control.

h. #36. La Jolla Village Drive / Lebon Drive

- Implement Adaptive Traffic Signal Control at this intersection according to City of San Diego requirements. If necessary, upgrade and/or repair signal interconnect, communications, detection and controller equipment.
- Install Transit Signal Priority Control.

i. #37. La Jolla Village Drive / Regents Road

- Implement Adaptive Traffic Signal Control at this intersection according to City of San Diego requirements. If necessary, upgrade and/or repair signal interconnect, communications, detection and controller equipment.
- Install Transit Signal Priority Control

iii. <u>Phase 3: La Jolla Village Drive Corridor (Genesee Avenue to I-805) Intersection Improvements:</u>

a. #38. La Jolla Village Drive / Genesee Avenue

- Implement Adaptive Traffic Signal Control at this intersection according to City of San Diego requirements. If necessary, upgrade and/or repair signal interconnect, communications, detection and controller equipment.
- Install Transit Signal Priority Controls.

b. #39. La Jolla Village Drive / Executive Way

S = Significant; LS = Less than Significant; PS = Potential Significant; SU = Significant/Unavoidable

Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

	o Implement Adaptive Traffic Signal Control at this intersection according to City of San Diego requirements. If necessary, upgrade and/or repair signal interconnect, communications, detection and controller equipment. o Install Transit Signal Priority Controls. c. #40. La Jolla Village Drive / Towne Centre Drive o Implement Adaptive Traffic Signal Control at this intersection according to City of San Diego requirements. If necessary, upgrade and/or repair signal interconnect, communications, detection and controller equipment. o Install Transit Signal Priority Control. d. #41. La Jolla Village Drive / I-805 SB Ramps o Implement Adaptive Traffic Signal Control at this intersection according to City of San Diego requirements. If necessary, upgrade and/or repair signal interconnect, communications, detection and controller equipment. o Install Transit Signal Priority Control. e. #42. La Jolla Village Drive / I-805 NB Ramps o Implement Adaptive Traffic Signal Control at this intersection according to City of San Diego requirements. If necessary, upgrade and/or repair signal interconnect, communications, detection and controller equipment. o Install Transit Signal Priority Control. While Tra-1A-OPT2 would fully address a number of the impacted locations (but not all of them) and because the improvements noted above are not on campus lands, UC San Diego cannot implement these improvements unless or until they are approved by the City of San Diego and Caltrans and thus are beyond the control of UC San Diego. Because UC San Diego cannot guarantee implementation of the recommended improvements and not all of the impacted locations would be improved, cumulatively significant and unavoidable impacts would remain.		
Induce Substantial Vehicle Miles Traveled	**Implementation of the proposed 2018 LRDP would not cause substantial additional VMT that exceed the regional averages for that land use.**	**LS**	**LS**
Mitigation Measure(s)			
No mitigation is required.			

S = Significant; LS = Less than Significant; PS = Potential Significant; SU = Significant/Unavoidable

Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

Compliance with Alternative Transportation Policies, Plans, and Programs	**Implementation of the 2018 LRDP would not conflict with applicable policies, plans, or programs regarding safety or performance of public transit, bicycle, or pedestrian facilities.**	**LS**	**LS**
Mitigation Measure(s)			
No mitigation is required.			
ISSUE: 3.15 UTILITIES, SERVICE SYSTEMS, AND ENERGY		**Significance Before Mitigation**	**Significance After Mitigation**
Wastewater Treatment	**Implementation of the 2018 LRDP would not result in an exceedance of the City's treatment capacity to serve the project's projected demand.**	**LS**	**LS**
Mitigation Measure(s)			
No mitigation is required.			
New Water or Wastewater Facilities	**Implementation of the 2018 LRDP would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities which could cause significant environmental effects.**	**LS**	**LS**
Mitigation Measure(s)			
No mitigation is required.			

S = Significant; LS = Less than Significant; PS = Potential Significant; SU = Significant/Unavoidable

Table ES-1 (continued)
Environmental Impacts and Mitigation Measures

New Storm Water Facilities	**Implementation of the 2018 LRDP would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities which could cause significant environmental effects.**	**LS**	**LS**
Mitigation Measure(s)			
No mitigation is required.			
Water Supply Availability	**Implementation of the 2018 LRDP would not result in insufficient water supplies available to serve the project from existing entitlements and resources, or new or expanded entitlements are needed**	**LS**	**LS**
Mitigation Measure(s)			
No mitigation is required.			
Compliance with Solid Waste Regulations	**Implementation of the 2018 LRDP would comply with federal, state, and local management and reduction statutes and regulations related to solid waste.**	**LS**	**LS**
Mitigation Measure(s)			
No mitigation is required.			
Energy	**Implementation of the 2018 LRDP would not result in the wasteful, inefficient, or unnecessary use of energy.**	**LS**	**LS**
Mitigation Measure(s)			
No mitigation is required.			

S = Significant; LS = Less than Significant; PS = Potential Significant; SU = Significant/Unavoidable

Table ES-2
Summary of Cumulative Impacts

Issue	Cumulative Setting	Existing Cumulative Impact	2018 LRDP Contribution to Cumulative Impact
3.1 Aesthetics			
Degradation of views to scenic vista	UC San Diego and the surrounding communities	Less than significant	Not cumulatively considerable
Degradation of visual character/quality on site or the surrounding area	UC San Diego and the surrounding communities	Less than significant	Not cumulatively considerable
New source of substantial light or glare on campus	UC San Diego and the surrounding communities	Less than significant	Not cumulatively considerable
3.2 Air Quality			
Consistency with applicable air quality plan	San Diego Air Basin	Less than significant	Not cumulatively considerable
Consistency with air quality standards	San Diego Air Basin	Potentially significant	Cumulatively considerable and unavoidable
Cumulative increase in criteria pollutant emissions	San Diego Air Basin	Potentially significant	Cumulatively considerable and unavoidable
Expose sensitive receptors to pollutant concentrations resulting in CO hotspot	San Diego Air Basin	Potentially significant	Not cumulatively considerable
Expose sensitive receptors to toxic air contaminant emissions	San Diego Air Basin	Potentially significant	Not cumulatively considerable
3.3 Biological Resources			
Regional loss of sensitive plants, animals, and vegetation communities	Nation, state and San Diego region	Potentially significant	Not cumulatively considerable
Regional loss of riparian or other sensitive natural communities	Nation, state and San Diego region	Potentially significant	Not cumulatively considerable

Table ES-2 (continued)
Summary of Cumulative Impacts

Issue	Cumulative Setting	Existing Cumulative Impact	2018 LRDP Contribution to Cumulative Impact
Federally protected wetlands as defined by Section 404 of the Clean Water Act	Nation, state and San Diego region	Potentially significant	Not cumulatively considerable
3.4 Cultural and Tribal Cultural Resources			
Regional loss of built environment resources	Nation, including southern California, and San Diego region	Potentially significant	Cumulatively considerable and unavoidable
Regional loss of archaeological resources and human remains	Kumeyaay national territory	Potentially significant	Not cumulatively considerable
Regional loss of paleontological resources	San Diego region	Potentially significant	Not cumulatively considerable
Regional loss of tribal cultural resources	Kumeyaay national territory	Potentially significant	Cumulatively considerable and unavoidable
3.5 Geology and Soils			
Exposure of persons to seismic-related hazards	UC San Diego	Potentially significant	Not cumulatively considerable
Exposure of soil erosion or topsoil loss	Peñasquitos Hydrologic Unit	Less than significant	Not cumulatively considerable
Exposure of unstable soil	UC San Diego	Less than significant	Not cumulatively considerable
Exposure of expansive soils	UC San Diego	Less than significant	Not cumulatively considerable
3.6 Greenhouse Gas Emissions			
Generate substantial GHG emissions	Global	Potentially significant	Not cumulatively considerable
Consistency with applicable plan, policy or regulation	Global	Less than significant	Not cumulatively considerable
3.7 Hazards and Hazardous Materials			

Table ES-2 (continued)
Summary of Cumulative Impacts

Issue	Cumulative Setting	Existing Cumulative Impact	2018 LRDP Contribution to Cumulative Impact
Regional use, transport, and disposal of hazardous materials	UC San Diego and San Diego region	Less than significant	Not cumulatively considerable
Exposure to accidental releases of hazardous materials	UC San Diego and San Diego region	Less than significant	Not cumulatively considerable
Exposure of hazardous emissions or material to nearby schools	UC San Diego and San Diego region	Less than significant	Not cumulatively considerable
Regional exposure of people to listed hazardous materials sites	UC San Diego and San Diego region	Less than significant	Not cumulatively considerable
Exposure of people from nearby airports	UC San Diego and San Diego region	Less than significant	Not cumulatively considerable
Impair or interfere with emergency response and evacuation plans	UC San Diego and San Diego region	Less than significant	Not cumulatively considerable
Exposure of people and structures to wildland fires	UC San Diego and San Diego region	Less than significant	Not cumulatively considerable
3.8 Hydrology and Water Quality			
Increases in storm water runoff within the watershed would contribute to downstream erosion problems and flooding	Peñasquitos Hydrologic Unit, within which the UC San Diego campus is located	Less than significant	Not cumulatively considerable
Development within watershed increases pollutant sources that could adversely affect receiving waters	Peñasquitos Hydrologic Unit, within which the UC San Diego campus is located	Less than significant	Not cumulatively considerable
Violate or substantially degrade water quality standards	Peñasquitos Hydrologic Unit, within which the UC San Diego campus is located	Less than significant	Not cumulatively considerable

Table ES-2 (continued)
Summary of Cumulative Impacts

Issue	Cumulative Setting	Existing Cumulative Impact	2018 LRDP Contribution to Cumulative Impact
Regional exposure to seiches, tsunamis, or mudflows	Peñasquitos Hydrologic Unit, within which the UC San Diego campus is located	Less than significant	Not cumulatively considerable
3.9 Land Use and Planning			
Conflicts with applicable land use plans, policies, and regulations	UC San Diego and the surrounding communities	Less than significant	Not cumulatively considerable
3.10 Noise			
Exceed noise standards	UC San Diego and the surrounding communities	Potentially significant	Not cumulatively considerable
Exposure to excessive groundborne vibration	UC San Diego and surrounding communities	Less than significant	Not cumulatively considerable
Permanent substantial increases in ambient noise	UC San Diego and the surrounding communities	Potentially significant	Not cumulatively considerable
Temporary or periodic substantial increases in ambient noise	UC San Diego and the surrounding communities	Less than significant	Not cumulatively considerable
3.11 Population and Housing			
Direct and indirect inducement of substantial population growth	San Diego region	Potentially significant	Cumulatively considerable and unavoidable
Regional displacement of housing or people	San Diego region	Less than significant	Not cumulatively considerable
3.12 Public Services			
Potential adverse physical impacts from new fire protection facilities	City of San Diego near the UC San Diego campus	Less than significant	Not cumulatively considerable

Table ES-2 (continued)
Summary of Cumulative Impacts

Issue	Cumulative Setting	Existing Cumulative Impact	2018 LRDP Contribution to Cumulative Impact
Potential adverse physical impacts from new police protection facilities	City of San Diego near the UC San Diego campus	Less than significant	Not cumulatively considerable
Potential adverse physical impacts from new school facilities	San Diego Unified School District service area	Less than significant	Not cumulatively considerable
3.13 Recreation			
Deterioration of parks and recreational facilities	City of San Diego and San Diego region	Less than significant	Not cumulatively considerable
Construction of new recreational facilities	City of San Diego and San Diego region	Less than significant	Not cumulatively considerable
3.14 Transportation/Traffic			
Compliance with measure of effectiveness for circulation system performance	Traffic impact study area	Potentially significant	Cumulatively considerable and unavoidable
Induce substantial vehicle miles traveled	Traffic impact study area	Potentially significant	Not cumulatively considerable
Compliance with alternative transportation policies, plans, and programs	Traffic impact study area	Less than significant	Not cumulatively considerable
3.15 Utilities, Service Systems, and Energy			
Regional development could cumulatively affect wastewater treatment capabilities	San Diego region	Less than significant	Not cumulatively considerable
Regional development could generate a cumulative demand for new, or an expansion of existing, water or wastewater facilities	San Diego region	Less than significant	Not cumulatively considerable

Table ES-2 (continued)
Summary of Cumulative Impacts

Issue	Cumulative Setting	Existing Cumulative Impact	2018 LRDP Contribution to Cumulative Impact
Regional development could generate cumulative demand for new, or an expansion of existing, storm water facilities	San Diego region	Less than significant	Not cumulatively considerable
Regional development could generate cumulative demand beyond water supply availability	San Diego region	Less than significant	Not cumulatively considerable
Regional development could impact compliance with solid waste regulations	San Diego region	Less than significant	Not cumulatively considerable
Regional development could result in the wasteful, inefficient, or unnecessary use of energy	San Diego region	Less than significant	Not cumulatively considerable

Table ES-3
Comparison of Potentially Significant Impacts for Alternatives to the 2018 LRDP

Issue Areas with Potential for Significant Impacts under the 2018 LRDP or Its Alternatives	2018 LRDP		Alternatives to the 2018 LRDP			
	Without Mitigation	With Mitigation	No Project (2004 LRDP)	Redevelopment/ Infill Only	Increased Housing	Reduced Project
Aesthetics						
Substantial adverse effect on a scenic vista	PS	LS	>	<	>	<
Substantial degradation of visual character and quality	PS	LS	>	<	>	<
New source of substantial light or glare	PS	LS	=	<	>	<
Air Quality						
Violation of an air quality standard or contributing substantially to an existing violation	PS	SU	<	=	<	>
Cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard	PS	SU	<	=	<	>
Expose sensitive receptors to substantial pollutant concentrations	PS	SU	<	=	<	>
Biological Resources						
Substantial adverse effect on any species identified as a candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS	PS	LS	=	<	>	<
Substantial adverse effect on riparian habitat and other sensitive natural communities identified in local or regional plans, policies, regulations or by the CDFW or USFWS	PS	LS	=	<	>	<
Substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act	PS	LS	=	<	>	<
Cultural and Tribal Cultural Resources						
Substantial adverse change in the significance of a historical resource	PS	SU	<	=	=	<
Substantial adverse change in the significance of an archaeological resource	PS	LS	=	<	=	<
Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature	PS	LS	<	=	=	<
Disturb any human remains, including those interred outside of dedicated cemeteries	PS	LS	=	<	=	<
Substantial adverse change in the significance of a tribal cultural resource	PS	LS	<	<	=	<
GHG Emissions						
Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment	PS	LS	<	=	<	>

Table ES-3 (continued)
Comparison of Potentially Significant Impacts for Alternatives to the 2018 LRDP

Issue Areas with Potential for Significant Impacts under the 2018 LRDP or Its Alternatives	2018 LRDP		Alternatives to the 2018 LRDP			
	Without Mitigation	With Mitigation	No Project (2004 LRDP)	Redevelopment/ Infill Only	Increased Housing	Reduced Project
Hazards and Hazardous Materials						
Activities being located on listed hazardous materials sites that could create a significant hazard to the public or environment	PS	LS	=	=	=	<
Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan	PS	LS	=	=	>	<
Noise						
Exposure of persons to noise in excess of standards	PS	LS	<	=	=	>
Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels	PS	LS	<	=	=	=
Substantial permanent increase in ambient noise levels in the project vicinity	PS	LS	<	=	=	=
Substantial temporary or periodic increase in ambient noise levels in the project vicinity	PS	LS	<	=	=	<
Population and Housing						
Direct inducement of substantial population growth	PS	SU	<	=	=	=
Transportation/Traffic						
Conflict with an applicable plan or policy establishing measures of effectiveness for performance of the circulation system	PS	SU	<	=	<	>
Result in inadequate parking capacity[1]	N/A	N/A	>	N/A	N/A	N/A
Cause substantial additional VMT that exceed the regional averages for that land use	LS	LS*	N/A	=	<	>[2]

Notes:
= Impacts would be similar to those of the proposed 2018 LRDP
> Impacts would be greater than those of the proposed 2018 LRDP
< Impacts would be less than those of the proposed 2018 LRDP
PS Potentially significant impact
LS Less than significant impact
SU Significant and unavoidable impact
N/A Not Applicable
* = No mitigation required
[1] This standard of significance was removed from Appendix G of the State CEQA Guidelines in 2009 (effective March 2010). However, it did apply to the No Project Alternative (2004 LRDP) and was found to be a potentially significant impact that was mitigated to a less than significant level. Since it no longer applies, "N/A" is shown for the proposed 2018 LRDP and the other project alternatives as a comparison evaluation cannot be completed.
[2] While the proposed 2018 LRDP would result in less than significant impacts related to VMT, the Reduced Project Alternative could potentially result in significant impacts to VMT that require mitigation. Because of this potentially significant impact, VMT impacts are included in this table.