CALIFORNIA COASTAL COMMISSION
South Coast Area Office
301 E. Ocean Blvd., Suite 300
Long Beach, CA 90802-4302
(562) 590-5071

W26e

Filed:	04/07/2019
180th Day:	10/04/2019
Staff:	M. Revell- LB
Staff Report:	08/30/2019
Hearing Date:	09/11/2019

STAFF REPORT: REGULAR CALENDAR

Application No.:	**5-19-0213**
Applicants:	**City of Newport Beach**
Location:	1900 Back Bay Dr., Newport Beach, Orange County (APN 440-092-79)
Project Description:	Phase 2A of Big Canyon Coastal Habitat Restoration and Adaptation Project, consisting of 11.3 acres of riparian habitat restoration and enhancement, including removal of non-native vegetation, approximately 5,500 cubic yards of grading, creek bank stabilization, replanting of native vegetation, and floodplain restoration in Newport Beach, Orange County.
Staff Recommendation:	Approval with conditions.

SUMMARY OF STAFF RECOMMENDATION

The project is within the 60-acre Big Canyon Creek Nature Park primarily located between Jamboree Road to the east and Back Bay Drive to the west, bounded by residential communities to the North and South along the creek bluffs, approximately 1 mile north of Coast Highway. Big Canyon Creek flows west into the Upper Newport Bay State Ecological Reserve within the City of Newport Beach (**Exhibit 1**). The area is located between the first public road and the sea (Bay) and is designated open space in the City's certified Local Coastal Plan.

The project area is an 11.3 acre site between Jamboree Road and Backbay Drive, and currently contains 6.33 acres of invasive pepper tree grove, 2.91 acres of mixed arroyo willow/pepper tree grove, 0.58 acre of alkali heath marsh alliance, 0.40 acres of freshwater marsh, 0.28 acre of Menzies's goldenbush scrub alliance, and 0.82 acre of bare areas. In 2016, the Commission approved Phase 1 of the Coastal Habitat Restoration Project under Coastal Development Permit No. 5-16-0059, which consisted of restoration of riparian habitat upstream of Big Canyon Creek between Jamboree Road and the current project location, and included installation of a bioretention

facility to remove stormwater pollutants entering the Nature Park from an existing culvert under Jamboree Road, which flows through Big Canyon Creek Nature Park, and ultimately into Upper Newport Bay. Big Canyon provides habitat for sensitive plant species such as California boxthorn and southern tarplant, and special-status animal species such as orange-throated whiptail, yellow warbler, Coastal California gnatcatcher and Least Bell's Vireo. Within the riparian habitat, there are a significant number of invasive trees including Brazilian Peppertree and Myoporum.

Phase 2A of the Big Canyon Creek Restoration Project proposes to re-establish a functioning complex of wetland and upland habitats downstream of Phase 1, and involves removal of non-native vegetation and replanting native species to restore a mosaic of appropriate native riparian, wet alkali meadow, high alkali meadow, and upland transitional habitats. The project is intended to improve the site's resilience to infestation by the Polyphagous Shot Hole Borer (PSHB) through various means and will stabilize the creek and improve its connection with the floodplain by pulling back incised steep banks and implementing erosion control measures using plantings. Finally, the project is being designed to discourage mosquito breeding, further improve water quality by reducing selenium and sediment entering the bay, and encourage public access for education and passive recreation.

The City of Newport Beach proposes to remove approximately 9.24 acres of invasive Brazilian pepper trees and other exotics and invasive vegetation for restoration purposes, including 6.33 acres within the pepper tree groves, and an additional 0.5 acre of exotics removal within the existing woody riparian areas, and 2.41-acres of existing woody riparian vegetation that contains pepper trees. In addition, several of the native willows that exist in the stream corridor outside of the pepper trees have been infested by the Polyphagous Shot Hole Borer (PSHB), which depending on the severity of the infestation, will either be pruned and treated or removed if necessary. Excavation and grading of the of the existing channel bank is also proposed to create floodplain benches and gentler slopes connecting the channel with the floodplain and providing for more frequent inundation during storm events. Fine grading of the site will create a gentler slope from the re-constructed/stabilized banks to provide connectivity between the channel and floodway, and better support for vegetation. Overall, the project will result in improved water quality and habitat for Big Canyon through watershed improvements by improving the flow of the creek to remove toxins, restore connectivity of the creek to the floodplain, and habitat improvement for Big Canyon. The applicant expects to start construction in the fall, outside of the nesting season.

The habitat restoration and the wetland and creek water restoration will result in a significant improvement in the quality of the creek and water flows into the bay and the ocean. Because the project has been designed to be the least environmentally damaging alternative, and has the primary goal of restoration of the floodplain and improving water quality, the long-term environmental benefits of the project are expected to far outweigh the temporary short-term effects of the restoration work. Coastal Commission staff is recommending approval of the permit with eight special conditions to ensure that the project preserves and enhances coastal resources, conforms with Sections 30233 of the Coastal Act as an allowed use within wetlands, is the least environmentally damaging alternative, and provides more than sufficient mitigation for the adverse environmental impacts.

Special Condition 1 requires final revised construction and site plans. **Special Condition 2**

requires that the applicant provide a final restoration and monitoring plan to ensure that the quality of the restoration project will be monitored to ensure that the biological productivity of the site is improved in as-built conditions. **Special Condition 3** requires the applicant to submit a final staging plan to protect the existing habitat from degradation during staging and construction.

The riparian and coastal sage scrub habitat has the potential to provide nesting and foraging resources for sensitive species including the Least Bell's Vireo, the coastal California gnatcatcher, raptors and other species. In order to protect the sensitive species in the project area, **Special Conditions 4 and 5** require the applicant provide for a biological monitor during construction to protect sensitive species and to abide by a construction schedule to avoid impacting habitat during nesting season. **Special Condition 6** requires the applicant adhere to construction BMPs to be found consistent with Sections 30230 and 30231 of the Coastal Act regarding the protection of water quality to promote the biological productivity of coastal waters and to protect human health. **Special Condition 7** requires submittal of an archeological monitoring plan to ensure that any prehistoric or archaeological or paleontological cultural resources that may be present on the site and could be impacted by the proposed development receive proper protections in order for the project to be found consistent with Section 30244 of the Coastal Act. Lastly, **Special Condition 8** requires the applicant provide other resource agency approvals.

TABLE OF CONTENTS

APPENDICES

EXHIBITS

I. MOTION AND RESOLUTION

Motion:

*I move that the Commission **approve** Coastal Development Permit Application No. 5-19-0213 pursuant to the staff recommendation.*

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution:

The Commission hereby approves Coastal Development Permit Application No. 5-19-0213 for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS

This permit is granted subject to the following standard conditions:

1. **Notice of Receipt and Acknowledgment**. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittees or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. **Interpretation.** Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.

4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittees to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

1. Final Revised Plans

A. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for the review and written approval of the Executive Director, two full-size sets of the following revised final plans, modified as required below.

1. A grading plan that substantially conforms with the plans submitted to the Commission on June 25, 2019 and that includes grading elevations and quantities and depicts the limits of ground disturbance;
2. A site plan that substantially conforms with the plans submitted to the Commission on June 25, 2019, revised to show all infrastructure, interpretive amenities, trail signage, and any other appurtenances which conform with the requirements of the special conditions of this permit.

B. All revised plans shall be prepared and certified by a licensed professional or professionals as applicable (e.g., biologist, geotechnical engineer), based on current information and professional standards, and shall be certified to ensure that they are consistent with the Commission's approval and with the recommendations of any required technical reports.

C. The permittee shall undertake development in conformance with the approved final plans unless the Commission amends this permit or the Executive Director determines that no amendment is legally required for any proposed minor deviations.

2. Final Habitat Restoration and Monitoring Plan. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicants shall submit for review and written approval of the Executive Director, a final detailed habitat restoration and monitoring plan to restore disturbed habitat in substantial conformance with the submitted *Big Canyon Restoration Project – Phase 2A Revegetation Plan*, ESA, received Wednesday, July 3, 2019. A biologist qualified in the preparation of plans to restore coastal habitats shall design the revised restoration and monitoring plan. The revised restoration and monitoring plan shall at a minimum include the following:

A. Restoration plan including planting map, plant palette, source of plant material, and schedule of plant installation, watering, erosion control, soil fertilization and weed abatement.

B. Final Success Criteria. The restoration will be considered successful if the overall species composition and the vegetative cover of the dominant perennial species are

similar to relatively undisturbed vegetation of the same type in nearby reference areas. Species composition shall be considered similar if all the dominant species and at least 80% of the non-dominant species at the reference site are present at the restored site.

C. Provisions for monitoring and remediation of the restoration site in accordance with the approved final restoration program for a period of five years or until it has been determined that success criteria have been met or have failed to be met, whichever comes first.

D. Provisions for submission of annual reports of monitoring results to the Executive Director for the duration of the required monitoring period. Each report shall document the condition of the restoration with photographs taken from the same fixed points in the same directions. Each report shall also include a "Performance Evaluation" section where information and results from the monitoring program are used to evaluate the status of the restoration project in relation to the performance standards. The performance monitoring period shall be five years. The final report must be prepared in conjunction with a qualified biologist. The reports must evaluate whether the restoration site conforms to the goals, objectives, and performance standards set forth in the approved final restoration program.

E. If the final report indicates that the restoration project has been unsuccessful, in part, or in whole, based on the approved performance standards, the applicant shall submit within 90 days a revised or supplemental restoration program to compensate for those portions of the original program that were necessary to offset project impacts which did not meet the approved performance standards. The revised restoration program, if necessary, shall be processed as an amendment to this coastal development permit.

F. The permittees shall monitor and manage the restoration site in accordance with the approved mitigation and monitoring plan, including any revised restoration program approved by the Commission or its staff. Any proposed changes to the approved mitigation and monitoring plan shall be reported to the Executive Director. No changes to the approved mitigation and monitoring plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

3. Construction Staging. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicants shall submit for review and written approval of the Executive Director, a final detailed construction staging plan in substantial conformance to the Construction Staging Plan dated May 15, 2019 which indicates that the construction staging area(s) will avoid impacts to public access to the bay and avoid impacts to sensitive habitat areas.

A. The construction staging plan shall be for Phase II and shall demonstrate:
   1. Construction equipment shall not be stored outside the staging area
   2. Habitat (vegetated) areas shall not be used for staging or storage of equipment

3. The staging area for construction of the project shall not obstruct access to Upper Newport Bay Ecological Reserve

B. The plan shall include, at a minimum, a site plan that depicts the following components:
   1. Limits of the staging area(s)
      i. construction corridor(s)
      ii. construction site
      iii. location of construction fencing and temporary job trailers

C. The permittee shall undertake development in accordance with the approved final plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

4. Biological Monitor. By acceptance of this permit, the applicant agrees that:
An appropriately trained biologist shall monitor the proposed development for disturbance to sensitive species or habitat area. At minimum, monitoring shall occur once a week during any week in which construction occurs. Daily monitoring shall occur during development which could significantly impact biological resources such as dredging or construction that could result in disturbances to the raptors or sensitive species in the area. Based on field observations, the biologist shall advise the applicant regarding methods to minimize or avoid significant impacts, which could occur upon sensitive species or habitat areas. The applicant shall not undertake any activity that would disturb habitat area unless specifically authorized and mitigated under this coastal development permit or unless an amendment to this coastal development permit for such disturbance has been obtained from the Coastal Commission.

5. Construction Timing. By acceptance of this permit, the applicant agrees that:

A. If construction activities, including but not limited to grading, construction, restoration activities, or other disturbance, are to occur between February 1 and September 15, a pre-construction nesting bird survey shall be conducted to determine the presence of active nests within 500 feet of the construction activities. The nesting bird surveys shall be completed no more than 72 hours prior to any construction activities. All ground-disturbance activities within 500 feet of raptor nests or other active nests or as specified below shall be halted until that nesting effort is finished.

B. The monitor shall review and verify compliance with these nesting boundaries and shall verify when the nests have been naturally vacated for the season, with no human interference. Work may resume when no other active nests are found. Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to the Executive Director.

C. Appropriate noise-abatement measures (e.g., sound walls) shall be implemented to ensure that noise levels are less than 60 A-weighted decibels (dBA) at the active nest of a listed species, as determined by the biological

monitor. This shall be verified by weekly noise monitoring at an equivalent location conducted by a qualified acoustical engineer during the breeding season (February 1 to September 15) or as otherwise determined by a qualified biological monitor based on nesting activity.

The applicant further agrees that:

Construction during Breeding and Non-Breeding Seasons for Sensitive Species:

D. Activities involving disturbance or removal of riparian vegetation shall be prohibited during the least Bell's vireo breeding season (March 15 to September 15).
E. Vegetation impacts shall be monitored by a qualified Biologist. The Biological Monitor shall delineate (by the use of orange snow fencing or lath and ropes/flagging) all areas adjacent to the impact area that contain habitat suitable for sensitive bird occupation (i.e., California gnatcatcher, Belding savannah sparrow, light-footed clapper rail) and raptors.
F. Prior to and during any disturbance of suitable gnatcatcher habitats outside the gnatcatcher breeding season, the biologist shall locate any individual gnatcatchers on-site and direct clearing to begin in an area a minimum of 300 feet away from the birds. No site disturbance shall occur until the individual birds have naturally vacated the area without human interference. It shall be the responsibility of the permittee to assure that gnatcatchers shall not be directly injured or killed by impacts to Coastal Sage Scrub or other Scrub communities.
G. Prior to initiating vegetation impacts or project construction, the biological monitor shall meet on-site with the construction manager or other individual(s) with oversight and management responsibility for the day- to-day activities on the construction site to discuss implementation of the relevant avoidance and minimization mitigation measures for gnatcatchers. The biologist shall meet as needed with the construction manager (e.g., when new crews are employed) to discuss implementation of these measures.

The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved revised final plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

6. Construction and Pollution Prevention Plan. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION the applicant shall submit, for the review and written approval of the Executive Director, a final Construction and Pollution Prevention Plan prepared and certified by a qualified licensed professional. The final Plan shall demonstrate that all construction, including, but not limited to, clearing, grading, staging, storage of equipment and materials, or other activities that involve ground disturbance, and creation or replacement of impervious surfaces, complies with the following requirements:

1. **Minimize Erosion and Sediment Discharge.** During construction, erosion and the discharge of sediment off-site or to coastal waters shall be minimized through the use of appropriate Best Management Practices (BMPs), including:

1. Land disturbance during construction (e.g., clearing, grading, and cut-and-fill) shall be minimized, and grading activities shall be phased, to avoid increased erosion and sedimentation.
2. Erosion control BMPs (such as mulch, soil binders, geotextile blankets or mats, or temporary seeding) shall be installed as needed to prevent soil from being transported by water or wind. Temporary BMPs shall be implemented to stabilize soil on graded or disturbed areas as soon as feasible during construction, where there is a potential for soil erosion to lead to discharge of sediment off-site or to coastal waters.
3. Sediment control BMPs (such as silt fences, fiber rolls, sediment basins, inlet protection, sand bag barriers, or straw bale barriers) shall be installed as needed to trap and remove eroded sediment from runoff, to prevent sedimentation of coastal waters.
4. Tracking control BMPs (such as a stabilized construction entrance/exit, and street sweeping) shall be installed or implemented as needed to prevent tracking sediment off-site by vehicles leaving the construction area.
5. Runoff control BMPs (such as a concrete washout facility, dewatering tank, or dedicated vehicle wash area) that will be implemented during construction to retain, infiltrate, or treat stormwater and non-stormwater runoff.

2. **Minimize Discharge of Construction Pollutants.** The discharge of other pollutants resulting from construction activities (such as chemicals, paints, vehicle fluids, petroleum products, asphalt and cement compounds, debris, and trash) into runoff or coastal waters shall be minimized through the use of appropriate BMPs, including:

1. Materials management and waste management BMPs (such as stockpile management, spill prevention, and good housekeeping practices) shall be installed or implemented as needed to minimize pollutant discharge and polluted runoff resulting from staging, storage, and disposal of construction chemicals and materials. BMPs shall include, at a minimum:
    i. Covering stockpiled construction materials, soil, and other excavated materials to prevent contact with rain, and protecting all stockpiles from stormwater runoff using temporary perimeter barriers.
    ii. Cleaning up all leaks, drips, and spills immediately; having a written plan for the clean-up of spills and leaks; and maintaining an inventory of products and chemicals used on site.
    iii. Proper disposal of all wastes; providing trash receptacles on site; and covering open trash receptacles during wet weather.
    iv. Prompt removal of all construction debris from the wetland area.
    v. Detaining, infiltrating, or treating runoff, if needed, prior to conveyance off-site during construction.
2. Fueling and maintenance of construction equipment and vehicles shall be conducted off site if feasible. Any fueling and maintenance of mobile equipment conducted on site shall take place at a designated area located at least 50 feet from coastal waters, drainage courses, and storm drain inlets, if feasible (unless those inlets are blocked to protect against fuel spills). The fueling and maintenance area shall be designed to fully contain any spills of fuel, oil, or other contaminants. Equipment that cannot be feasibly relocated

to a designated fueling and maintenance area (such as cranes) may be fueled and maintained in other areas of the site, provided that procedures are implemented to fully contain any potential spills.

3. **Minimize Other Impacts of Construction Activities.** Other impacts of construction activities shall be minimized through the use of appropriate BMPs, including:

1. The damage or removal of non-invasive vegetation (including trees, native vegetation, and root structures) during construction shall be minimized, to achieve water quality benefits such as transpiration, vegetative interception, pollutant uptake, shading of waterways, and erosion control.
2. Soil compaction due to construction activities shall be minimized, to retain the natural stormwater infiltration capacity of the soil.
3. The use of temporary erosion and sediment control products (such as fiber rolls, erosion control blankets, mulch control netting, and silt fences) that incorporate plastic netting (such as polypropylene, nylon, polyethylene, polyester, or other synthetic fibers) shall be avoided, to minimize wildlife entanglement and plastic debris pollution.

4. **Construction In, Over, or Adjacent to Coastal Waters and Habitat.** Construction taking place adjacent to coastal waters and habitat shall protect the coastal waters and habitat by implementing additional BMPs, including:

1. No construction equipment or materials (including debris) shall be allowed at any time outside of the project area.
2. All work shall take place during daylight hours, and lighting of the wetlands is prohibited.
3. Tarps or other devices shall be used to capture debris, dust, oil, grease, rust, dirt, fine particles, and spills to protect the quality of coastal waters.
4. All erosion and sediment controls shall be in place prior to the commencement of construction, as well as at the end of each workday. At a minimum, if grading is taking place, sediment control BMPs shall be installed at the perimeter of the construction site to prevent construction-related sediment and debris from entering the waterways, natural drainage swales, and the storm drain system.

5. **Manage Construction-Phase BMPs.** Appropriate protocols shall be implemented to manage all construction-phase BMPs (including installation and removal, ongoing operation, inspection, maintenance, and training), to protect coastal water quality.

6. **Construction Site Map and Narrative Description.** The Construction and Pollution Prevention Plan shall include a construction site map and a narrative description addressing, at a minimum, the following required components:

1. A map delineating the construction site, construction phasing boundaries, and the location of all temporary construction-phase BMPs (such as silt fences, inlet protection, and sediment basins).
2. A description of the BMPs that will be implemented to minimize land disturbance activities, minimize the project footprint, minimize soil compaction, and minimize damage or removal of non-invasive vegetation. Include a construction phasing schedule, if applicable to the project, with a description and timeline of significant land disturbance activities.

3. A description of the BMPs that will be implemented to minimize erosion and sedimentation, control runoff and minimize the discharge of other pollutants resulting from construction activities. Include calculations that demonstrate proper sizing of BMPs.
4. A description and schedule for the management of all construction-phase BMPs (including installation and removal, ongoing operation, inspection, maintenance, and training). Identify any temporary BMPs that will be converted to permanent post-development BMPs.

7. Archaeological/Cultural Resources.

A. By acceptance of this permit, the applicant agrees to comply with the following monitoring conditions during construction:

1. Archaeological monitor(s) qualified by the California Office of Historic Preservation (OHP) standards, and a minimum of 1 Native American monitor from each tribal entity with documented ancestral ties to the area appointed consistent with the standards of the Native American Heritage Commission (NAHC), and the Native American most likely descendent (MLD) when State Law mandates identification of a MLD, shall monitor all project grading, excavation work, site preparation or landscaping activities associated with the approved development. Prior to the commencement and/or re-commencement of any monitoring, the permittee shall notify each archeological and Native American monitor of the requirements and procedures established by this special condition, including all subsections. Furthermore, prior to the commencement and/or re-commencement of any monitoring, the permittee shall provide a copy of this special condition, any archaeological monitoring or research plans, and any other plans required pursuant to this condition and which have been approved by the Executive Director, to each monitor;

2. The permittee shall provide sufficient archeological and Native American monitors to assure that all project grading and any other subsurface activity that has any potential to uncover or otherwise disturb cultural deposits is monitored at all times;

B. If an area of cultural deposits is discovered during the course of the project,

1. All construction and subsurface activity that have the potential to uncover or otherwise disturb cultural deposits in the area of the discovery or may foreclose mitigation options shall cease within 50 feet of the deposit immediately and shall not recommence except as provided in subsection C hereof; and the project archaeologist shall prepare and submit a Significance Testing Plan, for review and approval of the Executive Director, identifying measures to be undertaken to determine the significance of the find. The Plan shall be prepared in consultation with the Native American monitors, and the MLD when State Law mandates the identification of a MLD. The Executive Director shall, in writing, determine the adequacy of the Plan if can be implemented without further Commission action, provide written

authorization to proceed. The Significance Testing Plan results, along with the project archaeologist's recommendation as to whether the discovery should be considered significant, and the comments of the Native American monitors and MLD when State Law mandates the identification of a MLD, shall be submitted to the Executive Director for a determination of the significance of the discovery. If the Executive Director determines that the discovery is significant, development shall not recommence and the permittee shall submit to the Executive Director a Supplementary Archaeological Plan in accordance with subsection C, below.

3. A permittee seeking to recommence construction following discovery of cultural deposits determined to be significant pursuant to the process established in the Significance Testing Plan in subsection B(i) shall submit a Supplementary Archaeological Plan for the review and written approval of the Executive Director, prepared by the project archaeologist in consultation with the Native American monitor(s), and the Native American most likely descendent (MLD) when State Law mandates identification of a MLD. The Supplementary Archaeology Plan shall identify proposed investigation and mitigation measures; in-situ preservation is the preferred mitigation and can be achieved through such methods such as, but not limited to, project redesign, capping, and deeding the cultural resource areas in open space. In order to protect archaeological resources, any further development may only be undertaken consistent with the provisions of the approved Supplementary Archaeological Plan, as well as, to the extent applicable, the original approved archaeological plan.

(i) If the Executive Director approves the Supplementary Archaeological Plan and determines that the Supplementary Archaeological Plan's recommended changes to the proposed development or mitigation measures are de minimis in nature and scope, construction may recommence after this determination is made in writing by the Executive Director.

(ii) If the Executive Director approves the Supplementary Archaeological Plan but determines that the changes therein are not de minimis, construction may not recommence until after an amendment to this permit is approved by the Commission to authorize a new archaeological approach.

(iii)A report verifying compliance with this condition shall be submitted to the Executive Director for review and written approval, upon completion of the mitigation measures detailed in the approved archaeological monitoring plan and/or Supplementary Archaeological Plan required to protect significant archaeological finds.

8. Other Agency Approvals. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall provide to the Executive Director a copy of each permit issued by the California Department of Fish and Wildlife, Regional Water Quality Control Board, US Army Corps of Engineers, the US Fish and Wildlife Service, and the State Lands Commission (hereinafter "other resource agencies"), or a letter of permission, or evidence that no permit or permission is required. The applicant shall inform the Executive Director of any changes to the project required

by the other resource agencies. Such changes shall not be incorporated into the project until the applicant obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

IV. FINDINGS AND DECLARATIONS

A. PROJECT LOCATION AND DESCRIPTION

The project site is located within the City of Newport Beach on 11.32 acres within the eastern portion of the 60-acre Big Canyon Creek Nature Park located between Jamboree Road and Back Bay Drive to the east and west, and bounded by residential communities to the North and South along the creek bluffs, approximately 1 mile north of Pacific Coast Highway. Located on the east side of Upper Newport Bay, Big Canyon Creek winds through the Big Canyon Nature Park in a southeast to northwest direction and into the Upper Newport Bay State Ecological Reserve (EXHIBIT 1). The Big Canyon watershed is roughly 1,300 acres extending approximately 3 miles east from Back Bay Drive into the San Joaquin Hills. The area is located between the first public road and the Bay and is designated open space in the City's certified Land Use Plan. The site is in a natural canyon with steep canyon slopes, a narrow floodplain, and a perennial stream (Big Canyon Creek), which flows west into the Upper Newport Bay. Slopes of the canyon range in elevation from 20-75 feet above mean sea level (MSL) and the canyon creek elevation ranges from below MSL to 25 feet above MSL. The canyon represents the only remaining natural, undeveloped portion of the Big Canyon Creek watershed, and is the only significant remaining natural canyon on the east side of Newport Bay. The Big Canyon Creek Watershed is approximately 2 square miles and drains directly into Upper Newport Bay.

As part of the City's phased approach to the Big Canyon Habitat Restoration Project, Phase 1 of the project resulted in the capture of dry weather flows and diversion around high-selenium containing groundwater seeps which are collected and diverted to the sanitary sewer. These measures have resulted in water quality improvements that would otherwise have had the potential to impact downstream restoration efforts. Phase 2B and 2C of the Big Canyon Creek Restoration project are located immediately downstream from Phase 2A, and occur on property owned by the California Department of Fish and Wildlife. Projected restoration of these areas is expected to include invasive plant removal and management, stream corridor enhancement, remediation of the selenium-impacted freshwater pond and revegetation with native plants. Phases 2B and 2C are not considered a part of this application, and will be proposed as separate projects as future funding becomes available. The restoration project is a voluntary restoration project driven by the City with grant funding; it is not mitigation to offset impacts from other development.

The project site is located on public trust lands managed by the City of Newport Beach. Phase 2 of the restoration project is located between Phase 1, located immediately adjacent to Jamboree Road southeast of the subject site, and the California Department of Fish and Wildlife Property, located to the northwest boundary of the subject site immediately adjacent to Upper Newport Bay (EXHIBIT 2).

The 11.3 acre subject site currently contains 6.33 acres of invasive pepper tree grove, 2.91 acres of mixed arroyo willow/pepper tree grove, 0.58 acre of alkali heath marsh alliance, 0.40 acres of

freshwater marsh, and 0.28 acre of Menzies's goldenbush scrub alliance, and 0.82 acre of bare areas. Almost the entire project site (approximately 10.47 acres) is delineated as wetland/riparian (EXHIBIT 3).

Phase 2 of The Big Canyon Creek Restoration Project proposes to re-establish a functioning complex of wetland and upland habitats by: 1) removing exotic and invasive plants; 2) replanting native vegetation to create a mosaic of coastal habitats; 3) restore, enhance and improve the resiliency of the riparian habitat by creating wet and high alkali marsh habitat; and 4) reduce creek channel erosion and restore connectivity between the creek channel and floodplain (EXHIBIT 5).

More than half of the project area is dominated by invasive Brazilian pepper trees, which has a negative impact on the quality of the riparian corridor and adjacent habitat zones. Native to South America and introduced as an ornamental plant in the 1840s, Brazilian pepper trees form dense and monospecific stands that crowd out native species, and produce chemicals that inhibit the growth of native plant species.[1] In order to remove the Brazilian pepper tree without the use of chemicals, the entire tree including the root ball must be removed, because simply cutting the tree will not kill it; its roots quickly produce several new shoots, and in many cases proliferate when under stress. Therefore, the City is proposing to remove the entire pepper tree grove which will require extensive clearing and grubbing in approximately 6.33 acres utilizing excavators and backhoes. Selective removal of exotic trees and other invasive plants will be conducted in an additional 2.41-acre area of existing woody riparian vegetation that contains pepper trees. The total area of clearing, grubbing and selective vegetation removal for restoration purposes is 9.24 acres (EXHIBIT 4).

Clearing and removal of non-native pepper trees with large canopies and root systems will leave behind depressions in the stream banks and surrounding soil where the large root masses were removed. The remaining voids will be back-filled utilizing soils that will be relocated from grading activities along the creek banks which will be pulled-back, widening the creek to provide better connectivity to the floodplain. The removal of pepper trees and root systems located within and adjacent to the stream banks will be conducted with bank stabilization efforts. In reaches where the existing channel is deeper than desired, removal of the trees will create an opportunity to adapt the root ball depressions into a wider and more stable floodplain which will improve the continuous flow of the water in the creek, which will improve the quality of the water in the creek by reducing erosion, and reducing the concentration of metals, toxics, nutrients, and bacteria.

There is currently an existing depression in the northwest corner of the project site that collects water from the storm drain outlet above, and becomes a mosquito vector habitat when wet weather flows from the storm drain outlet enters the scour pond. In an effort to remediate this condition, the City is proposing to line the scour pond with approximately 80 cubic yards of rip rap to facilitate better drainage and prevent erosion, in addition to grading the side channel that drains from the scour pond to the creek, which will direct the discharge flow from the storm drain to the proposed re-contoured and stabilized channel.

Construction of the project is expected to occur in phases over the course of 5 months, beginning in fall of 2019, and will include the creek restoration and habitat restoration and enhancement. Three

[1] Brazilian pepper trees are allelopathic. U.S. Department of Agriculture, National Invasive Species Information Center, https://www.invasivespeciesinfo.gov, July 26, 2019.

potential excavation and grading equipment access points are located around the perimeter of the project area within existing vehicle access roads utilizing temporary ramps that will be removed upon completion of the project. Temporary stockpiling of soils will be located within the restoration area identified as the construction staging area/material stockpile area on the southwest portion of the project area. Approximately eight employees will be present on the project site, and construction hours will occur between 7:00 am and 6:30 pm consistent with the City's Municipal Code (**Exhibit 6**).

As previously described, Big Canyon provides habitat for numerous plant and wildlife species. Several federally listed plant and avian species associated with wetland and marsh habitats have been observed or have a high potential to occur within the project area. Many of the habitats and plant communities are fragmented, discontinuous, and threatened by invasive plants such as Brazilian peppertree and myoporum.

The existing utility access road constructed as a part of Phase 1 will continue to serve as the 15 foot wide public trail with access from Jamboree Road. The trail would connect to a proposed 3.5 foot wide trail north of the stilling basin and follow the creek bank, eventually connecting to an existing trail network within the creek bed leading to Back Bay Drive and the bay (EXHIBIT 2).

Overall, the project will result in improved water quality and habitat for the Upper Big Canyon through the removal of approximately 10 acres of invasive species and the creation, restoration and enhancement of riparian habitat, and the restoration of upland habitat (coastal sage scrub). Watershed improvements include the transformation of toxins, flood flow attenuation, and habitat improvement for Upper Big Canyon. The applicant expects to start construction in the fall, outside of the nesting season.

B. STANDARD OF REVIEW

The City of Newport Beach LCP was effectively certified on January 13, 2017. The standard of review for development within the City's permit jurisdiction is the City's certified LCP. The subject property is within an area of public trust lands managed by the City, added to the trust in 1998 by Senate Bill 575 (1997). Public trust lands are within the Commission's retained permit jurisdiction, therefore the standard of review for development within the Commission's original permit jurisdiction is Chapter 3 of the Coastal Act, although the City's certified LCP is advisory in nature and may provide guidance.

C. BIOLOGICAL RESOURCES

Section 30230 of the Coastal Act states:

> *Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*

Section 30231 of the Coastal Act states:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30233 of the Coastal Act states in part:

(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

(6) Restoration purposes.

Section 30236 of the Coastal Act states:

Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the floodplain is feasible and where such protection is necessary for public safety or to protect existing development; or (3) developments where the primary function is the improvement of fish and wildlife habitat.

Section 30240 of the Coastal Act states:

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.
(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

Section 30107.5 of the Coastal Act defines environmentally sensitive habitat or ESHA as:

"Environmentally sensitive area" means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.

Although Chapter 3 of the Coastal Act is the standard of review for this project, policies equivalent to Section 30230, 30231, 30233, 30236 and 30240 of the Coastal Act are included in the Newport Beach Coastal Land Use Plan (LUP). Furthermore, the following LUP policies, among others, frame the issues of concern for the Big Canyon Environmental Study area (ESA)[2] as well as measures to address those issues. The LUP states (emphasis added):

*Potential impacts to the natural habitats in this study area (*Big Canyon) *include erosion, creek water quality runoff, sedimentation, increased human activity, noise, invasive species, and uncontrolled public access.*

The goals of the restoration project will address several of the impacts noted in the LUP, listed above and restore the quality of the Big Canyon Creek ESA.

Policy 4.1.3-1: Utilize the following mitigation measures to reduce the potential for adverse impact to ESA natural habitats from sources including, but not limited to, those identified in Table 4.1.1:

B. Where pedestrian access is permitted, avoid adverse impacts to sensitive areas from pedestrian traffic through the use of well defined footpaths, boardwalks, protective fencing, signage and similar methods.

C. Prohibit the planting of non-native plant species and require the removal of non-natives in conjunction with landscaping or revegetation projects in natural habitat areas.

D. Strictly control encroachments into natural habitats to prevent impacts that would significantly degrade the habitat.

H. Participate in implementation of Total Maximum Daily Loads (TMLDs).

I. Participate in programs to control sedimentation into and within Upper Newport Bay.

J. Use docent programs to actively manage and enforce CDFG regulations in marine protected areas regarding the taking of intertidal and subtidal plants and animals and to minimize incidental trampling.

M. Implement TMDLs into Newport Bay and local watersheds to minimize water quality problems along the coastline.

N. Prohibit invasive species and require removal in new development.

O. Implement and enforce TMDLs in watershed and Upper Newport Bay to improve water quality in Newport Harbor.

[2] The Land Use Plan defines Environmental Study Area as "…Relatively large, undeveloped areas containing natural habitats and may be capable of supporting sensitive biological resources."

Marine Resources

Section 30230 of the Coastal Act states that marine resources shall be enhanced and restored and Section 30231 requires controlling runoff, preventing substantial interference with surface water flow and alteration of streams, and maintaining vegetation buffers around riparian habitats. The project as proposed meets the requirements of these sections and the goals of the project are consistent with the Coastal Act.

Of the 11.3 acres of riparian habitat, approximately 10.47 are wetlands **(Exhibit 6).** While the project has been designed and conditioned to avoid permanent impacts to native riparian habitat and jurisdictional wetlands, the project proposes to restore segments of Big Canyon Creek that have been eroded and incised, which will require grading in the creek, vegetation removal, and excavation for stream restoration. Therefore, temporary impacts are unavoidable, but the project as designed and conditioned will result in a much higher functioning wetland ecosystem with higher water quality

Big Canyon Creek is currently in a mostly natural, un-channelized condition within the Project Area. The creek drains approximately two square miles of urban developed land. The reservoir, irrigation water, and surface runoff provide a perennial supply of water to Big Canyon Creek and adjacent wetland areas. Big Canyon Creek drains into Upper Newport Bay through two culverts under Back Bay Road and into a salt marsh system on the western side of the road. Tidal activity occurs only within the salt marsh areas and currently has little or no influence on the freshwater systems to the east of Back Bay Road.

The natural function of Big Canyon includes accommodating storm events and flooding; during large floods, such as a 100-year flood, the entire canyon floor becomes inundated. This natural flooding process provides the necessary soil moisture for plant growth. However, the channel banks and inverts are subject to erosion and sedimentation during flood events which may cause damage to roadways, the existing boardwalk bridge, and other infrastructure. Erosion and sedimentation also negatively impact habitat quality in the canyon and ultimately of Upper Newport Bay. An element of the Big Canyon Nature Park restoration project is to improve the creek flow, minimize areas of scour and sedimentation, which will improve water quality entering the bay.

Overall, the project will result in improved water quality and habitat for Big Canyon by improving creek flow, reducing erosion and sediment entering the bay, and floodplain restoration. Watershed improvements include the restoration of the hydrological connection with the creek and the flood plain, reducing bank erosion and improving water quality through natural filtration and infiltration, planting of native vegetation, and bank stabilization efforts which will improve benthic macro-invertebrate habitat for Big Canyon Creek.

The existing trail locations avoid impacts to sensitive areas and are limited to the creek banks. The trail surrounding the project area provides a clearly defined path of travel for public access and recreation without disturbing the sensitive resources. In addition, the revegetation plan includes the planting of barrier plants along the northwest portion of the creek where the creek runs under the pedestrian path to create a physical barrier protecting the sensitive areas from hikers. The project is consistent with policy *4.1.3-1:* C, above, that requires the removal of non-natives during any revegetation project.

The project is consistent with policies above referring to TMDLs in that this phase of the project continues to address excess sediment and toxins within the creek. In order to improve water quality and the marine environment of the bay and the creek, TMDLs are established by the EPA in order to set limits on any contaminants that can be present in bodies of water in order to protect human health and wildlife health using the water sources. Concentrations of selenium above water quality criteria for selenium under the California Toxics Rule chronic freshwater criteria have been measured in dry weather flows in Big Canyon Creek, and moderate selenium concentrations have been recorded near the mouth of the creek since the 1970s. While selenium is an essential micronutrient for normal animal nutrition, small concentrations above those required may produce toxic effects which range from physical malformations during embryonic development to sterility and death. Since selenium in aquatic ecosystems is readily taken up by aquatic organisms, concentrations can easily reach levels toxic to fish and other wildlife. In 2002, the EPA established the TMDLs for toxic pollutants, including selenium, for Newport Bay.

After a significant study, the City of Newport Beach ascertained that the source of the excess selenium is a natural source within the underlying Miocene Monterey Soil Formation, which is a natural land faction that forms much of the white bluffs of the creek banks and extends along the entire watershed. The marine formation has many elements that can be hazardous to aquatic life, health, and the environment when in excess of the TMDLs. The changes to the canyon hydrology due to urbanization have likely contributed to the mobilization of selenium by disturbing the underlying formation. Prior to urbanization, the Big Canyon Creek likely functioned as an ephemeral stream and only had water in it during the wet season. Surface waters are now present in the creek year-round because of the impermeability of the surrounding developed areas, which support a variety of beneficial uses including a freshwater pond in the creek bed, marsh and riparian habitats, however in order to protect the habitats, excess selenium must be addressed. The LUP includes policies to ensure that the water quality of the creeks and bay are protected and the project as proposed implements these policies.

The City is implementing a selenium reduction program in the watershed that includes dry weather diversions and other measures to reduce the selenium concentrations in the creek. The City has implemented selenium reduction measures as part of Phase 1 (CDP No. 5-16-0059) through the installation of the underground bioretention cell and modified constructed wetland designed to treat pollutants found in urban watersheds, including selenium, which have reduced the concentration of selenium in dry weather flows in Big Canyon Creek.[3]

Upper Newport Bay is listed as an impaired water body under section 303(d) of the Clean Water Act. According to this classification, the following contaminants occur in both Upper and Lower Newport Bay: pesticides and metals, nutrients, pathogens, and sediments/siltation. Phase 2 intends to help meet these TMDLs by addressing the polluted runoff in the creek before contaminated water reaches Upper Newport Bay. The proposed Project includes an integrated system of water quality

[3] Water samples have demonstrated that selenium concentrations prior to the implementation of Phase 1 were higher than then they are today (23 ug/1 vs.13-15 ug/l) Pohl, David H. "Re: Coastal Commission Questions" Message to Scott Holbrook. July 24, 2019. Email.

improvement components, erosion and sedimentation control and use of natural habitats, and addresses not only excess selenium, but will also prevent other pollutants from reaching the Bay contributing to overall improved water quality and an improved marine environment.

There is a potential for discharge of polluted runoff from the project site into Upper Newport Bay as a result of the proposed development. Sections 30230 and 30231 of the Coastal Act require that marine resources and the biological productivity of coastal water be maintained and enhanced. Storage or placement of construction materials, debris, or waste in a location subject to erosion and dispersion or which may be discharged into coastal waters via rain or wind would result in adverse impacts upon the marine environment that would reduce the biological productivity of coastal waters. For instance, construction debris entering coastal waters may cover and displace soft bottom habitat. However, construction best management practices will be implemented to avoid or minimize impacts to the environment. Therefore, the proposed project is not anticipated to result in any significant adverse impact to marine resources or water quality.

The proposed development includes measures to address discharge of polluted run-off from the surrounding urban areas into coastal waters. As construction activities may generate debris or sediment that could enter the wetlands, the creek, or Newport Bay, **Special Condition 8** requires the applicant to adhere to construction BMPs. The development, as proposed and as conditioned, incorporates design features to minimize the effect of construction activities on the marine environment. The Commission finds that the proposed development, as conditioned, conforms with Sections 30230 and 30231 of the Coastal Act regarding the protection of water quality to promote the biological productivity of coastal waters and to protect human health.

Filling of Wetlands

Section 30233 governs projects that result in fill of wetlands, and provides that fill of wetlands may occur if a three-part test is satisfied: 1) the fill is for a use designated in the statute to be an allowable use, 2) there are no feasible less environmentally damaging alternatives, and 3) feasible mitigation measures have been provided to minimize adverse environmental effects.

The biological report submitted by the applicant indicates that the project area for Phase 2 of the project contains approximately 10.47 acres of jurisdictional wetlands, including riparian and marsh habitat. As discussed above, approximately 80 cubic yards of rip rap, covering approximately 2,160 square feet of wetland, will be placed in an existing scour pond below an existing storm drain outfall in the northern portion of the project site. Thus, the project will result in fill of wetlands and must comply with Section 30233.

Although the project has been designed to avoid permanent impacts to wetlands, the project proposes to restore segments of Big Canyon Creek that have been eroded and incised, and that have partly isolated the channel from the floodplain through grading back the incised bank to restore connectivity with the floodplain. Therefore, temporary effects to waters, wetlands, and associated riparian habitat are unavoidable, but the resulting restored habitat would provide superior ecological benefits and will not result in any loss of jurisdictional wetlands.

Temporary impacts to jurisdictional wetland areas would occur from implementation of riparian habitat restoration, including grading. The City proposes to re-contour the channel bank by pulling back the upper banks along approximately 660 linear feet of the channel within the pepper tree

grove areas, up to an average of about 30 feet on each side of the channel to an average depth of 1.5 feet. This would create hydrologically connected floodplain areas that would be seasonally inundated. Following clearing and removal of invasive pepper trees, including the bulk of associated root material in the upper 2 to 3 feet of soil, various measures would be implemented to stabilize and then revegetate the channel and adjacent areas. Out of the approximately 10.47 acres of CCC delineated wetlands, approximately 6.79 acres will be effected by clearing and grubbing, and approximately 2.40 acres will be effected by selective invasive vegetation removal. A total of 9.19 acres of wetland habitat will be impacted by other restoration activities associated with the repair of the creekbed and floodplain. Overall, the restoration project will replace a majority of the degraded and dysfunctional wetlands that exhibit mainly a monoculture of low value pepper tree habitat with a fully functioning, diverse mosaic of several types of native, natural wetland with much greater habitat value to wildlife.

In order to be consistent with Section 30233, a project that involves filling or dredging in a wetland must meet the three-prong test. The use must be one of the uses specifically allowed, it must be the least environmentally damaging alternative, and it must provide adequate mitigation to offset any impacts created by the project. The project does meet the list of limited approvable projects for fill of wetlands under section 30233(a)(6) and has been designed to be the least environmentally damaging alternative and includes measures to minimize adverse environmental effects.

1. Allowable Use

Section 30233(a)(6) of the Coastal Act provides that the filling of wetlands is permitted for restoration purposes. The project is a restoration project in that it will remove approximately 9.5 acres of invasive vegetation that are degrading the habitat, and restore appropriate habitat and functional hydrology of the creek by limiting bank erosion (discussed under 'sedimentation' below). The project will also protect and improve the quality of the water flowing through the creek and into the bay and the Pacific Ocean. Finally, the project is considered a restoration of the riparian and wetland habitat in the creek bed by removing large amounts of non-native vegetation that occupy a large portion of the flood plain and is a restoration of upland areas to coastal sage scrub. Specifically, the 80 cubic yards of fill for the scour pond is a critical part of the restoration because it prevents the erosion of the surrounding wetland and surrounding habitat when large volumes of storm water flow onto the project site.

The proposed use, restoration, includes some fill, and is identified as allowable pursuant to Section 30233 (6). Therefore, the proposed development is consistent with Section 30233 of the Coastal Act with regard to uses which include fill within wetlands.

2. Alternatives

Section 30233 requires the permitted project to be the least environmentally damaging alternative. The applicant provided three alternative projects that consisted of additional permanent impacts to wetlands than the proposal, including a no project alternative.

Alternative 1: No Project

As discussed, the current site conditions of the project area (i.e. presence of invasive Brazilian pepper tree grove monoculture, PSHB infestation of native and non-native vegetation, disconnected hydrology causing erosion and reducing water infiltration and filtration) have diminished the habitat value of this section of the creek and surrounding riparian area, and have minimized

available habitat for native species. According to the biological assessment submitted with the application x , no State or federally listed or protected species have been observed for many years under these existing site conditions, and only a very few special status species utilize the area due to the degraded habitat. Moreover, current conditions do not contribute to lowering selenium concentrations, standing water creates breeding habitat for mosquitos contributing to vector control issues, and PSHB infestation will continue to spread if not treated or removed. Therefore, this alternative is not the least environmentally damaging alternative.

Alternative 2: Reduced Project Area, More Planting of Native Riparian Woodland Species
In an effort to consider options that would be most cost effective, the applicant analyzed the option of planting a broad woody riparian habitat corridor with native trees similar to existing conditions (i.e., replacing pepper tree forest with native riparian woodland species), with aggressive management of PSHB within the restoration and enhancement areas. Although this option was more affordable and was more favorable to nesting birds (such as Least Bells Vireo), it is not necessarily typical or representative of natural or historic ecological conditions, which indicate woody riparian habitat accounting for more of a narrow "ribbon" along the creek likely due to historically insufficient hydrology to support willow-dominated riparian woodland. Additionally, a more willow dominant habitat would provide a less complex habitat mosaic, and would be more susceptible to PSHBs that target woody vegetation, which would require more aggressive PSHB management. Moreover, restoration of a less complex habitat mosaic (one that is willow dominant) was ultimately inconsistent with the project's objective to increase habitat and species diversity. Therefore, this alternative is not feasible and does not maximize the habitat value of the area given these technological constraints.

Alternative 3: Expand Brackish Marsh
The third alternative included the expansion of brackish marsh habitat through excavation and contouring the floodplain to promote saturation from groundwater. This alternative would require amending the soil to decrease salinity, and the addition of organic material, compost tea and other "plant probiotics" to bolster willow health against PSHB infestation. Considerations favoring this alternative included the reduction of need for PSHB management efforts for the riparian corridor, and that adding marsh habitat could provide mitigation potentially needed for phase 2B. However, the increase in brackish marsh areas would create more ponding and stagnant water, which would create more favorable mosquito breeding habitat, and would also increase the bioavailability of selenium because selenium in a freshwater system increases in standing water. Finally, this option involved the most site grading to connect the marsh area, and there was a potential to intrude into the shallow groundwater aquafer which was not preferable. As such, this alternative is not the least environmentally damaging feasible alternative.

For the forgoing reasons, Alternative 4, the proposed project, is the least environmentally damaging feasible alternative for the restoration, because it improves the quantity, quality, and complexity of aquatic and riparian habitats and improves lateral connectivity within the high flow channel to various degrees, and avoids creating favorable mosquito breeding habitat.

The alternatives analysis submitted by the applicant demonstrates that the proposed project has been designed to avoid permanent impacts to wetlands to the maximum extent feasible and is the least environmentally damaging alternative. There is no alternative that would include less fill than the proposed 80 cubic yards of rip rap that would support the restoration of the remainder of the

wetland and creek bed. Therefore, the proposed development is consistent with Section 30233's requirement that there are no feasible, less environmentally damaging alternatives.

3. Mitigation

Section 30233 of the Coastal Act requires that wetland projects include mitigation measures to minimize adverse environmental effects. As stated, the proposed vegetation removal and re-contouring of the creek to restore floodplain connectivity will temporarily impact the habitat, but the project has been designed and conditioned to minimize and mitigate adverse environmental effects.

In summary, the goal of the proposed development is habitat restoration, where wetlands will be restored and enhanced through restoring floodplain functions that sustain habitat, removing non-native vegetation, and planting native riparian species. Therefore, the project results in overall more biologically productive wetlands. Therefore, the Commission finds that the proposed development, as conditioned, conforms with Section 30233 of the Coastal Act because it is an allowed use within wetlands, is the least environmentally damaging alternative, and provides more than sufficient mitigation for any adverse environmental impacts.

Sedimentation

Big Canyon Creek in its current state is degraded as a result of upstream development, historical grazing and agricultural activities, increased peak flows during storms, and year round dry weather flows from urbanization in the watershed. As a result, the creek segment within Phase 2A exhibits un-vegetated erosion prone stream banks, stream channel incision, and loss of floodplain connectivity where the sections of the creek are incised with steep streambanks that are isolated from the floodplain. Water polluted with sediment can prevent animals from seeing food in the water. Sediment laden water can also prevent natural vegetation from growing in that water. Sediment in stream beds can also disrupt the natural food chain by destroying the habitat where the smallest stream organisms live. Therefore, grading is proposed to occur within a limited area along the channel segments. Banks higher than 2 feet high will be contoured back at a gentle slope to intercept the existing valley floor not more than 30 feet either side of the channel. This would create hydrologically connected floodplain areas that would be seasonally inundated. The grading would create a gentle slope where riparian vegetation would be planted that would reduce potential bank erosion and improve water quality through natural filtration and infiltration. The project proposes to restore segments of the creek within Phase 2A that have been eroded and incised thereby achieving greater water quality, consistent with Coastal Act policies 30230 and 30231.

Alteration of the Creek

The Project intends to restore the physical channel and floodplain functions that sustain habitat by restoring a stable channel cross section with areas where the channel overflows seasonally onto the floodplain to create seasonal wetlands. Due to the environmental sensitivity of the site, no major engineering work is proposed to armor the creek and canyon. Section 30236 of the Coastal Act limits substantial alterations to creeks. The proposed project would maintain the same drainage paths and patterns as currently exist.

Section 30236 of the Coastal Act requires mitigation for projects that substantially alter streams and are limited to water supply projects, flood control projects, or improvement of fish and wildlife habitat. This project will improve the creek flow by restoring connectivity of the creek with the

floodplain, will maintain the flow within the current creek bed and does not involve damming or channelizing the creek. The project is not a water supply project, nor a flood control project, however the project will enhance the fish and wildlife habitat of the creek and the bay as a result of the restoration of the floodplain, so it is an allowed alteration of the creek under section 30236, and the proposed project as designed and conditioned by this permit incorporate the best mitigation measures feasible.

The proposed riparian restoration would serve to enhance and restore marine resources. The biological productivity and the quality of coastal waters, tidal marsh, Big Canyon Creek, and wetlands would be enhanced and restored. Restoration of the riparian habitats will improve habitat and water quality for wildlife species and restore migratory corridors within the Project Area. Therefore, the Commission finds that the proposed development, as conditioned, conforms with Sections 30236 of the Coastal Act.

Land Resources within the Restoration Project Area

Pursuant to subsection 30240(a) of the Coastal Act, development in environmentally sensitive habitat areas (ESHA) is limited to uses that are dependent on the resource and must protect against any significant disruption of habitat values. Under section 30240(b), development that occurs adjacent to ESHA must be sited and designed to prevent impacts which would significantly degrade those areas, and must be compatible with the continuance of those habitat areas.

1. ESHA in Project Area

Several of the habitat types surrounding the creek in the Phase 2A project area qualify as ESHA. The LUP states that all riparian habitat within the study areas are ESHA unless there is site-specific evidence to the contrary (LUP Section 4.1.3, page 4-15). Section 4.1.1 of the LUP specifically identifies these habitats as ESHA: *Scrub habitats, including southern coastal bluff scrub, maritime succulent scrub, and Diegan coastal sage scrub* and *Riparian habitats, including southern willow scrub, southern coast live oak riparian forest, southern cottonwood willow riparian forest, southern arroyo willow forest, southern black willow forest, and southern sycamore alder riparian woodland.*

The entire project site (approximately 11.3 acres) is riparian habitat. The area currently consists of 6.33 acres of invasive pepper tree monoculture, 2.91 acres of mixed arroyo willow/pepper tree grove, 0.58 acre of alkali heath marsh alliance, 0.40 acres of freshwater marsh, and 0.28 acre of Menzies's Goldenbush scrub alliance, and 0.82 acre of bare areas. The proposed project will not occur in the freshwater marsh and alkali meadows; however, the project would restore the areas that contain mixed arroyo willow/pepper tree grove vegetation community. The riparian and CSS habitat has the potential to provide nesting and foraging resources for sensitive species including the Least Bell's Vireo, the California Gnatcatcher, raptors and other species.

The applicant's biological report titled *DRAFT Biological Resources Technical Report, Big Canyon Coastal Habitat Restoration and Adaptation Project – Phase 2A,* dated July 2018, prepared by Environmental Science Associates, in addition to the *Response to Comments and Errata/Revisions on the Initial Study/Mitigated Negative Declaration for the Big Canyon Coastal Habitat Restoration and Adaptation Project—Phase 2a dated January 8, 2019*, identifies three ESHAs within the project site, which include freshwater marsh, alkali meadow, and Menzies's Goldenbush

Scrub Alliance. The applicant's study concludes that the pepper tree forest and mixed arroyo willow/pepper tree forest in the project site do not rise to the level of ESHA due to the non-native pepper tree invasion that is currently severely degrading the habitat value of the area. The Commission Staff Ecologist did not make a determination as to whether the mixed arroyo willow/pepper tree forest rises to the level of ESHA, however, as numerous decisions of the Commission confirm, ESHA that is impacted by invasive vegetation does not lose its status as an environmentally sensitive habitat area. The LUP provides that all riparian habitat is presumed to be ESHA *unless there is site-specific evidence to the contrary*. Here, the applicant's evidence that some of the riparian habitat on-site is impacted by invasive vegetation does not overcome the presumption that the riparian habitat is, in fact, ESHA.

Therefore, the majority of the project site, consisting of 11.3 acres of riparian habitat, is presumed to be ESHA and the project must comply with Section 30240 of the Coastal Act. As discussed below, the project is consistent with Section 30240 with respect to both development in and adjacent to ESHA. However, even if some of the riparian habitat is not treated as ESHA, the majority of the project site qualifies as wetlands such that the project must comply with the requirements of Section 30233, discussed above. Thus, as a practical matter, the designation (or not) of the project area as ESHA would not change any of the recommended special conditions.

2. Development in ESHA

As stated above, under section 30240(a), development that occurs in designated ESHA must satisfy two tests: 1) it must be for a use that is dependent on the resource, and 2) it must protect against any significant disruption of habitat values.

The purpose of Phase 2A of the restoration project is to re-establish a functioning complex of wetland and upland habitats along a portion of Big Canyon Creek that is downstream of Phase 1 of the project, and primarily involves removal of non-native vegetation (pepper trees) and replanting native vegetative communities. More specifically, the development involves the following development in riparian habitats: 9.24 acre area where the pepper trees will be removed will be replanted with: 1.16 acres of riparian vegetation resilient to PSHB; 1.94 acres of Wet Alkali Meadow Community; and 3.26 acres of High Alkali Meadow Community. The majority of the bare areas that cover the perimeter of the project area will be planted with 0.48 acre of upland transition habitat including coastal sage scrub species. The remaining 2.40 acres of native riparian habitat will be enhanced through selective removal of invasive plants and replaced with native riparian vegetation resilient to PSHB and PSHB management for existing infested woody riparian plants.

The restoration of the floodplain, containing riparian ESHA, is a use that is dependent on the resource (habitat restoration and nature study). While the proposed restoration project will have temporary impacts to riparian habitat, the proposal is a habitat restoration project that, once completed, will contribute to the increased productivity of the habitat. Without the proposed project the highly invasive vegetation would continue to proliferate and displace native habitat for native species. The improvement to the water quality of the creek and wetlands is part of the holistic restoration of the wetlands and habitat.

Resource dependent development, such as habitat restoration and nature study, is allowed in ESHA under the Coastal Act. While proposed project will disrupt the habitat temporarily, post-project, the restored habitat will be of a much higher value to the wildlife and adjacent open space, and will be compatible with the continuance of the ESHA. The project enhances the quality of the existing habitat by including major riparian and wetland creation/restoration.

3. Development Adjacent to ESHA

Under section 30240(b), development that occurs adjacent to ESHA must be sited and designed to prevent impacts which would significantly degrade those areas, and must be compatible with the continuance of those habitat areas. Even accepting the conclusion of the applicant's study that the pepper tree forest is not ESHA, development will occur adjacent to known ESHA communities, including freshwater marsh and alkali meadow communities. Thus, the project must ensure that the project has been designed to prevent impacts that would significantly degrade those sensitive communities, and must be compatible with the continued existence of the habitat areas.

The applicants submitted a conceptual habitat restoration plan, which consists of establishing approximately 3.26 acres of High Alkali Meadow Community, 1.94 acres of Wet Alkali Meadow Community; 0.48 acres of Upland Transition Habitat; and approximately 2.40 acres of selective removal of invasive plants and replacement with native riparian habitat resilient to PSHB; and PSHB Management for existing infested Woody Riparian Plants. To ensure that potential impacts to the sensitive species are avoided, all work is conditioned to occur outside nesting season. To ensure the proposed project incorporates and implements this measure, the Commission imposes **Special Condition 5**, which specifies time and operation constraints to avoid adverse impacts on sensitive species.

The riparian and CSS habitat has the potential to provide nesting and foraging resources for sensitive species including the Least Bell's Vireo, the California Gnatcatcher, raptors and other species. To avoid impacting sensitive species during construction, the Commission imposes **Special Conditions 4 and 5** to require that the project is monitored for potential impacts to biological resources and that work occurs outside of nesting season. If the proposed restoration is not properly conducted and monitored, the restoration program could fail to meet the performance standards specified and/or contribute to the spread of non-natives and PSHB. Therefore, to ensure proper implementation of the proposed restoration, **Special Condition 2** requires the applicant to submit a monitoring report five (5) years from the date of the approval or the CDP and the final restoration program. If the report concludes that the restoration is not in conformance with or has failed to meet the performance standards specified in the restoration program approved pursuant to this permit, the applicant shall submit a revised or supplemental restoration plan for the review and approval of the Executive Director.

Conclusion

To ensure that impacts to biological and marine resources will be minimized, **Special Condition 2** requires that the applicant to provide a final restoration plan for review and approval of the Executive Director to ensure that the quality of the restoration project will be monitored and to ensure that the biological productivity of the site is improved in as-built conditions. **Special Condition 3** requires the applicant to submit a final staging plan to protect the existing habitat from

degradation during staging and construction. The riparian and CSS habitat has the potential to provide nesting and foraging resources for sensitive species including the Least Bell's Vireo, the California Gnatcatcher, raptors and other species. In order to protect the sensitive species in the project area, **Special Conditions 4 and 5** require the applicant to provide for a biological monitor during construction to protect sensitive species and to abide by a construction schedule to avoid impacting habitat during nesting season. As conditioned, the Commission finds that the project is consistent with the resource protection policies of Section 30240 of the Coastal Act.

D. WATER QUALITY

Section 30230 of the Coastal Act states:

> *Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*

Section 30231 of the Coastal Act states:

> *The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

There is a potential for discharge of polluted runoff from the project site into Upper Newport Bay as a result of the proposed development. Sections 30230 and 30231 of the Coastal Act require that marine resources and the biological productivity of coastal water be maintained and enhanced. Storage or placement of construction materials, debris, or waste in a location subject to erosion and dispersion or which may be discharged into coastal waters via rain or wind would result in adverse impacts upon the marine environment that would reduce the biological productivity of coastal waters. For instance, construction debris entering coastal waters may cover and displace soft bottom habitat. However, construction best management practices will be implemented to avoid or minimize impacts to the environment. Therefore, the proposed project is not anticipated to result in any significant adverse impact to marine resources or water quality. In order to ensure prevention of adverse construction-related impacts upon marine resources and to minimize erosion, the Commission imposes **Special Condition 6** requiring the applicants to implement construction best management practices. Therefore, the Commission finds that the proposed development, as conditioned, conforms with Sections 30230 and 30231 of the Coastal Act regarding the protection of water quality to promote the biological productivity of coastal waters and to protect human health.

E. PUBLIC ACCESS AND RECREATION

Section 30210 of the Coastal Act states:

> *In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*

Section 30212 of the Coastal Act states, in relevant part:

> *(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects*

The proposed project does not propose any new trail connections to existing public trails within the canyon. The existing utility access road around the perimeter of the project site serves as a 15 foot wide public trail with access from Jamboree Road. The trail connects to a 3.5 foot wide trail north of the project site and follows the creek bank, eventually connecting to an existing trail network around the creek bed leading to Back Bay Drive and the bay. The proposed project is consistent with Section 30210 because it provides maximum recreational opportunities and is consistent with Section 30212 as the trail network will continue to provide access to the Bay and coastal waters. As conditioned, the project is consistent with the Coastal Act.

F. CULTURAL AND ARCHAEOLOGICAL RESOURCES

Section 30244 of the Coastal Act states:

> *Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.*

Policies of the Certified LUP state:

> *4.5.1-1: Require new development to protect and preserve paleontological and archaeological resources from destruction, and avoid and minimize impacts to such resources. If avoidance of the resource is not feasible, require an in-situ or site-capping preservation plan or a recovery plan for mitigating the effect of the development.*
>
> *4.5.1-2: Require a qualified paleontologist/archeologist to monitor all grading and/or excavation where there is a potential to affect cultural or paleontological resources. If grading operations or excavations uncover paleontological/archaeological resources, require the paleontologist/archeologist monitor to suspend all development activity to avoid destruction of resources until a determination can be made as to the significance of the resources. If resources are determined to be significant, require submittal of a mitigation plan. Mitigation measures considered may range from in-situ preservation to recovery and/or relocation. Mitigation plans shall include a good faith effort to avoid impacts to cultural resources through methods such as, but not limited to, project redesign, in situ preservation/capping, and placing cultural resource areas in open space.*

4.5.1-3: Notify cultural organizations, including Native American organizations, of proposed developments that have the potential to adversely impact cultural resources. Allow qualified representatives of such groups to monitor grading and/or excavation of development sites.

4.5.1-5: Where there is a potential to affect cultural or paleontological resources, require the submittal of an archeological/cultural resources monitoring plan that identifies monitoring methods and describes the procedures for selecting archeological and Native American monitors and procedures that will be followed if additional or unexpected archeological/cultural resources are encountered during development of the site. Procedures may include, but are not limited to, provisions for cessation of all grading and construction activities in the area of the discovery that has any potential to uncover or otherwise disturb cultural deposits in the area of the discovery and all construction that may foreclose mitigation options to allow for significance testing, additional investigation and mitigation.

Although surveys conducted in connection with the project's EIR did not identify any archaeological or paleontological resources on the site, Native American outreach and a search of the Sacred Lands File conducted by the City indicates that the immediate vicinity of the project area, specifically in areas atop higher elevation bluffs and mesas, is sensitive for prehistoric archaeological resources Therefore, ground disturbing activities, although confined to the upper two to three feet, does have some potential to impact any buried resources that might be present. To minimize potential impacts to resources pursuant to the City' Cultural Resources Assessment entitled *Big Canyon Coastal Habitat Restoration and Adaptation Project—Phase 2A, Cultural Resources Study/Archaeological Research Plan, prepared by ESA, July, 2018*), the City proposes to retain a qualified archaeologist and a Native American representative to monitor all ground disturbing activities on the project site. Consistent with the policies of the LUP that require an archeological and cultural resources monitoring plan be submitted, **Special Condition 7** requires submittal of an archeological monitoring plan to ensure that any prehistoric, archaeological or paleontological cultural resources that may be present on the site and could be impacted by the proposed development receive proper protections, preferably avoidance. The plan shall include provisions for both Professional Archeologists and Native American monitors to be present during soil disturbance. As conditioned for a monitoring plan and protection of the archeological resources, the project is consistent with Section 30244 of the Coastal Act.

G. LOCAL COASTAL PROGRAM

The City of Newport Beach LCP was effectively certified on January 13, 2017. The standard of review for development within the City's permit jurisdiction is the City's certified LCP. The subject property is within an area of public trust lands managed by the City, added to the trust in 1998 by Senate Bill 575 (1997). Public trust lands are within the Commission's retained permit jurisdiction, therefore the standard of review for development within the Commission's original permit jurisdiction is Chapter 3 of the Coastal Act, although the City's certified LCP is advisory in nature and may provide guidance.

H. CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 13096 of Title 14 of the California Code of Regulations requires Commission approval of a coastal development permit application to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. As discussed above, the proposed development, as conditioned, is consistent with the Chapter 3 policies of the Coastal Act. Special Conditions imposed will mitigate adverse impacts to coastal resources and public access. The **Special Conditions** address the following issues: **1)** final revised plans; **2)** final habitat restoration and monitoring plan**; 3)** final construction staging; **4)** biological monitoring; **5)** timing and operation constraints; **6)** best management practices; and **7)** cultural resources. Therefore, the Commission finds that, as conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect of the proposed project, there are no remaining significant environmental impacts within the meaning of CEQA, and the project is consistent with CEQA and the policies of the Coastal Act.