CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

2375 Northside Drive, Suite.100, San Diego, CA 92108 Phone (619) 516-1990 • Fax (619) 516-1994 http://www.waterboards.ca.gov/sandiego/

Clean Water Act Section 401 Water Quality Certification and Waste Discharge Requirements for Discharge of Dredged and/or Fill Materials

PROJECT: Otay Ranch Village Three Development Certification Number 12C-026 WDID: 9 000002443

Reg. Meas. ID: 384242 Place ID: 779635 Party ID: 555744 Person ID: 555745

APPLICANT: Homefed Otay Land II, LLC 1903 Wright Place, Suite 220 Carlsbad, CA 92008

ACTION:

Order for Low Impact Certification	Order for Denial of Certification
 Order for Technically-conditioned Certification 	Enrollment in Isolated Waters Order No. 2004-004-DWQ
 Enrollment in SWRCB GWDR Order No. 2003-017-DWQ 	

PROJECT DESCRIPTION

An application dated July 17, 2015 was submitted by Homefed Otay Land II, LLC¹ (hereinafter Applicant), for Water Quality Certification pursuant to section 401 of the Clean Water Act (United States Code (USC) Title 33, section 1341) for the proposed Otay Ranch Village Three Development Project (Project). The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) deemed the application to be complete on April 20, 2012 and denied without prejudice on June 20, 2012. The Applicant proposes to discharge dredged or fill material to waters of the United States and/or State associated with construction activity at the Project site. The Applicant has also applied for a Clean Water Act section 404 permit from the United States Army Corps of Engineers for the Project (USACE File No. SPL-2012-00181-RAG).

The Project is located northeast of the intersection Main Street and Heritage Road within the City of Chula Vista, San Diego County, California. The Project center reading is located at latitude 32.59766 and longitude -116.000789. The Applicant has paid all required application fees for this Certification in the amount of \$90,000.00. On an annual basis, the Applicant must also pay all active discharge fees and post discharge monitoring fees, as appropriate. On April 5, 2012, the San Diego Water Board provided public notice of the Project application pursuant to California Code of Regulations, title 23, section 3858 by posting information describing the

¹ Application was originally received on March 20, 2012 by SSBT LCRE V, LLC. The property was sold to Homefed Otay Land II, LLC and the application was transferred on July 17, 2015.

Project on the San Diego Water Board's web site and providing a period of twenty-one days for public review and comment. No comments were received.

The Applicant proposes to develop approximately 120 acres of mixed-use village core that includes industrial, office and commercial lots surrounded by multi-family attached and detached residential neighborhoods. The Project includes the extension of Heritage Road to Main Street and the extension of Main Street to the Project Site's eastern boundary. The Project includes developing a portion of the Village Four area that includes 17.8 acres of community park and 8.6 acres of non-preserve open space. The Project also includes the dedication of 158.1 acres of Wolf Canyon open space to the Multiple Species Conservation Program Preserve.

The Project will convert approximately 277.9 acres of pervious ground cover to impervious surfaces. Runoff leaving the developed Project area would be significantly greater in volume, velocity, peak flow rate, and duration than pre-development runoff from the same area without mitigation. Post-construction best management practices (BMPs) to manage and control the effects of these runoff increases will consist of site design and low impact development (LID) BMPs, source control BMPs, and bioretention integrated management practices treatment controls to treat the 85th percentile flow from the development. These BMPs will be designed, constructed, and maintained to meet City of Chula Vista's LID Capture Volume and hydromodification treatment requirements.

The Project application includes a description of the design objective, operation, and degree of treatment expected to be attained from equipment, facilities, or activities (including construction and post-construction BMPs) to treat waste and reduce runoff or other effluents which may be discharged. Compliance with the Certification conditions will help ensure that construction and post-construction discharges from the Project will not cause on-site or off-site downstream erosion, damage to downstream properties, or otherwise damage stream habitats in violation of water quality standards in the *Water Quality Control Plan for the San Diego Basin (9)* (Basin Plan).

Project construction will permanently impact 0.46 acre (10,318 linear feet) of stream channel and 0.003 acre of depressional wetland waters of the United States and/or State. The Applicant reports that the Project purpose cannot be practically accomplished in a manner which would avoid or result in less adverse impacts to aquatic resources considering all potential practicable alternatives, such as the potential for alternate available locations, designs, reductions in size, configuration or density.

The Applicant reports that compensatory mitigation for the permanent loss of 0.463 acre of jurisdictional waters will be achieved off-site through the enhancement and re-establishment of 2.64 acres of stream channel waters of the United States and/or State and establishment of 0.31 acre of wetland waters of the United States and/or State. All waters of the United States and/or State receiving temporary discharges of fill material will be restored upon removal of the fill. Mitigation for discharges of fill material to waters of the United States and/or State states and/or State will be completed by the Applicant at the Otay River Restoration Project located in the Otay hydrologic sub-area (HSA 910.20) at a minimum compensation ratio of 5.7:1 (area mitigated:area impacted) for stream channel impacts and 103:1 for wetland impacts. The Otay River Restoration Project (Restoration Project) is located immediately downstream of Savage

Dam on Lower Otay Lake. The Restoration Project will restore approximately 100 acres on an approximately 1-mile long segment of the Otay River that was previously impacted by a mining operation. The Restoration Project will completely restore the channel morphology of the river through the re-establishment of primary and secondary flow channels and 10-year, 25-year and 100-year floodplains. The Restoration Project will also remove more than 70 acres of invasive species and restore native riparian vegetation throughout the river corridor. Additionally, the Restoration Project will eradicate invasive species from more than 1 mile of the existing riparian area of the Otay River between Savage Dam and the Restoration Project site (Upstream Enhancement Area). Phased implementation of the proposed Restoration Project includes:

- Phase 1 Invasive Species Removal in the Upstream Enhancement Area
- Phase 2 Restoration of Otay River Mainstem (Permittee Responsible Mitigation for Otay Ranch Village Three Development and Otay Ranch Village 8 West Projects)
- Future Phases, restoration of the remaining parcel area will be proposed as a mitigation bank.

The large-scale Restoration Project proposes to enhance, rehabilitate, and re-establish the physical, hydrological, and biological processes that will preserve, enhance, and restore a suite of beneficial uses (WARM, WILD, RARE, and REC-2) in a 2.2-mile, contiguous segment of the Otay River. Additionally, more than 1.3 miles of stream channel waters of the United States and/or State will be added to the resource. Therefore, a linear feet compensation ratio of less than 1:1 is accepted for this Project.

Detailed written specifications and work descriptions for the compensatory mitigation project including, but not limited to, the geographic boundaries of the project, timing, sequence, monitoring, maintenance, ecological success performance standards and provisions for longterm management and protection of the mitigation areas are described in the V3/V8W HMMP Addendum to the Otay River Restoration Project Final Habitat Mitigation and Monitoring Plan (Mitigation Plan), dated May 2016. San Diego Water Board acceptance of the Mitigation Plan applies only to the Project described in this Certification and must not be construed as approval for other current or future projects that are planning to use additional acreage at the site for mitigation. The Mitigation Plan is incorporated in this Certification by reference as if set forth herein. The Mitigation Plan provides for implementation of compensatory mitigation which offsets adverse water quality impacts attributed to the Project in a manner that protects and restores the abundance, types and conditions of aquatic resources and supports their beneficial uses. Implementation of the Mitigation Plan will reduce significant environmental impacts to resources within the San Diego Water Board's purview to a less than significant level. Based on all of these considerations, the Mitigation Plan will adequately compensate for the loss of beneficial uses and habitat within waters of the United States and/or State attributable to the Project.

Additional Project details are provided in Attachments 2 through 5 of this Certification.

TABLE OF CONTENTS

I.	STANDARD CONDITIONS	5
II.	GENERAL CONDITIONS	5
III.	CONSTRUCTION BEST MANAGEMENT PRACTICES	8
IV.	POST-CONSTRUCTION BEST MANAGEMENT PRACTICES	10
V.	PROJECT IMPACTS AND COMPENSATORY MITIGATION	11
VI.	MONITORING AND REPORTING REQUIREMENTS	15
VII.	NOTIFICATION REQUIREMENTS	22
VIII.	CALIFORNIA ENVIRONMENTAL QUALITY ACT COMPLIANCE	24
IX.	SAN DIEGO WATER BOARD CONTACT PERSON	24
Х.	WATER QUALITY CERTIFICATION	25

Attachments:

- 1. Definitions
- Project Location Maps
 Project Site Plans

- 4. Mitigation Figures
 5. CEQA Mitigation Monitoring and Reporting Program

I. STANDARD CONDITIONS

Pursuant to section 3860 of title 23 of the California Code of Regulations, the following three standard conditions apply to <u>all</u> water quality certification actions:

- A. This Certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to section 13330 of the Water Code and chapter 28, article 6 (commencing with title 23, section 3867), of the California Code of Regulations.
- B. This Certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility and requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent Certification application was filed pursuant to California Code of Regulations title 23, section 3855 subdivision (b), and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
- C. This Certification action is conditioned upon total payment of any fee required under title 23, chapter 28 (commencing with section 3830) of California Code of Regulations and owed by the applicant.

II. GENERAL CONDITIONS

- A. Term of Certification. Water Quality Certification No. 12C-026 (Certification) shall expire upon a) the expiration or retraction of the Clean Water Act section 404 (33 USC Title 33, section1344) permit issued by the U.S. Army Corps of Engineers for this Project, or b) five (5) years from the date of issuance of this Certification, whichever occurs first.
- B. **Duty to Comply.** The Applicant must comply with all conditions and requirements of this Certification. Any Certification noncompliance constitutes a violation of the Water Code and is grounds for enforcement action or Certification termination, revocation and reissuance, or modification.
- C. General Waste Discharge Requirements. The requirements of this Certification are enforceable through Water Quality Order No. 2003-0017-DWQ, *Statewide General Waste Discharge Requirements for Discharges of Dredged or Fill Material that have Received State Water Quality Certification* (Water Quality Order No. 2003-0017-DWQ). This provision shall apply irrespective of whether a) the federal permit for which the Certification was obtained is subsequently retracted or is expired, or b) the Certification is expired. Water Quality Order No. 2003-0017-DWQ is accessible at:

http://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/generalorders/go_wdr401regulated_projects.pdf.

- D. Project Conformance with Application. All water quality protection measures and BMPs described in the application and supplemental information for water quality certification are incorporated by reference into this Certification as if fully stated herein. Notwithstanding any more specific conditions in this Certification, the Applicant shall construct, implement and comply with all water quality protection measures and BMPs described in the application and supplemental information. The conditions within this Certification shall supersede conflicting provisions within the application and supplemental information submitted as part of this Certification action.
- E. **Project Conformance with Water Quality Control Plans or Policies**. Notwithstanding any more specific conditions in this Certification, the Project shall be constructed in a manner consistent with the Basin Plan and any other applicable water quality control plans or policies adopted or approved pursuant to the Porter Cologne Water Quality Act (Division 7, commencing with Water Code Section 13000) or section 303 of the Clean Water Act (33 USC section 1313). The Basin Plan is accessible at:

http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/index.shtml

- F. **Project Modification**. The Applicant must submit any changes to the Project, including Project operation, which would have a significant or material effect on the findings, conclusions, or conditions of this Certification, to the San Diego Water Board for prior review and written approval. If the San Diego Water Board is not notified of a significant change to the Project, it will be considered a violation of this Certification.
- G. **Certification Distribution Posting**. During Project construction, the Applicant must maintain a copy of this Certification at the Project site. This Certification must be available at all times to site personnel and agencies. A copy of this Certification shall also be provided to any contractor or subcontractor performing construction work, and the copy shall remain in their possession at the Project site.
- H. **Inspection and Entry**. The Applicant must allow the San Diego Water Board or the State Water Resources Control Board, and/or their authorized representative(s) (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents as may be required under law, to:
 - 1. Enter upon the Project or Compensatory Mitigation site(s) premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Certification;
 - 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Certification;
 - Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Certification; and

- 4. Sample or monitor, at reasonable times, for the purposes of assuring Certification compliance, or as otherwise authorized by the Clean Water Act or Water Code, any substances or parameters at any location.
- I. Enforcement Notification. In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under State law. For purposes of section 401(d) of the Clean Water Act, the applicability of any State law authorizing remedies, penalties, process or sanctions for the violation or threatened violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Certification.
- J. **Certification Actions**. This Certification may be modified, revoked and reissued, or terminated for cause including but not limited to the following:
 - 1. Violation of any term or condition of this Certification;
 - Monitoring results indicate that continued Project activities could violate water quality objectives or impair the beneficial uses of the Wolf Canyon Creek, the Otay River, or their tributaries;
 - 3. Obtaining this Certification by misrepresentation or failure to disclose fully all relevant facts;
 - 4. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; and
 - Incorporation of any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.

The filing of a request by the Applicant for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Certification condition.

- K. **Duty to Provide Information**. The Applicant shall furnish to the San Diego Water Board, within a reasonable time, any information which the San Diego Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Certification or to determine compliance with this Certification.
- L. **Property Rights**. This Certification does not convey any property rights of any sort, or any exclusive privilege.
- M. Petitions. Any person aggrieved by this action of the San Diego Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with the California Code of Regulations, title 23, sections 3867 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Certification. Copies of the law and regulations applicable to filing

petitions may be found on the Internet at: <u>http://www.waterboards.ca.gov/public_notices/petitions/water_quality</u> or will be provided upon request.

III. CONSTRUCTION BEST MANAGEMENT PRACTICES

- A. **Approvals to Commence Construction**. The Applicant shall not commence Project construction until all necessary federal, State, and local approvals are obtained.
- B. **Personnel Education.** Prior to the start of the Project, and annually thereafter, the Applicant must educate all personnel on the requirements in this Certification, pollution prevention measures, spill response measures, and BMP implementation and maintenance measures.
- C. **Spill Containment Materials.** The Applicant must, at all times, maintain appropriate types and sufficient quantities of materials on-site to contain any spill or inadvertent release of materials that may cause a condition of pollution or nuisance if the materials reach waters of the United States and/or State.
- D. General Construction Storm Water Permit. Prior to start of Project construction, the Applicant must, as applicable, obtain coverage under, and comply with, the requirements of State Water Resources Control Board Water Quality Order No. 2009-0009-DWQ, the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activity, (General Construction Storm Water Permit) and any reissuance. If Project construction activities do not require coverage under the General Construction Storm Water Permit, the Applicant must develop and implement a runoff management plan (or equivalent construction BMP plan) to prevent the discharge of sediment and other pollutants during construction activities.
- E. Waste Management. The Applicant must properly manage, store, treat, and dispose of wastes in accordance with applicable federal, state, and local laws and regulations. Waste management shall be implemented to avoid or minimize exposure of wastes to precipitation or storm water runoff. The storage, handling, treatment, or disposal of waste shall not create conditions of pollution, contamination or nuisance as defined in Water Code section 13050. Upon Project completion, all Project generated debris, building materials, excess material, waste, and trash shall be removed from the Project site(s) for disposal at an authorized landfill or other disposal site in compliance with federal, state and local laws and regulations.
- F. Waste Management. Except for a discharge permitted under this Certification, the dumping, deposition, or discharge of trash, rubbish, unset cement or asphalt, concrete, grout, damaged concrete or asphalt, concrete or asphalt spoils, wash water, organic or earthen material, steel, sawdust or other construction debris waste from Project activities directly into waters of the United States and or State, or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited.

- G. **Downstream Erosion.** Discharges of concentrated flow during construction or after Project completion must not cause downstream erosion or damage to properties or stream habitat.
- H. **Construction Equipment**. All equipment must be washed prior to transport to the Project site and must be free of sediment, debris, and foreign matter. All equipment used in direct contact with surface water shall be steam cleaned prior to use. All equipment using gas, oil, hydraulic fluid, or other petroleum products shall be inspected for leaks prior to use and shall be monitored for leakage. Stationary equipment (e.g., motors, pumps, generator, etc.) shall be positioned over drip pans or other types of containment.
- Process Water. Water containing mud, silt, or other pollutants from equipment washing or other activities, must not be discharged to waters of the United States and/or State or placed in locations that may be subjected to storm water runoff flows. Pollutants discharged to areas within a stream diversion must be removed at the end of each work day or sooner if rain is predicted.
- J. **Surface Water Diversion.** All surface waters, including ponded waters, must be diverted away from areas of active grading, construction, excavation, vegetation removal, and/or any other activity which may result in a discharge to the receiving water. Diversion activities must not result in the degradation of beneficial uses or exceedance of the receiving water quality objectives. Any temporary dam or other artificial obstruction constructed must only be built from materials such as clean gravel which will cause little or no siltation. Normal flows must be restored to the affected stream immediately upon completion of work at that location.
- K. Re-vegetation and Stabilization. All areas that have 14 or more days of inactivity must be stabilized within 14 days of the last activity. The Applicant shall implement and maintain BMPs to prevent erosion of the rough graded areas. After completion of grading, all areas must be re-vegetated with native species appropriate for the area. The re-vegetation palette must not contain any plants listed on the California Invasive Plant Council Invasive Plant Inventory, which can be accessed at <u>http://www.calipc.org/ip/inventory/</u>.
- L. **Hazardous Materials.** Except as authorized by this Certification, substances hazardous to aquatic life including, but not limited to, petroleum products, unused cement/concrete, asphalt, and coating materials, must be prevented from contaminating the soil and/or entering waters of the United States and/or State. BMPs must be implemented to prevent such discharges during each Project activity involving hazardous materials.
- M. Vegetation Removal. Removal of vegetation must occur by hand, mechanically, or through application of United States Environmental Protection Agency (USEPA) approved herbicides deployed using applicable BMPs to minimize adverse effects to beneficial uses of waters of the United States and/or State. Discharges related to the application of aquatic pesticides within waters of the United States must be done in compliance with State Water Resources Control Board Water Quality Order No. 2004-

0009-DWQ, the Statewide General National Pollution Discharge Elimination System Permit for the Discharge of Aquatic Weed Control in Waters of the United States, and any subsequent reissuance as applicable.

- N. Limits of Disturbance. The Applicant shall clearly define the limits of Project disturbance to waters of the United States and/or State using highly visible markers such as flag markers, construction fencing, or silt barriers prior to commencement of Project construction activities within those areas.
- O. On-site Qualified Biologist. The Applicant shall designate an on-site qualified biologist to monitor Project construction activities within or adjacent to waters of the United States and/or State to ensure compliance with the Certification requirements. The biologist shall be given the authority to stop all work on-site if a violation of this Certification occurs or has the potential to occur. Records and field notes of the biologist's activities shall be kept on-site and made available for review upon request by the San Diego Water Board.
- P. Beneficial Use Protection. The Applicant must take all necessary measures to protect the beneficial uses of waters of the Wolf Canyon Creek, the Otay River and their tributaries. This Certification requires compliance with all applicable requirements of the Basin Plan. If at any time, an unauthorized discharge to surface waters (including rivers or streams) occurs or monitoring indicates that the Project is violating, or threatens to violate, water quality objectives, the associated Project activities shall cease immediately and the San Diego Water Board shall be notified in accordance with Notification Requirement VII.A of this Certification. Associated Project activities may not resume without approval from the San Diego Water Board.

IV. POST-CONSTRUCTION BEST MANAGEMENT PRACTICES

- A. **Post-Construction Discharges.** The Applicant shall not allow post-construction discharges from the Project site to cause or contribute to on-site or off-site erosion or damage to properties or stream habitats.
- B. **Storm Drain Inlets.** All storm drain inlet structures within the Project boundaries must be stamped or stenciled (or equivalent) with appropriate language prohibiting non-storm water discharges.
- C. **Post-Construction BMP Design.** The Project must be designed to comply with the requirements for priority development projects in section E.3 of the Regional MS4 Permit Order No. R9-2013-0001, *National Pollutant Discharge Elimination Systems Permit and Waste Discharge Requirements for Discharges of Urban Runoff from the MS4s Draining the Watersheds within the San Diego Region* (Regional MS4 Permit) as well as the most current BMP Design Manual for the City of Chula Vista. Where conflict exists between the referenced documents the most stringent requirements shall apply.

- D. **Post-Construction BMP Maintenance.** The post construction BMPs must be designed, constructed, and maintained in accordance with the most recent California Storm Water Quality Association (CASQA)² guidance. The Applicant shall:
 - 1. No less than two times per year, assess the performance of the BMPs to ensure protection of the receiving waters and identify any necessary corrective measures;
 - 2. Perform inspections of BMPs, at the beginning of the wet season no later than October 1 and the end of the wet season no later than April 1, for standing water, slope stability, sediment accumulation, trash and debris, and presence of burrows;
 - 3. Regularly perform preventative maintenance of BMPs, including removal of accumulated trash and debris, as needed to ensure proper functioning of the BMPs;
 - 4. Identify and promptly repair damage to BMPs; and
 - 5. Maintain a log documenting all BMP inspections and maintenance activities. The log shall be made available to the San Diego Water Board upon request.

V. PROJECT IMPACTS AND COMPENSATORY MITIGATION

- A. **Project Impact Avoidance and Minimization**. The Project must avoid and minimize adverse impacts to waters of the United States and/or State to the maximum extent practicable.
- B. **Project Impacts and Compensatory Mitigation.** Unavoidable Project impacts to Wolf Canyon Creek, the Otay River, and their tributaries within the Otay Watershed must not exceed the type and magnitude of impacts described in the table below. At a minimum, compensatory mitigation required to offset unavoidable temporary and permanent Project impacts to waters of the United States and/or State must be achieved as described in the table below:

² California Storm Water Quality Association (*California Storm Water BMP Handbook, New Development and Redevelopment 2003)*, available on-line at: <u>http://www.cabmphandbooks.org/</u> [Accessed on January 15, 2012]

	Impacts (acres)	Impacts (linear ft.)	Mitigation for Impacts (acres)	Mitigation Ratio (area mitigated :area impacted)	Mitigation for Impacts (linear ft.)	Mitigation Ratio (linear feet mitigated :linear feet impacted)
Permanent Impac	ts					
Stream Channel	0.46 ¹	10,318 ¹	0.98 Enhancement ² 1.66 Re-establishment ³	2.1:1 3.6:1	2,159 ⁴	0.21:1 ⁴
Wetland	0.003 ⁵	NA	0.31 Establishment ⁶	103:1	NA	NA

NA = Not Applicable

- 1. Permanent fill of 0.28 acre (5,109 linear feet) of waters of the U.S. and/or State and 0.18 acre (5,209 linear feet) of waters of the State only.
- 2. Enhancement of 0.98 acre (1,312 linear feet) of existing Otay River low flow stream channel within Phase 2 of the Restoration Project(see Attachment 4, Figure 5, "Main Channel (Enhancement)").
- 3. Re-establishment of 1.11 acres of adjacent Otay River active floodplain and 0.55 acre (847 linear feet) of unnamed tributary to the Otay River within Phase 2 of the Restoration Project (see Attachment 4, Figure 5, "Active Floodplain" and "Tributary," respectively).
- 4. A linear feet compensation ratio of less than 1:1 is accepted for this Project for the reasons as follows. The Project's mitigation proposal is a part of a large-scale Restoration Project that will enhance, rehabilitate, and re-establish the physical, hydrological, and biological processes that will preserve, enhance, and restore a suite of beneficial uses (WARM, WILD, RARE, and REC-2). The Restoration Project will restore the channel morphology of the river and the riparian corridor with native vegetation. The Restoration Project design includes upstream enhancement of approximately 2.63 acres of riparian habitat along 6,495 linear feet of the Otay River mainstem from Savage Dam to the Restoration Site (Phase 1, see Attachment 4, Figure 3) for the purpose of protecting the Restoration Project Site from re-infestation of invasive species. The Restoration Project will provide a high value, large-scale restoration and enhancement of 5,338 linear feet length of the Otay River, adding an additional 7,180 linear feet of secondary, tertiary, and tributary stream channels, in a large contiguous area of an in-watershed aquatic resource, which off-sets the lack of a 1:1 linear feet mitigation ratio.
- 5. Permanent fill of 0.003 acre of depressional wetland waters of the United States and/or State.
- 6. Establishment of a seasonal pond within Phase 2 of the Restoration Project Site (see Attachment 4, Figure 5, "Seasonal Pond"). The seasonal pond will be created within the 25-year high floodplain and will supplement existing onsite ponds creating a complex that will provide emergent habitat and water in an otherwise dry system.
 - C. **Compensatory Mitigation Plan Implementation.** The Applicant must fully and completely implement the Mitigation Plan as it pertains to this Project; any deviations from, or revisions to, the Mitigation Plan must be pre-approved by the San Diego Water Board.

- D. **Performance Standards.** Compensatory mitigation required under this Certification shall be considered achieved once it has met the ecological success performance standards contained in the Mitigation Plan (Section 6.4, beginning on page 6-5) to the satisfaction of the San Diego Water Board.
- E. **Compensatory Mitigation Site Design.** The compensatory mitigation site(s) shall be designed to be self-sustaining once performance standards have been achieved. This includes minimization of active engineering features (e.g., pumps) and appropriate siting to ensure that natural hydrology and landscape context support long-term sustainability in conformance with the following conditions:
 - 1. Most of the channels through the mitigation sites shall be characterized by equilibrium conditions, with no evidence of severe aggradation or degradation;
 - 2. As viewed along cross-sections, the channel and buffer area(s) shall have a variety of slopes, or elevations, that are characterized by different moisture gradients. Each sub-slope shall contain physical patch types or features that contribute to irregularity in height, edges, or surface and to complex topography overall; and
 - 3. The mitigation sites shall have a well-developed plant community characterized by a high degree of horizontal and vertical interspersion among plant zones and layers.
- F. **Treatment and Maintenance of Upstream Enhancement Area.** The Applicant must eradicate invasive species in the 6,495 linear-foot long segment of the Otay River between Savage Dam and the Restoration Project Site, identified as the Upstream Enhancement Area (Phase 1), in accordance with the Mitigation Plan. The Upstream Enhancement Area must be monitored at least annually and retreated, if necessary, for at least 5 years following the initial treatment.
- G. **Temporary Project Impact Areas.** The Applicant must restore all areas of temporary impacts and all other areas of temporary disturbance which could result in a discharge or a threatened discharge of pollutants to waters of the United States and/or State. Restoration must include grading of disturbed areas to pre-project contours and revegetation with native species. The Applicant must implement all necessary BMPs to control erosion and runoff from areas associated with the Project.
- H. Long-Term Management and Maintenance. The compensatory mitigation site(s) must be managed, protected, and maintained, in perpetuity, in conformance with the long-term management plan and the final ecological success performance standards identified in the Mitigation Plan. The aquatic habitats, riparian areas, buffers and uplands that comprise the mitigation site(s) must be protected in perpetuity from land-use and maintenance activities that may threaten water quality or beneficial uses within the mitigation area(s) in a manner consistent with the following requirements:
 - Any maintenance activities on the mitigation site(s) that do not contribute to the success of the mitigation site(s) and enhancement of beneficial uses and ecological functions and services are prohibited;

- Maintenance activities must be limited to the removal of trash and debris, removal of exotic plant species, replacement of dead native plant species, and remedial measures deemed necessary for the success of the compensatory mitigation project;
- 3. The Mitigation site(s) must be maintained, in perpetuity, free of untreated perennial exotic plant species including, but not limited to, pampas grass, giant reed, tamarisk, sweet fennel, tree tobacco, castor bean, palm and pepper tree. Annual exotic plant species must not occupy more than 5 percent of the mitigation site(s); and
- 4. If at any time a catastrophic natural event (e.g., fire, flood) causes damage(s) to the mitigation site(s) or other deficiencies in the compensatory mitigation project, the Applicant must take prompt and appropriate action to repair the damage(s) including replanting the affected area(s) and address any other deficiencies. The San Diego Water Board may require additional monitoring by the Applicant to assess how the compensatory mitigation site(s) or project is responding to a catastrophic natural event.
- Timing of Mitigation Site Construction. The construction of proposed mitigation must be concurrent with project grading and completed no later than 12 months following the start of Project construction. Delays in implementing mitigation must be compensated for by an increased mitigation implementation of 10% of the cumulative compensatory mitigation for each month of delay.
- J. Mitigation Site(s) Preservation Mechanism. Within 120 days from the issuance of this Certification, the Applicant must provide the San Diego Water Board with a draft preservation mechanism (e.g. deed restriction, conservation easement, etc.) that will protect all mitigation areas and their buffers in perpetuity. Within 12 months of the start of Project construction, the Applicant must submit proof of a completed final preservation mechanism that will protect all mitigation areas and their buffers in perpetuity. The conservation easement, deed restriction, or other legal limitation on the mitigation properties must be adequate to demonstrate that the sites will be maintained without future development or encroachment on the sites which could otherwise reduce the functions and values of the sites for the variety of beneficial uses of waters of the United States and/ or State that it supports. The legal limitation must prohibit, without exception, all residential, commercial, industrial, institutional, and transportation development, and any other infrastructure development that would not maintain or enhance the wetland and streambed functions and values of the sites. The preservation mechanism must clearly prohibit activities that would result in soil disturbance or vegetation removal, other than the removal of non-native vegetation. Other infrastructure development to be prohibited includes, but is not limited to, additional utility lines, maintenance roads, and areas of maintained landscaping for recreation.

VI. MONITORING AND REPORTING REQUIREMENTS

- A. **Representative Monitoring**. Samples and measurements taken for the purpose of monitoring under this Certification shall be representative of the monitored activity.
- B. **Monitoring Reports**. Monitoring results shall be reported to the San Diego Water Board at the intervals specified in section VI of this Certification.
- C. **Monitoring and Reporting Revisions**. The San Diego Water Board may make revisions to the monitoring program at any time during the term of this Certification and may reduce or increase the number of parameters to be monitored, locations monitored, the frequency of monitoring, or the number and size of samples collected.
- D. Records of Monitoring Information. Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements;
 - 2. The individual(s) who performed the sampling or measurements;
 - 3. The date(s) analyses were performed;
 - 4. The individual(s) who performed the analyses;
 - 5. The analytical techniques or methods used; and
 - 6. The results of such analyses.
- E. California Rapid Assessment Method. California Rapid Assessment Method (CRAM)³ monitoring must be performed to assess the current and potential ecological conditions (ecological integrity) of the impact site and proposed compensatory mitigation site(s). These conditions reflect the overall level of ecological function of an aquatic resource. Prior to initiating Project construction, the Applicant shall develop a monitoring plan to implement California Rapid Assessment Method (CRAM) monitoring. The Applicant must conduct a quantitative function-based assessment of the health of wetland/streambed habitat, using the appropriate CRAM module for each aquatic resource type, to establish pre-project baseline conditions, set CRAM success criteria, and assess the mitigation site(s) progress towards meeting the success criteria. CRAM monitoring must be conducted prior to the start of Project construction authorized under this Certification and at years 3 and 5 following construction completion. The CRAM monitoring results shall be submitted with the respective Annual Project Progress Report. An evaluation, interpretation, and tabulation of all CRAM assessment data shall be submitted with the Final Project Completion Report.

³ The most recent versions of the California Rapid Assessment Method (CRAM) for Wetlands and additional information regarding CRAM can be accessed at http://www.cramwetlands.org/

- F. Benthic Macroinvertebrate Community Analysis. The Applicant shall conduct bioassessment monitoring, as described in this section, to assess the success of mitigation areas, whenever applicable, using benthic macroinvertebrate community data. Bioassessment shall include: 1) the collection and reporting of benthic macroinvertebrate data; and 2) the collection and reporting of physical habitat data. Bioassessment using benthic macroinvertebrates shall be conducted in wadeable streams with sufficient flow during the index period. In this context, streams shall be defined as streams with surface water flow present during the appropriate index period⁴. Wadeable streams shall be defined as streams that can be safely waded in order to be sampled for benthic invertebrates during the appropriate index period. If the appropriate sampling period lies outside the index period, such as in intermittent streams, please contact the San Diego Water Board.
 - Field Methods. Bioassessment monitoring must be performed using the SWAMP field methods specified in Standard Operating Procedures for Collecting Benthic Macroinvertebrate Samples and Associated Physical and Chemical Data for Ambient Bioassessments in California⁵ (SOP, Ode 2007) or any updates of these methods. The Applicant shall conduct, concurrently with all required benthic macroinvertebrate collections, the "Full" suite of physical habitat characterization measurements as specified in Table 1 of the SOP.
 - 2. Laboratory Methods. Benthic macroinvertebrates shall be identified using the SWAMP laboratory methods specified in *Standard Operating Procedures for Laboratory Processing and Identification of Benthic Macroinvertebrates in California*⁶ (Laboratory SOP, Woodard et al. 2012) or any updates of these methods. Standard Taxonomic Effort (STE) Level II of the Southwestern Association of Freshwater Invertebrate Taxonomists (SAFIT) is required. Quality control samples are required for 10% of the samples each year and Quality Assurance samples must be analyzed by the Aquatic Bioassessment Laboratory of the California Department of Fish and Wildlife.
 - Data Analysis. Analysis of benthic macroinvertebrate data shall be conducted using scoring tools including but not limited to the *California Stream Condition Index*⁷ (CSCI, Rehn et al., 2015, SWAMP-TM-2015-0002).
 - 4. **Data Storage.** Benthic macroinvertebrate data and physical habitat data shall be submitted to the California Environmental Data Exchange Network⁸ (CEDEN).

⁴ The appropriate index period can be found electronically at the following location: <u>http://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/constpermits/cgp_biomap.pdf</u>

⁵ The SOP can be found electronically at the following location: http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/phab_sopr6.pdf

⁶ The Laboratory SOP can be found electronically at the following location: <u>http://www.waterboards.ca.gov/water_issues/programs/swamp/bioassessment/docs/combined_sop_2016.pdf</u>

⁷ The *California Stream Condition Index* can be found electronically at the following location: <u>http://www.waterboards.ca.gov/water_issues/programs/swamp/bioassessment/docs/csci_tech_memo.pdf</u>

⁸ The California Environmental Data Exchange Network can be found electronically at the following location: <u>http://www.ceden.org/</u>

- a. **Mitigation Sites.** At a minimum, bioassessment monitoring for mitigation areas must be performed at three sites (assessment stations) in the Otay River before Project initiation, and then in years three and five following start of Project construction, during the established "index period" for the Otay watershed. The first assessment station is the mitigation site reference station, which must be located upstream of the mitigation site(s) in a reference area; the second assessment station must be located within the mitigation site(s); and the third assessment station upstream of the mitigation site(s) must be located and sampled concurrently with the second and third assessment stations. Reference stations shall be defined as stations that show minimally disturbed conditions.
- 6. **Monitoring Reports.** An evaluation, interpretation and tabulation of the benthic macroinvertebrate community analysis must be submitted with the respective Annual Project Monitoring Report.
- G. Jurisdictional Delineation. In order to demonstrate that the Project has met the compensatory mitigation required in section V.B, the Applicant shall perform a jurisdictional delineation of the Permittee Responsible Mitigation for Otay Ranch Village 3 Project. The delineation shall be performed using the methodology set forth in the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual and the 2008 Regional Supplement to the U.S. Army Corps of Engineers Wetland Delineation Manual: Arid West Region and the lateral limits of non-wetland waters using the 2008 Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States Delineation Manual by the end of year 5. Using the jurisdictional delineation, the Applicant shall demonstrate that the compensatory mitigation provides the area of each aquatic resource type, as described in section V.B, and both wetland vegetation and hydrology (Ordinary High Water Mark) are present. The jurisdictional delineation results must be submitted with the respective Annual Project Progress Report.
- H. **Geographic Information System Data.** The Applicant must submit Geographic Information System (GIS) shape files of the Project impact sites within 30 days of the start of project construction and GIS shape files of the Project mitigation sites within 30 days of mitigation installation. All impact and mitigation site shape files must be polygons. Two GPS readings (points) must be taken on each line of the polygon and the polygon must have a minimum of 10 points. GIS metadata must also be submitted.

- I. Annual Project Progress Reports. The Applicant must submit annual Project progress reports describing status of BMP implementation, compensatory mitigation, and compliance with all requirements of this Certification to the San Diego Water Board prior to March 1 of each year following the issuance of this Certification, until the Project has reached completion. The Annual Project Progress Reports must contain compensatory mitigation monitoring information sufficient to demonstrate how the compensatory mitigation project is progressing towards accomplishing its objectives and meeting its performance standards. Annual Project Progress Reports must be submitted even if Project construction has not begun. The monitoring period for each Annual Project Progress Report shall be January 1st through December 31st of each year. Annual Project Progress Reports must include, at a minimum, the following:
 - 1. **Project Status and Compliance Reporting.** The Annual Project Progress Report must include the following Project status and compliance information:
 - a. The names, qualifications, and affiliations of the persons contributing to the report;
 - b. The status, progress, and anticipated schedule for completion of Project construction activities including the installation and operational status of best management practices project features for erosion and storm water quality treatment;
 - c. A description of Project construction delays encountered or anticipated that may affect the schedule for construction completion; and
 - d. A description of each incident of noncompliance during the annual monitoring period and its cause, the period of the noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
 - 2. Compensatory Mitigation Monitoring Reporting. Mitigation monitoring information must be submitted as part of the Annual Project Progress Report for a period of not less than five years, sufficient to demonstrate that the compensatory mitigation project has accomplished its objectives and met ecological success performance standards contained in the Mitigation Plan. Following Project implementation the San Diego Water Board may reduce or waive compensatory mitigation monitoring requirements upon a determination that performance standards have been achieved. Conversely the San Diego Water Board may extend the monitoring period beyond five years upon a determination that the performance standards have not been met or the compensatory mitigation project is not on track to meet them. The Annual Project Progress Report must include the following compensatory mitigation monitoring information:
 - a. Names, qualifications, and affiliations of the persons contributing to the report;

- c. A description of the following mitigation site(s) characteristics:
 - i. Detritus cover;
 - ii. General topographic complexity;
 - iii. General upstream and downstream habitat and hydrologic connectivity; and
 - iv. Source of hydrology
- Monitoring data interpretations and conclusions as to how the compensatory mitigation project(s) is progressing towards meeting performance standards and whether the performance standards have been met;
- e. A description of the progress toward implementing a plan to manage the compensatory mitigation project after performance standards have been achieved to ensure the long term sustainability of the resource in perpetuity, including a discussion of long term financing mechanisms, the party responsible for long term management, and a timetable for future steps;
- f. Qualitative and quantitative comparisons of current mitigation conditions with preconstruction conditions and previous mitigation monitoring results;
- g. Stream photo documentation, including all areas of permanent and temporary impact, prior to and after mitigation site construction. Photo documentation must be conducted in accordance with guidelines posted at <u>http://www.waterboards.ca.gov/sandiego/water_issues/programs/401_certification_n/docs/401c/401PhotoDocRB9V713.pdf</u>. In addition, photo documentation must include Geographic Positioning System (GPS) coordinates for each of the photo points referenced;
- h. The results of the California Rapid Assessment Method (CRAM) monitoring required under section VI.E of this Certification;
- i. The results of the Benthic Macroinvertebrate Community Analysis monitoring required under section VI.F of this Certification;
- j. The results of the jurisdictional delineation required under section VI.G of this Certification;
- k. As-built drawings of the compensatory mitigation project site(s), no bigger than 11"X17"; and
- I. A survey report documenting boundaries of the compensatory mitigation site(s).

- J. Final Project Completion Report. The Applicant must submit a Final Project Completion Report to the San Diego Water Board within 30 days of completion of the Project. The final report must include the following information:
 - 1. Date of construction initiation;
 - 2. Date of construction completion;
 - 3. BMP installation and operational status for the Project;
 - 4. As-built drawings of the Project, no bigger than 11"X17";
 - Photo documentation of implemented post-construction BMPs and all areas of permanent and temporary impacts, prior to and after project construction. Photo documentation must be conducted in accordance with guidelines posted at <u>http://www.waterboards.ca.gov/sandiego/water_issues/programs/401_certification/d</u> <u>ocs/401c/401PhotoDocRB9V713.pdf</u>. In addition, photo documentation must include Global Positioning System (GPS) coordinates for each of the photo points referenced; and
 - An evaluation, interpretation, and tabulation of all California Rapid Assessment Method (CRAM) and benthic macroinvertebrate community assessment data collected throughout the term of Project construction in accordance with section VI.E and VI.F of this Certification.
- K. Reporting Authority. The submittal of information required under this Certification, or in response to a suspected violation of any condition of this Certification, is required pursuant to Water Code section 13267 and 13383. Civil liability may be administratively imposed by the San Diego Water Board for failure to submit information pursuant to Water Code sections 13268 or 13385.
- L. Electronic Document Submittal. The Applicant must submit all reports and information required under this Certification in electronic format via e-mail to <u>SanDiego@waterboards.ca.gov</u>. Documents over 50 megabytes will not be accepted via e-mail and must be placed on a disc and delivered to:

California Regional Water Quality Control Board San Diego Region Attn: 401 Certification No. 12C-026:779635:Ihonma 2375 Northside Drive, Suite 100 San Diego, California 92108

Each electronic document must be submitted as a single file, in Portable Document Format (PDF), and converted to text searchable format using Optical Character Recognition (OCR). All electronic documents must include scanned copies of all signature pages; electronic signatures will not be accepted. Electronic documents submitted to the San Diego Water Board must include the following identification numbers in the header or subject line: Certification No. 12C-026:779635:lhonma.

- M. **Document Signatory Requirements**. All applications, reports, or information submitted to the San Diego Water Board must be signed as follows:
 - 1. For a corporation, by a responsible corporate officer of at least the level of vice president.
 - 2. For a partnership or sole proprietorship, by a general partner or proprietor, respectively.
 - 3. For a municipality, or a state, federal, or other public agency, by either a principal executive officer or ranking elected official.
 - 4. A duly authorized representative may sign applications, reports, or information if:
 - a. The authorization is made in writing by a person described above.
 - b. The authorization specifies either an individual or position having responsibility for the overall operation of the regulated activity.
 - c. The written authorization is submitted to the San Diego Water Board Executive Officer.

If such authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the Project, a new authorization satisfying the above requirements must be submitted to the San Diego Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative.

N. **Document Certification Requirements**. All applications, reports, or information submitted to the San Diego Water Board must be certified as follows:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

VII. NOTIFICATION REQUIREMENTS

- A. Twenty Four Hour Non-Compliance Reporting. The Applicant shall report any noncompliance which may endanger health or the environment. Any such information shall be provided orally to the San Diego Water Board within 24 hours from the time the Applicant becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Applicant becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The San Diego Water Board, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.
- B. Hazardous Substance Discharge. Except as provided in Water Code section 13271(b), any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the State, shall as soon as (a) that person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the County of San Diego, in accordance with California Health and Safety Code section 5411.5 and the California Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State toxic disaster contingency plan adopted pursuant to Government Code Title 2, Division 1, Chapter 7, Article 3.7 (commencing with section 8574.17), and immediately notify the State Water Board or the San Diego Water Board of the discharge. This provision does not require reporting of any discharge of less than a reportable quantity as provided for under subdivisions (f) and (g) of section 13271 of the Water Code unless the Applicant is in violation of a Basin Plan prohibition.
- C. Oil or Petroleum Product Discharge. Except as provided in Water Code section 13272(b), any person who without regard to intent or negligence, causes or permits any oil or petroleum product to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) such person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the California Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State oil spill contingency plan adopted pursuant to Government Code Title 2, Division 1, Chapter 7, Article 3.7 (commencing with section 8574.1). This requirement does not require reporting of any discharge of less than 42 gallons unless the discharge is also required to be reported pursuant to Clean Water Act section 311, or the discharge is in violation of a Basin Plan prohibition.
- D. **Anticipated Noncompliance**. The Applicant shall give advance notice to the San Diego Water Board of any planned changes in the Project or the Compensatory Mitigation project which may result in noncompliance with Certification conditions or requirements.

- E. **Commencement of Construction Notification.** The Applicant must notify the San Diego Water Board in writing at least 5 days prior to the start of initial Project construction ground disturbance
- F. **Transfers.** This Certification is not transferable in its entirety or in part to any person or organization except after notice to the San Diego Water Board in accordance with the following terms:
 - Transfer of Property Ownership: The Applicant must notify the San Diego Water Board of any change in ownership of the Project area. Notification of change in ownership must include, but not be limited to, a statement that the Applicant has provided the purchaser with a copy of the Section 401 Water Quality Certification and that the purchaser understands and accepts the certification requirements and the obligation to implement them or be subject to liability for failure to do so; the seller and purchaser must sign and date the notification and provide such notification to the San Diego Water Board within 10 days of the transfer of ownership.
 - 2. Transfer of Mitigation Responsibility: Any notification of transfer of responsibilities to satisfy the mitigation requirements set forth in this Certification must include a signed statement from an authorized representative of the new party (transferee) demonstrating acceptance and understanding of the responsibility to comply with and fully satisfy the mitigation conditions and agreement that failure to comply with the mitigation conditions and associated requirements may subject the transferee to enforcement by the San Diego Water Board under Water Code section 13385, subdivision (a). Notification of transfer of responsibilities meeting the above conditions must be provided to the San Diego Water Board within 10 days of the transfer date.
 - 3. **Transfer of Post-Construction BMP Maintenance Responsibility:** The Applicant assumes responsibility for the inspection and maintenance of all post-construction structural BMPs until such responsibility is legally transferred to another entity. At the time maintenance responsibility for post-construction BMPs is legally transferred the Applicant must submit to the San Diego Water Board a copy of such documentation and must provide the transferee with a copy of a long-term BMP maintenance plan that complies with manufacturer specifications. The Applicant must provide such notification to the San Diego Water Board within **10 days** of the transfer of BMP maintenance responsibility.

Upon properly noticed transfers of responsibility, the transferee assumes responsibility for compliance with this Certification and references in this Certification to the Applicant will be interpreted to refer to the transferee as appropriate. Transfer of responsibility does not necessarily relieve the Applicant of responsibility for compliance with this Certification in the event that a transferee fails to comply.

VIII. CALIFORNIA ENVIRONMENTAL QUALITY ACT COMPLIANCE

- A. The City of Chula Vista is the Lead Agency under the California Environmental Quality Act (CEQA) (Public Resources Code section 21000, et seq.) section 21067, and CEQA Guidelines (California Code of Regulations, title 14, section 15000 et seq.) section 15367, and has filed Notice of Determinations dated December 3, 2014 and December 17, 2014 for the Final Environmental Impact Report (FEIR) titled Final Environmental Impact Report for the Otay Ranch University Villages Project (State Clearing House Number 2013071077). The Lead Agency has determined the Project will have a significant effect on the environment and mitigation measures were made a condition of the Project.
- B. The San Diego Water Board is a Responsible Agency under CEQA (Public Resources Code section 21069; CEQA Guidelines section 15381). The San Diego Water Board has considered the Lead Agency's FEIR and finds that the Project as proposed will have a significant effect on resources within the San Diego Water Board's purview.
- C. The San Diego Water Board has required mitigation measures as a condition of this Certification to avoid or reduce the environmental effects of the Project to resources within the Board's purview to a less than significant level.
- D. The Lead Agency has adopted a mitigation monitoring and reporting program pursuant to Public Resources Code section 21081.6 and CEQA Guidelines section 15097 to ensure that mitigation measures and revisions to the Project identified in the FEIR are implemented. The Mitigation Monitoring and Reporting Program (MMRP) is included and incorporated by reference in Attachment 5 to this Certification. The Applicant shall implement the Lead Agency's MMRP described in the FEIR, as it pertains to resources within the San Diego Water Board's purview. The San Diego Water Board has imposed additional MMRP requirements as specified in sections V and VI of this Certification.
- E. As a Responsible Agency under CEQA, the San Diego Water Board will file a Notice of Determination in accordance with CEQA Guidelines section 15096 subdivision (i).

IX. SAN DIEGO WATER BOARD CONTACT PERSON

Lisa Honma, Environmental Scientist Telephone: 619-521-3367 Email: Lisa.Honma@waterboards.ca.gov

X. WATER QUALITY CERTIFICATION

I hereby certify that the proposed discharge from the Otay Ranch Village Three Development Project (Certification No. 12C-026) will comply with the applicable provisions of sections 301 ("Effluent Limitations"), 302 ("Water Quality Related Effluent Limitations"), 303 ("Water Quality Standards and Implementation Plans"), 306 ("National Standards of Performance"), and 307 ("Toxic and Pretreatment Effluent Standards") of the Clean Water Act. This discharge is also regulated under State Water Board Order No. 2003-0017-DWQ, *"Statewide General Waste Discharge Requirements for Dredged or Fill Discharges that have Received State Water Quality Certification (General WDRs)*," which requires compliance with all conditions of this Water Quality Certification. Please note that enrollment under Order No. 2003-017-DWQ is conditional and, should new information come to our attention that indicates a water quality problem, the San Diego Water Board may issue individual waste discharge requirements at that time.

Except insofar as may be modified by any preceding conditions, all Certification actions are contingent on (a) the discharge being limited to, and all proposed mitigation being completed in strict compliance with, the applicants' Project description and/or the description in this Certification, and (b) compliance with all applicable requirements of the Basin Plan.

I, David W. Gibson, Executive Officer, do hereby certify the forgoing is a full, true, and correct copy of Certification No. 12C-026 issued on July 6, 2016.

DAVID W. GIBSON Executive Officer San Diego Water Board

6 July 2016 Date

ATTACHMENT 1 DEFINITIONS

Activity - when used in reference to a permit means any action, undertaking, or project including, but not limited to, construction, operation, maintenance, repair, modification, and restoration which may result in any discharge to waters of the state.

Buffer - means an upland, wetland, and/or riparian area that protects and/or enhances aquatic resource functions associated with wetlands, rivers, streams, lakes, marine, and estuarine systems from disturbances associated with adjacent land uses.

California Rapid Assessment Method (CRAM) - is a wetland assessment method intended to provide a rapid, scientifically-defensible and repeatable assessment methodology to monitor status and trends in the conditions of wetlands for applications throughout the state. It can also be used to assess the performance of compensatory mitigation projects and restoration projects. CRAM provides an assessment of overall ecological condition in terms of four attributes: landscape context and buffer, hydrology, physical structure and biotic structure. CRAM also includes an assessment of key stressors that may be affecting wetland condition and a "field to PC" data management tool (eCRAM) to ensure consistency and quality of data produced with the method.

Compensatory Mitigation Project - means compensatory mitigation implemented by the Applicant as a requirement of this Certification (i.e., applicant -responsible mitigation), or by a mitigation bank or an in-lieu fee program.

Discharge of dredged material – means any addition of dredged material into, including redeposit of dredged material other than incidental fallback within, the waters of the United States and/or State.

Discharge of fill material – means the addition of fill material into waters of the United States and/or State.

Dredged material – means material that is excavated or dredged from waters of the United States and/or State.

Ecological Success Performance Standards – means observable or measurable physical (including hydrological), chemical, and/or biological attributes that are used to determine if a compensatory mitigation project meets its objectives.

Enhancement – means the manipulation of the physical, chemical, or biological characteristics of an aquatic resource to improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Establishment – means the manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist. Creation results in a gain in aquatic resource area.

Fill material – means any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of a water body.

Isolated wetland – means a wetland with no surface water connection to other aquatic resources.

Mitigation Bank – means a site, or suite of sites, where resources (e.g., wetlands, streams, riparian areas) are restored, established, enhanced, and/or preserved for the purpose of providing mitigation for impacts authorized by this Certification.

Preservation - means the removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/ historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/ historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Start of Project Construction - For the purpose of this Certification, "start of Project construction" means to engage in a program of on-site construction, including site clearing, grading, dredging, landfilling, changing equipment, substituting equipment, or even moving the location of equipment specifically designed for a stationary source in preparation for the fabrication, erection or installation of the building components of the stationary source within waters of the United States and/or State.

Uplands - means non-wetland areas that lack any field-based indicators of wetlands or other aquatic conditions. Uplands are generally well-drained and occur above (i.e., up-slope) from nearby aquatic areas. Wetlands can, however, be entirely surrounded by uplands. For example, some natural seeps and constructed stock ponds lack aboveground hydrological connection to other aquatic areas. In the watershed context, uplands comprise the landscape matrix in which aquatic areas form. They are the primary sources of sediment, surface runoff, and associated chemicals that are deposited in aquatic areas or transported through them.

Water quality objectives and other appropriate requirements of state law – means the water quality objectives and beneficial uses as specified in the appropriate water quality control plan(s); the applicable provisions of sections 301, 302, 303, 306, and 307 of the Clean Water Act; and any other appropriate requirement of state law.

Waters of the State – means any surface water or groundwater, including saline waters, within the boundaries of the State. [Water Code section13050, subd. (e)].

ATTACHMENT 2 PROJECT LOCATION MAPS

Figure 1 – Regional Map Figure 2 – Regional Vicinity Map Figure 3 – Proposed Project





Figure 2 Regional Vicinity Otay Village 3/Portion of Village 4 Project





ATTACHMENT 3 PROJECT SITE PLANS

Figure 3 – Otay Village 3 Jurisdictional Waters Figure 4 – Otay Village 3 Waters Impacts Tentative Map CVT-13-02, Otay Ranch Village 3 North & A Portion of Village 4, Sheets 1 – 9





Figure 3 Otay Village 3 Jurisdictional Waters Otay Village 3/Portion of Village 4 Project







BESIDENTIA LCT dE-2 FINISHED SUPPAGE ELEVATION HOME PARTER IS WALLY" LO DD \$1 1104 0 NE LO BORHORD EXCLENT LINE ONDA SPACE LOT 08-27 LANDFILL NUISANCE EASEMEN SLOPE (2 1 W.X) PERCENT OF GRACE - 23 FOR ANY MARK A ST. D.FVATION 350.4 6417 ----STOR WAR (8%) NOCOR SEVER INVERT ELEVATION RATER MADE (8%) 347 4 · UNLESS SHOWN STHERE SE

FIRE HIDRANT

Also common hermitian an environ of the Line 1 doctation of RULES Scheme Line Lines in a free toget and which is maken a particular town in 271° CML data to the Line Also Scheme Scheme Lines Lines in a free toget and and a scheme Lines and the Scheme Lines and the scheme Lines Lines in a scheme Lines and a scheme Lines (Lines Also Lines (Lines Also Lines (Lines (Lines

PARCE & APN 644-560-15

PARIEL 3 OF PAREL WAR NO. 19423, IN THE DITY OF DALL VISTA, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, FILED IN THE OFTICE OF THE COUNTY RECORDER OF SAID COUNTY, JANUARY 18, 2006 HARDEL O APN BAA ORD 19 (FORTION)

PARASE 4 OF PARCE, WAY NO 20064, IN THE CITT OF ONLIA VISTA, COUNTY OF SAM DIESO, STATE OF ON IFORMIA, FILLD TH THE OF ISE, OF THE COUNTY BLOMMON OF SAID COUNTY, JUNE 1, 2007 EXCEPTING THERE FROM THAT FORTION OF SALE PAREL & LYING SOUTHEASTERLY OF THE FOLLOWING DISORTHED LINE.

DI MATHER REDUCTI FÜR HER TAGE ROAD FREM STATING PRIME ARTOFIK DARDS TO ALLON FOR A MATHEM BE ROAD ORDER, A WINNER (CINTERLING C NATUS OF 1, 100 FEET, A 45 MPH OSTAN STEED, REDUCTO FRANCLION COMPTO ELEMEN FEET AND REDUCED REDICTORARY DOMI TO 104 FEET

DEVICE MATCH REDUCT FOR MAIN STREET FIRM STRUCTURE PRIME ARTERIAL STANDARDS TO ALLOW FOR A MATURAL OR FOOD DRACE, REDUCED TRACE, LAND WIDEN DRACE TO DRACE STREET AND RESTORMED AND AN OTHER TO THAT DRACE

PUBLIC UTILITIES

599400, 01578-0 59400, 01578-0

SHEET INDEX SHEET 1 - TITLE SHEET SHEET 2 - ST. SECTIONS / DETAILS SHEET 3 - DETAILS SHEET A - PROJECT DESIGN SHEET 5 - PROJECT DESIGN SHEET 6 - PROJECT DESIGN SHEET 7 - PROJECT DESIGN SHEET 8 - BOUNDARY, EASEMENTS & ENCUMBRANCES SHEET 9 - SUMMARY TABLES 1gy

IUNSAKER & ASSOCIATES

RESUBNITTAL RESUBNITTAL (SHTS 1,4,5) RANDE MILMON II. INCREME So Days G NET SEVENC Indiania das IS TENTATIVE MAP CVT-13-02 OTAY RANCH VILLAGE 3 NORTH & A PORTION OF VILLAGE 4 City Of Chula Vista, California

PP P

/14 18

SHEET

1

OF

9





MOLECT HONDARY -----STO A MET ANTER MAIN EXISTING TOPO CONTON STORM DRAIN(181+) ----- Bernard RETAINING MAL LOT LINE PAC ELEVATION F237.7 ALANTARE MALL SYSTEM RESIDENTIAL LOT 100 05 mm - 0.5 m1 mm (G) FIRES ED SURFACE OF FURTION HONE OWNER 'S WATH! LO 0.000 NE104607-000 DD 0 EASDIENT LINE WEN SPACE LOT 09-27 LANDFILL HUISANG 2.04C (2 1 WAX) A PERCENT OF SPACE EASENENT MARES ST. C.EVATION 350.4 CATE: Я€Р WIN (8°•) NOTON: SENER INVERTIGLEVATION 3425 · 04.655 (2000) 204680 (20 ANTER WATE CHAT FIRE HICEAN

Develope in the care operation panels of materials statistics that we have a statistic burget of the care operation operation of the care operation operatio A OF CATEGORY THREE THREE THREE DATE AND CATEGORY OF SALE LOT AT STOCKNERS AS FOLLOWS.

All control references and entrol in accurate source proteins of the set of the reference of a density of a set of the reference of the proteins of a set of the set of the

INTERSECTION BITTE S INT OF BEGINITING PARCE & APV 644-060-15

RARQE, 3 OF PHOLE MARING. 19023, IN THE CITY OF CHAIR VISTA, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, FILED IN THE UTFICE OF THE COUNTY RECORDER OF SAID COUNTY, JANUARY 18, 2004. PAROEL O APN BAR-ORD-19 (FORT-ON)

PARCEL & OF PARCE, WAR NO. 20064, IN THE CITE OF ORLIN Y STA, COUNTY OF SAM DIEGO, STATE OF CALIFORNIA, FILED THE DATE OF CALIFORNIA, FILED THE DATE OF CALIFORNIA, FILED THE CALIFORNIA OF SAME COUNTY O

EXCEPTING THEREPRON THAT FORTION OF SALE PARELY LYING SOUTHEASTERLY OF THE FOLLOWING DESCRIPTION UNIT COMPLETING AT the NORTHEAST DIRECT OF SHID PARES. A THEND ALIVE THE NORTHEAST LINE THERE TANK IN 1973737 BIT THEN IN FEET TO THE PARE HEART OF BESINNING. THENDE TOUR 2116 007 MERT, SHIT AD THE PARESTOR T UNIT OF SHIT OWNED A Considering subscript to take the set of the subscripts of the indicator of the subscripts of the sub

WAIVER REQUEST

OCSION MILES REDUCT FOR HERITAGE ROW FROM SIX-UNE PRIME ARTERIA STADUES TO ALLOF FOR A MAXIMUM AS ROM (RMC), A VINIAM (DSTRUM CLARE ROULD OF 1, 100 FEL, A 4 MPH (DSTRUM STRUM), REDUCT TO AND, UNA KIDIN DOM: TO LLORD FELT AN ARTIGIZED RICH-OF-ANY (DAM) TO 154 FEET

DESTON MATTER REDUCTI FOR MAIN STREET FROM STATUME PRIVE ARTERIAL STANDARDS TO ALLOW FOR A MOVIMAN DE ROAD DRADE, REDUCED TRAVEL LAND MODIFICATION TO DISAND CELL AND MEDICIDA MARCHINE TO TAX DE

PUBLIC UTILITIES

er school district Hischool district

SHEET INDEX SHEET 1 - TITLE SHEET SHEET 2 - ST. SECTIONS / DETAILS SHEET 3 - DETAILS SHEET 4 - PROJECT DESIGN SHEET 5 - PROJECT DESIGN SHEET 6 - PROJECT DESIGN SHEET 7 - PROJECT DESIGN SHEET B - BOUNDARY, EASEMENTS & ENCUMBRANCES SHEET 9 - SUMMARY TABLES

SLEWITTR RESLEWITTR RESLEWITTR RESLEWITTR RESLEWITTR RESLEWITTR RESLEWITTR (SITS 1,4,5) RANDE SVI Men II. INCREME In Dags & SUII SEVENC Industriation for RESLEWITTAL RESLEWITTAL RESLEWITTAL FOR PC HEARIN TENTATIVE MAP CVT-13-02 OTAY RANCH VILLAGE 3 NORTH & A PORTION OF VILLAGE 4 City Of Chula Vista, California

CH. S.V.

HUNSAKER & ASSOCIATES

PREPARED BY

184

7LLAGE 3 NORTH & POR. OF VILL

ihlis

/14 14

SHEE

1

OF

9

倉

Single I

R 19 R 19 R 20

8-215 8-215

Mixed Use MU-la-1d

P053 P053 P054 P054 P054 P054 P054 P054

School 3-1

CPF 3

WU 2a 2e

Open Space

08.9

TOTAL





SHEET

3

OF

9

TCHLINE - COMMEL VILLAGE 2 MATCHLANE **OTAY VILLAGE 2** OTAY LANDFILL DURCE REPUBLIC SERVICES. DATED APRIL 9, 2013) 391.0F PROJECT PROJECT PROJECT PROJECT 420.57 0-1 R-21 40". 3.3 At. PAD. 3.2 At 107 5.2 44 FAD 4.9 42 -X 3 11295 a ra raba at S ST. DO the sector HET MU MU-2e SH R.216 107 4.0 A MU-2b SEE R-21a LOT 19 AC FAD 38 AC H 107 36 Ac PAD 33 Ac SUMPA ATION -EXISTING LANDFAL NUISANCE EASEMENT PER DOCUMENT NO. 1997-0118929 RECORDED MAR-17-1997 MU-20 int: PICACI END OF EN CRE-1 and a state to state of 東京 LOT 28 4. PAD 24 AC PROJECT 品品同二次 oggeoggeogge at a fair and any the start LEIM FIEX **OS-5** Galada a state state state COC (optoptoptop TRIBUTARY STREET (ST. 'C') 101 0.9 AC - Larmonto (\$1. 07 Malalele and a said 1 348.01 144 0Th 354 0F 010 P 1 352 OF G P . 2 Ð, N21 1 12 1 18 Ð CALLE SWANSEA (ST. SH & 1. Jelelele D STREET (ST. ET BENTONITE SETBACK POR DEOCON SOLS AVPORT TENTATIVE MAP CVT-13-02 OTAY RANCH SHEET PREPARED BY HUNSAKER & ASSOCIATES 4 VILLAGE 3 NORTH & A PORTION OF VILLAGE 4 OF A BUNK 00 9 RANNEC STD Wasks Scott PRONEIRING San Diego, Ca 92/21 SURVEYING Press/558-6500 FE FOR CONTINUATION SEE SHEET 6 City Of Chula Vista, California

9

FOR CONTINUATION SEE SHEET

ON GEOTEDINACA

RON

CVT-13-02









R. (0918/J#*In/ M/Otoy 13 TH - Sht 08.dwal Nov-06-2014 DR 54

NEIGHBORHOOD R-1	NEIGHBORHOOD R-3	NEIGHBORHOOD R-6	NEIGHBORHOOD R-9	NEIGHBORHOOD R-10	NEIGHBORHOOD R-11	NEIGHBORHOOD R-13	NEIGHBORHOOD R-15	NEIGHBORHOOD R-18 LOT # LOT AREA 1 3.789	LOT SUMMARY
2 4 695 1 4 542 4 4 492 6 4 497	2 2 692 3 2 656 4 3 5547 5 2 759	2 3.522 3 3.580 4 3.597 5 3.400	2 3,833 3 3,600 4 3,600 5 3,600	2 3.105 3 3.651 4 3.264 5 3.113	2 3.609 3 3.625 4 3.975 5 4.108	2 2.712 3 2.712 4 2.712 5 2.712	2 2.830 3 2.830 4 2.875 5 2.830	2 1.165 3 1.222 4 3.165 5 3.165	VILLAGE 3 NORTH
6 4 754 7 5 066 8 7 337	6 2,569 7 2,569 8 2,569 9 2,569	6 3.282 7 2.836 8 2.836	6 2,600 7 4,197 8 4,197	6 3.113 7 3.113 8 3.113 9 3.113	6 3.932 7 3.524 8 3.553 9 7.533	6 2.712 7 2.712 8 2.712	6 2.630 7 2.630 6 2.630 6 2.630	6 3,165 7 3,185 8 3,185 9 3,185	Land Use Gross Net Units
9 6.831 10 3.848 11 4.830 12 2.260	10 2.569 11 2.569 12 2.569 35 2.569	9 2.836 10 2.836 11 2.836 12 2.836	9 4,34 10 4,034 11 4,033 12 4,033	10 3.113 11 3.699 12 4.287	10 4.052 11 4.101 12 3.628	10 2.712 11 2.712 12 2.712	10 2.630 11 2.830 12 2.630	10 3.185 11 3.716 12 3.208	Ingle Parky Resources Ingle Parky Resources LOT 822 D Acce 2 S 2 74
13 3,246 14 3,223 15 3,218	14 3,110 RES. SUBTOTAL SF 58,739 RES. SUBTOTAL AC 0.9	13 2.836 14 2.836 15 2.836	12 4,033 14 4,033 15 4,029	13 3.553 14 3.703 15 3.703	13 3.623 14 3.573 15 3.598	10 2.824 14 2.824 15 2.824	13 2.630 14 3.663 15 3.606 16 2.757	13 3,206 14 3,206 15 3,206	R 44 x62 5.2 - /4 R-3 34 x75 3.8 - 54
16 3.129 17 3.129 18 3.129 19 19	000 3,347 049 2,569 RES.AVG107 522 2,767 GROULATION SF 22,245	16 3,437 RES. SUBTOTAL SF 50,608 RES. SUBTOTAL AC 1.2 MAY 4,258	16 6.033 17 3.900 18 3.909	17 3.703 18 3.915 19 4.372	17 4.253 18 3.519 19 3.501	17 2.824 18 2.824 19 3.235	17 2.755 18 2.755 19 2.755	17 3,206 16 3,226 19 3,653	R-4 34x75 2.6 - 25 R-6 34x83 2.1 - 25 R-6 34x83 1.4 - 16
20 3 129 21 3 129 22 3 129	CRCULATION AC 0.5 TOTAL SF 60.984 TOTAL AC 1.40	MN 2,856 RES. AVG LOT S22E 3163 CRCULATION SF 10,376	20 1,909 21 3,909 22 3,909	20 3,940 21 4,650 22 3,630 23 3,164	20 1.442 21 3.432 22 4.073 23 4.025	20 2.824 21 2.824 22 3.216 21 3.965	210 2.755 21 2.755 22 2.755 23 2.755	PES SUBTOTAL SF 62,324 PES SUBTOTAL AC 1.4 MAX 3,789	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
23 3,129 24 3,129 25 3,129 26 3,129		TOTAL SF 60.984 TOTAL AC 1.40	24 4.007 25 4.332 26 4.116	24 3,269 25 3,502 26 3,269 27 3,269	24 3,640 25 3,455 26 3,317	24 2.822 25 2.822 26 2.822	24 2.755 25 2.755 28 2.755 29 2.755	RES. AVG LOT SIZE 3, 280 CRCULATION SF 46, 575 CRCULATION AC 1, 1	R-10 48x65 19.4 - 170 R-11 48x65 4.2 - 27 R-12 44x62 7.7 - 70
27 3.129 28 3.129 29 3.129	LOT # LOT AREA		27 4,113 28 4,113 29 4,114	28 3.815 29 3.581 30 3.301	RES. SUBTOTAL SF 100,968 RES. SUBTOTAL AC 2.3 MAX 4,253	27 2.822 28 2.822 29 2.822 30 2.822	28 2.755 29 2.755 30 2.755	TOTAL SF 108,900 TOTAL AC 2.50	R-13 34/83' 4.7 - 46 R-14 34/85' 6.0 - 67 R-15 34/85' 4.7 - 51
30 3.129 31 3.129 32 3.437 33 4.015	2 3.030 3 3.030 4 3.029 5 3.030	NEIGHBORHOOD R-7	31 4,114 22 4,114 33 4,114	31 3.301 22 3.229 33 3.229 34 3.847	MN 5.278 RES. AVGLOT 5276 3.740 CRIDUATION SF 81.984	31 2,822 22 2,712 33 2,712	31 2.755 32 2.765 33 2.647 34 2.647	NEIGHBORHOOD R-19	R-16 34x75 5.9 - 54 R-17 34x85 3.0 - 26 R-18 26% 2.5 - 19
34 3.273 36 3.274 36 3.274	6 3,030 7 3,030 8 3,030	2 2,744 3 2,783 4 2,795	34 4,115 35 5,136 36 4,421 37 3,625	35 3.946 36 3.945 37 3.519 38 3.579	TOTAL SF 162,952 TOTAL AC 4.20	M 4.714 35 2.715 36 2.715 37 2.715	35 2.653 36 3.100 37 3.665	LOT # LOT AREA 1 4.898 2 3.880	R-19 48x75 7.9 - 51 R-20 44x62 5.5 - 44
38 3,224 39 2,765 40 2,785	9 3.030 10 3.423 11 3.243 12 2.855	5 2,797 6 2,799 7 2,601 8 2,802	36 3.625 39 3.625 40 3.625	39 3,622 40 3,673 41 3,724		38 2.715 39 2.715 40 2.715 41 2.715	39 3,010 39 3,010 40 3,010 41 3,010	3 3,930 4 3,880 5 3,880 6 3,880	Multi Family Residential
41 2.784 42 2.782 43 2.780 14 3.779	13 2,858 14 2,858 15 2,858	9 2,804 10 2,606 11 2,597	41 3,625 42 3,625 43 3,625 44 3,725	42 4,008 43 4,419 44 3,679 45 3,879	LOT # LOT AREA	42 2.715 43 2.715 44 2.715	42 3,010 43 3,010 44 3,010	7 3,850 8 3,850 9 3,860	R-215 3.9 3.8 170 R-216 3.3 3.2 155
45 2,778 46 2,770 47 2,763	16 2.658 17 2.858 18 2.858 19 2.858	12 2.597 13 2.597 14 2.597 15 2.587	45 3,015 46 4,585 47 5,441 48 411	46 3.678 47 3.679 48 3.657	2 2,658 3 2,658 4 2,958 5 2,958	45 2,715 46 3,497 RES. SUBTOTAL SF 130,010 RES. SUBTOTAL SF 30,010	46 3,010 47 3,010 48 3,010	10 4,893 11 4,780 12 3,889 13 3,889	Mixed Use Mixed January 104 21 20 80
40 2,643 49 2,635 50 2,834 51 2,022	20 2.858 21 2.858 22 2.858	96 2.597 17 2.597 18 2.597	49 4 118 50 4 185 51 4 181	50 3.780 51 3.184 52 3.183	6 2,054 7 2,058 8 2,058	MAX 3,953 MIN 2,712 RES. AVG LOT SUZE 2,826	49 3,010 50 3,010 51 3,010 905 5 91074 57 348 920	14 3.889 15 3.891 16 3.889	Mixed Use Total 2.1 2.0 80
52 2.828 53 3.402 54 3.892	24 2.858 25 3.459 Refs. sult to FAL SF 74.603	RES. SUBTOTAL SF 52,276 RES. SUBTOTAL AC 1.2 MAX 3,605	52 4,181 53 4,181 54 4,165 55 4,181	53 3.164 54 3.242 55 3.447 56 3.764	10 2,858 11 2,954 12 2,728	CRCULATION 55 74,722 CRCULATION AC 1.7 TOTAL 5F 204,732 TOTAL 5C 4,10	RES. SUBTOTAL AC 3.4 MAX 3.606 MIN 2.647	18 3,872 19 3,675 20 3,876	Parks 20 27
50 3,375 50 3,375 57 5,373 58 3,369	RES. SUBTOTAL AC 1.7 MAX 3.456 MIN 2.856 DISS. MIG 107 SIZE 2984	MN 2.597 RES AVG LOT SIZE 2.751 CIRCULATION SF 8.708	56 4 165 57 4 685 58 4 297 59 7 100	57 1242 58 1242 59 1242 59 1242	13 2 750 14 2 907 15 2 728 16 2 973		CROULATION SF 55.812 CROULATION SF 13.812 TOTAL SF 204.732	21 3.691 22 3.659 23 4.511 24 4.560	P-2 (Village 4) 0.7 P-2 (Village 4) 17.8 15.5 Parks Total 25.7 22.3
59 3,389 60 3,385 61 3,377 62 3,347	CRCULATION SF 38.653 CRCULATION AC 0.9 TOTAL SF 113.256	TOTAL SF 60.984 TOTAL AC 1.40	60 4,151 61 4,488 62 3,600	61 3.164 62 3.844 63 4.175	17 3.494 18 2.686 19 2.686	NEIGHBORHOOD R-14	YOTAL AC 4.70	28 3.675 28 3.675 27 3.675	Pvt. Open Space P0S-1 0.2
63 3.247 64 3.245 65 3.243	TOTAL AC 2.60		63 3.600 64 3.600 66 3.772 66 3.600	66 3,569 66 3,412 67 3,629	20 2,000 21 2,686 22 2,686 23 2,686	2 2.451 3 2.451 4 2.451	NEIGHBORHOOD R-16	20 3,675 20 3,675 30 3,675 31 3,726	P05-2 0.2 P05-3 0.2 P05-4 0.1
60 1.241 67 3.239 68 3.227 69 2.786	NEIGHBORHOOD R-5	NEIGHBORHOOD R-8	67 3,600 66 3,600 69 4,085	68 3.650 69 4.205 70 4.045 71 3.651	24 2,656 25 2,686 26 2,686 27 2,686	5 2.451 6 2.451 7 2.451 8 2.451	LOT # LOT AREA 1 3.287 2 2.558	32 3,675 33 4,564 34 4,718 35 1,562	P05-5 0.1 P05-6 0.1 P05-7 1.3
70 2,748 71 2,749 72 2,761 72 2,751	1 3,420 2 2030 3 3030	1 5318 2 3565 3 3,225	71 3,601 72 3,602 73 3,602	72 3.850 73 3.650 74 3.649	20 2,686 20 2,686 30 2,686	9 2.451 10 2.451 11 2.451	3 2.558 4 2.782 5 2.558 6 2.558	36 4,002 37 , 3,662 38 3,662	POS-8 0.2 Private OS Total 2.4
74 3.3% RES 6.00101A, 5F 251,843 RES 9.00101ALAC 5.8	4 3,029 5 3,030 6 3,030	4 3,036 5 2,904 6 2,474 7 3,075	74 3,605 75 3,605 76 3,608 77 3,610	76 3,665 77 3,118 78 8,102	21 2,945 22 2,546 23 2,746 34 2,727	13 2451 14 2451 15 2451	7 2.557 8 2.557 9 2.558 10 2.558	40 3.862 41 3.862 42 3.862	S-1 6.3 7.7 S-total 8.3 7.7
WAX 7.337 WIN 2.748 RES. AVGLOT 527E 3.403 CPLOLATION 55 94.637	6 3,030 9 3,030 10 3,423	8 3.068 9 2.103 10 3.116	78 2,611 79 3,615 80 3,614	60 3,289 61 3,667 62 3,281	26 3,092 26 3,406 37 3,196 38 3,162	16 2.451 17 2.451 18 2.451 19 2.437	11 2.557 12 2.557 13 2.557	43 4,668 44 5,553 45 3,600 46 3,600	Community Purpose Facilities 2.6 2.4
CRCULATION AC 2.2 TOTAL SF 348.460 TOTAL AC 8.0	11 3,243 12 2,654 13 2,859 14 2,859	11 3,133 12 2,970 13 2,923 14 2,923	82 3,616 83 4,113 84 4,028	60 3.1% 64 3.181 85 3.125 86 3.068	39 3.162 40 3.162 41 3.162	20 2,450 21 2,450 22 2,928	14 3.304 15 3.091 16 2.551 17 2.551	47 3,607 48 3,799 49 3,935	CPF-2 1.1 0.9 CPF-3 0.5 0.5
	15 2,850 16 2,850 17 2,850 18 2,850	15 2,923 16 2,923 17 2,923 18 2,923	85 3,600 87 3,600 86 3,600	87 3.761 64 4.357 69 3.815 90 3.812	41 2,004 43 3,224 44 3,126 45 3,196	24 2.551 26 2.551 26 2.551	18 2,551 19 2,551 20 2,551 21 2,551	51 507 RES. SUBTOTAL SF 205 287 RES. SUBTOTAL AC 4.7	* THE OFF-1 STE MAY BELLOCATED ON AMY FORTION OF THE MUZA-Ze FARCELS. Industrial/Office/IMixed Use
NEIGHBORHOOD R-2	19 2.858 20 2.858 21 2.858	19 2,923 20 2,923 21 3,316	89 3,600 90 3,600 91 3,600 92 3,600	01 5.619 92 3.659 63 4.342	46 3,155 47 3,109 48 3,278 49 3,196	27 2.101 28 2.551 29 2.551 30 2.551	22 2.551 23 2.552 24 2.552	MAX 5,553 MIN 3,600 RES.AVGLOT \$22E 4,025 CREATER \$5 134,877	i-ia 6.4 4.6 i-ib 6.1 4.1 i-2 4.4 2.3
1 3,174 2 3,040 3 3,519 4 1,222	22 2.859 20 2.859 24 2.859 25 3.456	PES. SUBTOTAL AC 1.5 MAX 5.318 MIN 2,874	93 3,600 94 3,600 96 3,600	98 3.647 98 3.647 97 3.668	50 3,162 51 2,992 52 2,992	31 2.551 32 2.550 33 2.554 34 2.554	28 2552 27 2552 28 2.633	CRECULATION AC 3.2 TOTAL SF 344 124 TOTAL AC 7.90	H3a 4.2 3.1 H3c 7.5 1.8 MU-2a-2e 6.1 5.3
5 2,603 6 3,737 7 3,630	PES SUBTOTAL SF 74,905 FEIS SUBTOTAL AC 1.7 MAX 3,456 Law 2,9459	RES. AVG.(01 SZE 3,145 CRECULATION SF 29,775 CRECULATION AC 0,7 TOTAL SF 95,532	97 3,600 98 3,600 99 3,600	98 3.974 99 3.998 100 3.982 101 3.229	54 3.002 55 3.258 56 3.475	35 2,558 36 2,558 37 2,558	29 2.548 30 2.548 31 2.548 12 2.548		O-1 5.2 4.9 Industrial/Office/Mixed Use Total 39.9 26.1
8 2,725 9 2,730 10 3,491 11 4,727	RES AVGLOT SUTE 2,859 CRICULATION IF 16,541 CRICULATION AC 0.4	TOTAL AC 2.20	100 3,600 101 3,600 102 3,600 103 3,600	102 3.291 103 3.291 104 3.291 106 3.291	57 3.270 58 3.259 59 3.259 60 3.259	38 2.558 39 2.558 40 2.558 41 2.558	33 2,549 34 2,540 35 2,540	NEIGHBORHOOD R-19	Open Space 08-1 4.2 08-2 2.2
12 4.063 13 3.185 14 3.707	TOTAL SF 91.476 TOTAL AC 2.10		104 3.600 105 3.600 108 3.600	106 1.291 107 3.291 108 3.291	61 3.259 62 3.259 63 3.259 64 3.259	42 2.558 43 2.558 44 2.558 46 2.967	26 2.540 27 2.540 30 2.540 39 2.540	2 2,728 3 2,728 4 2,728	05-3a/b 3.1 05-4 12.2 05-5 0.9
16 2,963 17 3,009 18 4,646			108 3,600 109 3,600 110 3,600	110 3.822 111 3.775 112 3.163	65 3.259 66 3.259 67 3.259	46 3.034 47 2.550 45 2.550	40 2,309 41 3,362 42 2,560 43 2,560	6 2,728 7 2,728 8 2,731	05-6 0.6 - 05-7 0.3 - 05-8 0.2 -
19 3,296 20 5.031 21 5.448 22 4.126			111 3,600 112 4,662 113 4,163 114 4,140	113 3.176 114 3.233 115 3.233 116 3.233	68 3,259 69 3,259 70 3,656 RES 5,81074, 57 213,758	49 2,550 50 2,550 51 2,551 52 2,551	44 2,560 45 2,580 46 2,580	9 3.012 10 2.964 11 2.761 12 3.231	OS-9 0.6 - OS-10 2.7 OS-11 8.6 -
23 3,115 24 2,811 25 2,728			115 4,326 116 4,675 117 \$153	117 3.233 118 5.233 119 3.235 120 3.235	Rils. Sult of AL AC 4.9 MAX 3.888 MIN 2.545	53 2.551 54 2.584 55 2.584 66 2.584	47 2.560 48 2.560 49 2.560 50 2.580	13 4.054 14 4.272 15 4.254 14 1.272	OS Total 35.6 - Preserve
26 2,728 27 2,728 28 2,728 29 2,728			119 6,776 120 5,118 121 4,208	121 3 233 122 3 233 123 3 234	CROULATION SF 121.654.0 CROULATION SF 121.654.0 CROULATION AC 2.8 TOTAL SF 335.412	57 2.584 58 2.584 59 2.584	51 2.580 52 2.580 53 2.680 54 3.955	17 4.300 18 3.612 19 3.012	05-12 155.2 - Por Of Heritage Hd/Portion of Marn St. 2.0 - Preserve Total 157.2 -
30 2,863 31 3,065 32 2,910 33 2,728			122 4,002 123 4,002 124 4,002 125 4,002	125 1.530 128 3.802 127 3.445	TOTAL AC 7.70	61 2554 62 2,564 63 2,564	RES. SUBTOTIN, SF 142,877 RES. SUBTOTIN, AC 3.3 MAX 3,365	20 2014 21 3,014 22 3,903 23 3,106	Circulation 17.0
34 3,574 RES. SUBTOTAL SF 115.055 RES. SUBTOTAL AC 2.6			126 4.092 127 4.092 128 4.092 129 4.092	128 3.476 129 3.476 130 3.483 131 3.483		64 2,564 65 2,564 66 2,554 67 3,096	KIN 2,548 RES. AVG LOT SIZE 2,646 CIRCULATION SF 114,127 CIRCULATION AC 2,6	24 5.057 25 3.948 26 3.957 27 3.590	Circulation Total 34.6
MIN 2,725 HES AVOLOT SIZE 3,364 CIRCULATION SI 46,117			130 4.092 131 4.092 132 4.092	132 3.493 133 3.493 134 3.493 135 3.493		RES. 9U8101AL SF 173,558 RES. SUBTOTAL AC 4.0 MAX 3,690	TOTAL SF 257.004 TOTAL AC 5.90	28 3.327 29 3.670 30 5.231	TOTAL 436.0 1,597
CIRCULATION AC 1.1 TOTAL SF 361.172 TOTAL AC 3.70			134 5.043 135 4.376 136 3.992	138 3.454 137 3.454 138 3.454 139 3.454		RES. AV0 LOT SIZE 2,560 CRCULATION SF 87,802 CRCULATION AC 2,0	NEIGHBORHOOD R-17	37 3.207 33 2.670 34 3.668	
			137 3.992 138 3.992 139 3.992 140 3.992	140 1.802 141 3.704 142 3.188 142 3.188		TOTAL SF 261,300 TOTAL AC 6.00	LOT # LOT AREA 1 3.834 2 2.855 2 2.855	35 3.340 36 3.311 37 3.282 38 5.300	
			141 3,992 142 3,992 143 3,992 144 3,992	144 3.232 145 3.232 146 3.214			4 2.884 5 2.855 6 2.855	39 3,907 40 3,105 41 2,753 42 2,753	
			145 3,992 146 3,992 147 3,992 147 3,992	147 3.220 148 3.228 149 3.231 150 3.232			7 2.855 8 2.855 9 2.855 10 2.855	43 2,728 44 3,080 RES SUBTOTAL SF 147,230	
			140 3,938 149 4,461 RES 50,81014,57 597,746 RES 50,81014,57 13,7	151 3.242 152 3.221 153 3.222 154 3.222			11 2.855 12 2.855 13 2.855 14 3.825	HES. SUBTOTAL AC 3.4 MAX 5.201 MIN 2.758 RES. AVG.LOT.SZE 3,346	
			MAX 8,061 MIN 3,600 RES_AVGLOT SZE 4,012 CERCULATION SF 290,876	155 3.607 156 4.165 157 3.316 158 3.316			15 3,692 16 2,422 17 2,822	CROULTION 5/ 92,350 CROULTION AC 2.1 TOTAL SF 226,580 TOTAL AC 5:50	
			CRCULATION AC 6.7 TOTAL SF 888,624 TOTAL AC 20.40	156 3.316 160 3.316 161 3.316 162 3.316			19 2.422 19 2.422 20 2.422 21 2.422		
				163 3.316 164 3.316 165 3.300			22 2.822 23 2.822 24 2.822 25 2.822		
				167 3.316 167 3.316 168 3.311 169 3.558 159 169			26 2.822 RES SUBTOTAL SF 76.725 RES SUBTOTAL AC 1.8 MAX 3.824		I OT TAPLES
				RE3_SUBTOTAL SF 566,565 RE3_SUBTOTAL AC 13.7 MAX 4.650			VIN 2.422 RES.AVG.LOT.B2E 2.951 CRICULATION 9/ 53.965		PREPARED BY: TENTATIVE MAP CVT-13-02
				MIN 3.088 RES. AVGLOT 522 3.509 CREQUATION SF 249.429 CREQUATION AC 5.7			TOTAL SF 130,680 TOTAL AC 3.00		HUNSAKER & ASSOCIATES OTAY RANCH
				TOTAL SF 845.064 TOTAL AC 19.45					VILLAGE 3 NORTH & A PORTION OF VILLAGE 4
									SUVERYC Pressesse vice ressesse vice City Of Chula Vista, California

CVT-13-02

TTVE MAP OTAY RANCH VILLAGE 3 NORTH & POR. OF VILLAG

SHEET 9 OF 9

ATTACHMENT 4 MITIGATION FIGURES

- Figure 1 Regional Vicinity
- Figure 2 Jurisdictional Delineation
- Figure 3 Mitigation Plan Figure 5 Phase 2 Detail
- Figure 9 Monitoring for Phase 2



Figure 1 Regional Vicinity Otay River Restoration Project





Figure 2 Jurisdictional Delineation **Otay River Restoration Project**



Figure 3 Mitigation Plan Otay River Restoration Project





Figure 5 Phase 2 Detail **Otay River Restoration Project**





Legend Phase 2 Mitigation Areas Village 3 Village 8W Otay Concept Plan (May 25, 2016) Main Channel Tributary Active Floodplain (10 year) High Floodplain (25 year) Upland (100 year) Seasonal Pond Photo Stations Panoramic Photo Stations <all other values> O Groundwater Monitoring Wells Vegetation Transects Channel and Floodplain Upland CRAM Assessment Areas (AA) ✓ Depressional Transect_CrossSection Channel Morphology --- Topography Cross Section Riverine

Figure 9 Monitoring for Phase 2 Otay River Restoration Project

ATTACHMENT 5 CEQA MITIGATION MONITORING AND REPORTING PROGRAM

Final Environmental Impact Report for Otay Ranch University Villages Project Mitigation, Monitoring and Reporting Program for Biological Resources & Water Quality and Hydrology

Final Environmental Impact Report for the Otay Ranch University Villages Project (Includes Village Three North and Portion of Village Four, Village Eight East, and Village Ten)

Mitigation Monitoring and Reporting Program for Biological Resources & Water Quality and Hydrology

Biological Resources (Section 5.8)

Potentially Significant Impact #1

Prior to mitigation implementation of the proposed project would result in significant direct and indirect impacts to "covered" sensitive plant species include the following: Otay tarplant, variegated dudleya, and San Diego barrel cactus. Otay tarplant and variegated dudleya are identified in the MSCP Subarea Plan as narrow endemics. Significant impacts to non-covered species include California adolphia, south coast saltscale, San Diego marsh-elder, singlewhorl burrobush, and Robinson's pepper grass. Implementation of the proposed project would result in the direct loss of habitat for all of the special-status animals and is considered significant prior to mitigation. Long-term indirect impacts to special-status wildlife species would also occur as a result of the proposed project. Impacts would consist of lighting, human activity in the Preserve, noise, and domestic animal predation. Indirect impacts to special-status wildlife species are considered significant prior to mitigation.

Mitigation Measures 1-4 & 12-18

1) MM BIO-1

Prior to the approval of the first Final Map for the project, the Project Applicant shall coordinate with the City of Chula Vista (City) Engineer and annex the project area within the Otay Ranch Preserve Community Facilities District No. 97-2.

Prior to the recordation of each Final Map, the Applicant shall convey land within the Otay Ranch Preserve to the Otay Ranch Preserve Owner/Manager (POM) or its designee at a ratio of 1.188 acres for each acre of "Developable Area" as defined by the RMP. Access for maintenance purposes shall also be conveyed to the satisfaction of the POM. Each tentative map shall be subject to a condition that the Applicant shall execute a maintenance agreement with the POM stating that it is the responsibility of the Applicant to maintain the conveyed parcel until the Preserve CFD has generated sufficient revenues to enable the POM to assume maintenance responsibilities. The Applicant shall maintain and manage the offered conveyance property consistent with the RMP Phase 2 until the Preserve CFD has generated sufficient revenues to enable the POM to assume maintenance and management responsibilities.

Prior to the POM's formal acceptance of the conveyed land in fee title, the Project Applicant shall prepare, to the satisfaction of the POM, Area Specific Management Directives (ASMDs) for the associated conveyance areas.

The ASMDs shall incorporate the guidelines and specific requirements of the Otay Ranch RMP plans and programs, management requirements of Table 3-5 of the MSCP Subregional Plan, and information and recommendations from any relevant special studies. Guidelines and requirements from these documents shall be evaluated in relationship to the Preserve configuration and specific habitats and species found within the associated conveyance areas and incorporated into the ASMDs to the satisfaction of the POM.

2) MM BIO-2

Prior to the issuance of any land development permits that impact maritime succulent scrub, including clearing and grubbing or grading permits, the Project Applicant shall prepare a restoration plan to restore impacts to maritime succulent scrub at a 1:1 ratio pursuant to the Otay Ranch RMP. A total of 5.5 acres will require restoration. The maritime succulent scrub restoration shall be prepared by a City-approved biologist and to the satisfaction of the Development Services Director (or their designee) pursuant to the Otay Ranch RMP restoration requirements. The restoration plan shall include, at a minimum, an implementation strategy; species salvage and relocation; appropriate seed mixtures and planting method; irrigation; quantitative and qualitative success criteria; maintenance, monitoring, and reporting program; estimated completion time; and contingency measures. The Project Applicant shall also be required to implement the revegetation plan subject to the oversight and approval of the Development Services Director (or their designee).

3) MM BIO-3

Prior to issuance of land development permits, including clearing, grubbing, grading and construction permits for the Future and Planned Facilities associated with Village Ten, the Project Applicant shall provide a revegetation plan for temporary impacts to 0.3 acres of coastal sage scrub habitat. The revegetation plan must be prepared by a qualified City-approved biologist familiar with the City's MSCP Subarea Plan and must include, but not be limited to, an implementation plan; appropriate seed mixtures and planting method; irrigation method; quantitative and qualitative success criteria; maintenance, monitoring, and reporting program; estimated completion time; and contingency measures. The Project Applicant shall be required to prepare and implement the revegetation plan subject to the oversight and approval of the Development Services Director (or their designee).

4) MM BIO-4

Prior to issuance of land development permits, including clearing, grubbing, grading, and/or construction permits for any areas adjacent to the preserve and the off-site facilities located within the preserve, the Project Applicant shall provide written confirmation that a City-approved biological monitor has been retained and shall be on site during clearing, grubbing, and/or grading activities. The biological monitor shall attend all pre-construction meetings and be present during the removal of any vegetation to ensure that the approved limits of disturbance are not exceeded and provide periodic monitoring of the impact area including, but not limited to, trenches, stockpiles, storage areas and protective fencing. The biological monitor shall be authorized to halt all associated project activities that may be in violation of the City's MSCP Subarea Plan and/or permits issued by any other agencies having jurisdictional authority over the project.

Before construction activities occur in areas containing sensitive biological resources within the off-site facilities area, all workers shall be educated by a City-approved biologist to recognize and avoid those areas that have been marked as sensitive biological resources.

5) MM BIO-12

Prior to the issuance of land development permits, including clearing or grubbing and grading permits, for areas with salvageable sensitive biological resources, including Otay tarplant, variegated dudleya, San Diego barrel cactus, San Diego bur-sage, singlewhorl burrobush, south coast saltscale, San Diego marsh-elder, and Robinson's pepper grass (including plant materials and soils/seed bank), the Project Applicant shall prepare a Resource Salvage Plan. The Resource Salvage Plan shall be prepared by a City-approved biologist to the satisfaction of the Development Services Director (or their designee).

The Resource Salvage Plan shall, at a minimum, evaluate options for plant salvage and relocation, including individual cactus salvage, native plant mulching, selective soil salvaging, application of plant materials on manufactured slopes, and application/relocation of resources within the Preserve. The

Resource Salvage Plan shall include incorporation of relocation efforts for non-covered species, including singlewhorl burrobush, south coast saltscale, San Diego marsh-elder, and Robinson's pepper grass, species that are all considered special-status by the CEQA and that would be impacted with project implementation. Relocation efforts may include seed collection and/or transplantation to a suitable receptor site and will be based on the most reliable methods of successful relocation. The program shall also contain a recommendation for method of salvage and relocation/application based on feasibility of implementation and likelihood of success. The program shall include, at a minimum, an implementation plan, maintenance and monitoring program, estimated completion time, and any relevant contingency measures. The program shall also be subject to the oversight of the Development Services Director (or their designee).

6) MM BIO-13

To avoid any direct impacts to raptors and/or any migratory birds protected under the MBTA, removal of habitat that supports active nests on the proposed area of disturbance should occur outside of the breeding season for these species. The breeding season is defined as February 15 to August 15 for coastal California gnatcatcher and other non-raptor birds and January 15 to August 31 for raptor species. If removal of habitat on the proposed area of disturbance must occur during the breeding season, the Project Applicant shall retain a City-approved biologist to conduct a pre-construction survey to determine the presence or absence of nesting birds on the proposed area of disturbance. The pre-construction survey must be conducted within 10 calendar days prior to the start of construction, and the results must be submitted to the City for review and approval prior to initiating any construction activities. If nesting birds are detected, a letter report or mitigation plan, as deemed appropriate by the City, shall be prepared and include proposed measures to be implemented to ensure that disturbance of breeding activities are avoided. The report or mitigation plan shall be submitted to the City for review and approval prior to interve to city's Mitigation Monitor shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction.

7) MM BIO-14

Prior to issuance of any land development permits, including clearing, grubbing, and grading permits, the Project Applicant shall retain a City-approved biologist to conduct focused surveys for northern harrier to determine the presence or absence of this species within 900-feet of the construction area. The pre-construction survey must be conducted within10 calendar days prior to the start of construction. The results of the survey must be submitted to the City for review and approval. If active nests are detected by the City-approved biologist, a bio-monitor shall be on site during construction to minimize construction impacts and ensure that no nests are removed or disturbed until all young have fledged.

8) MM BIO-15

Prior to issuance of any land development permits (including clearing, grubbing, and grading permits), the Project Applicant shall retain a City-approved biologist to conduct focused pre-construction surveys for burrowing owls. The surveys shall be performed no earlier than 30 days prior to the commencement of any clearing, grubbing, or grading activities. If occupied burrows are detected, the City-approved biologist shall prepare a passive relocation mitigation plan subject to the review and approval by the Wildlife agencies and City, including any subsequent burrowing owl relocation plans to avoid impacts from construction-related activities.

9) MM BIO-16

Prior to issuance of grading permits, the Project Applicant shall submit evidence to the satisfaction of the Development Services Director (or their designee), showing that the following features of the Preserve Edge Plans (Otay Ranch Company 2013a through 2013c) have been incorporated into grading and landscaping plans:

- 1. Provide post and fencing and signage for sensitive habitat adjacent to trails. Prior to the issuance of land development permits, including clearing or grubbing and grading and/or construction permits, for the project, the project owner shall submit wall and fence plans depicting appropriate barriers to prevent unauthorized access to the Preserve. The wall and fence plans shall, at a minimum, illustrate the locations and cross-sections of proposed walls, fences, informational and directional signage, access controls, and/or boundary markers along the Preserve boundary and off-site pedestrian trails as conceptually described in the Edge Plans. The required wall and fence plan shall be subject to the approval of the Development Services Director (or their designee).
- 2. Install canyon subdrains to prevent erosion of drainage and wetlands within the Preserve.
- 3. Prevent release of toxins, chemicals, petroleum products, exotic plant materials and other elements that might degrade or harm the natural environment or ecosystem within the Preserve.
- 4. Implement all necessary requirements for water quality as specified by the State and local agencies
- 5. Phase out agricultural uses adjacent to the Preserve to remove pollutants from the project site.
- 6. No invasive non-native plant species shall be introduced into areas immediately adjacent to, or within, the Preserve. All slopes immediately adjacent, or within, to the Preserve shall be planted with native species that reflect the adjacent native habitat, per the Edge Plan. Prior to the issuance of land development permits, including clearing or grubbing and grading and/or construction permits, for 1) areas within the 100-foot Preserve edge, and 2) infrastructure (e.g., roads, trails, utilities, etc.) sited within the Preserve, the Project Applicant shall prepare and submit to the satisfaction of the Development Services Director (or their designee) landscape plans to ensure that the proposed plant palette is consistent with the plant list contained in the Preserve Edge Plans for each village. The landscape plan shall also incorporate a manual weeding program for areas adjacent to the Preserve. The manual weeding program shall describe, at a minimum, the entity responsible for controlling invasive species, the maintenance activities and methods required to control invasive species, and a maintenance/monitoring schedule. All fuel modification shall be incorporated into development plans and shall not include any areas within the Preserve.

10) MM BIO-17

In accordance with the City's Adjacency Management Guidelines, the following mitigation measures shall be implemented to further reduce indirect impacts (from lighting, noise, invasive species, toxic substances, and public access) to sensitive biological resources located in the adjacent Preserve areas:

- 1. Lighting. In compliance with the Chula Vista MSCP Subarea Plan, all lighting shall be shielded and directed away from the Preserve. Concurrent with design review and prior to issuance of a building permit for any development located adjacent to the Preserve, the Applicant shall prepare a lighting plan and photometric analysis to the satisfaction of the Development Services Director (or their designee), for review and approval. The lighting plan shall illustrate the location of the proposed lighting standards and type of shielding measures. Low-pressure sodium lighting shall be used, if feasible, and shall be subject to the approval of the Development Services Director (or their designee).
- 2. Noise. Noise impacts adjacent to the Preserve lands shall be minimized. Berms or walls shall be constructed adjacent to commercial areas and any other use that may introduce noises that could impact or interfere with wildlife utilization of the Preserve. A 100-foot buffer around community park areas, specifically Community Parks (P-2) south of Village Eight East and in Portion of Village Four, should be installed in sections adjacent to Preserve habitat occupied by sensitive species such as the coastal cactus wren. Potential noise generating uses, such as baseball diamonds and soccer fields, should be oriented away from sensitive species habitat in these areas. Construction

activities shall include noise reduction measures or be conducted outside the breeding season of sensitive bird species.

- 3. California Gnatcatcher. For any work proposed between February 15 and August 15, prior to issuance of any land development permits, including clearing, grubbing, grading, and construction permits, associated with the off-site facilities located within the Preserve, the Project Applicant shall retain a City-approved biologist to conduct a pre-construction survey for the coastal California gnatcatcher to reaffirm the presence and extent of occupied habitat. The pre-construction survey area for the coastal California gnatcatcher shall encompass all habitats within the project work zone, as well as within a 300-foot buffer. The survey shall be performed to the satisfaction of the Development Services Director (or their designee) by a gualified biologist familiar with the City's MSCP Subarea Plan. The results of the pre-construction survey must be submitted in a report to the Development Services Director (or their designee) for review and approval prior to the issuance of any land development permits and prior to initiating any construction activities. If the coastal California gnatcatcher is detected, a minimum 300-foot buffer delineated by orange biological fencing shall be established around the detected species to ensure that no work shall occur within the occupied habitat from February 15 through August 15 and on-site noise reduction techniques shall be implemented to ensure that construction noise levels do not exceed 60 dB(A) Leg-h at the location of any occupied sensitive habitat areas. The Development Services Director (or their designee) shall have the discretion to modify the buffer width depending on-site-specific conditions. If the results of the pre-construction survey determine that the survey area is unoccupied, the work may commence at the discretion of the Development Services Director (or their designee) following the review and approval of the pre-construction report.
- 4. Invasive Species. Prior to issuance of land development permits, including clearing or grubbing and grading and/or construction permits for 1) areas within the 100-foot Preserve edge, and 2) infrastructure (e.g., roads, trails, utilities, etc.) sited within the Preserve, the Project Applicant shall prepare and submit to the satisfaction of the Development Services Director (or their designee), landscape plans to ensure that the proposed plant palette is consistent with the plant list contained in the Preserve Edge Plan. The landscape plan shall also incorporate a manual weeding program for areas adjacent to the preserve. The manual weeding program that shall describe at a minimum, the entity responsible for controlling invasive species, the maintenance activities and methods required to control invasives, and a maintenance/monitoring schedule.
- 5. Toxic Substances. See MMS BIO-4, BIO-6, BIO-8, BIO-16
- 6. Public Access. Prior to issuance of grading permits, the Project Applicant shall submit wall and fence plans depicting appropriate barriers to prevent unauthorized access into the Preserve. The wall and fence plans shall illustrate the locations and cross-sections of proposed walls and fences along the Preserve boundary, subject to the approval the City's Development Services Director (or their designee).

11) MM BIO-18

In accordance with the City's Adjacency Management Guidelines, the following mitigation measures shall be implemented to further reduce indirect impacts from noise to sensitive biological resources located in the adjacent Preserve areas emanating from the community parks:

Concurrent with the preparation of site-specific plan(s), and prior to the approval of a precise grading plan, the Project Applicant shall prepare, or in the case of the City being the lead on the preparation of the site specific plan, the Project Applicant shall fund the preparation of an acoustical analysis to ensure that noise impacts to surrounding Preserve areas have been minimized. The park design shall include measures to minimize noise impacts adjacent to the Preserve. Features that may be included in the park design may include, but are not limited to:

• berms or walls;

- inclusion of a minimum of 100 feet between the Preserve boundary and park uses where adjacent to habitat occupied by sensitive species such as coastal California gnatcatcher and coastal cactus wren;
- allow uses within the 100-foot buffer adjacent to the Preserve that may include access roads, parking, picnic areas, walking paths, and graded slopes;
- orient potential noise generating uses such as soccer fields and baseball diamonds away from occupied coastal California gnatcatcher and coastal cactus wren habitat.

Prior to mitigation, sensitive vegetation communities to be permanently impacted include non-native grassland, freshwater marsh, cismontane alkali marsh, disturbed cismontane alkali marsh, coastal sage scrub, disturbed coastal sage scrub, broom baccharis scrub, maritime succulent scrub, disturbed maritime succulent scrub, mulefat scrub, southern mixed chaparral, tamarisk scrub, and southern willow scrub. Impacts to sensitive vegetation communities would be significant prior to mitigation.

1) MM BIO-5

Prior to issuance of grading permits in portions of the SPA Plan areas that are adjacent to the Preserve, the Project Applicant shall install fencing. Prior to issuance of land development permits, including clearing, grubbing, grading and/or construction permits, the Project Applicant shall install fencing in accordance with Chula Vista Municipal Code (CVMC) 17.35.030. Prominently colored, well-installed fencing and signage shall be in place wherever the limits of grading are adjacent to sensitive vegetation communities or other biological resources, as identified by the qualified monitoring biologist. Fencing shall remain in place during all construction activities. All temporary fencing shall be shown on grading plans for areas adjacent to the preserve and for all off-site facilities constructed within the preserve. Prior to release of grading and/or improvement bonds, a qualified biologist shall provide evidence that work was conducted as authorized under the approved land development permit and associated plans.

2) MM BIO-6

Prior to issuance of land development permits, including clearing, grubbing, grading, and construction permits, the following notes shall be included on the applicable construction plans to the satisfaction of the Development Services Director (or their designee):

- A qualified biologist shall be on site to monitor all vegetation clearing and periodically thereafter to ensure implementation of appropriate resource protection measures.
- Dewatering shall be conducted in accordance with standard regulations of the RWQCB. A permit to discharge water from dewatering activities will be required. This will minimize erosion, siltation, and pollution within sensitive communities.
- During construction, material stockpiles shall be placed such that they cause minimal interference with on-site drainage patterns. This will protect sensitive vegetation from being inundated with sediment-laden runoff.
- Material stockpiles shall be covered when not in use. This will prevent fly-off that could damage nearby sensitive vegetation communities.
- Graded area shall be periodically watered to minimize dust that may affect adjacent vegetation.

The project would coordinate with the County for those areas located outside of Otay Ranch and within the County's jurisdiction. However, since impacts to native upland vegetation communities and wetland habitats are considered significant under the City's HLIT Ordinance, impacts would be potentially significant and mitigation would be required.

1) MM BIO-7

Prior to issuance of any land development permits, including clearing or grubbing and grading and/or construction permits, the project will be required to obtain a HILT Permit pursuant to Section 17.35 of the Chula Vista Municipal Code for impacts to Chula Vista MSCP Tier I, II, and II vegetation communities as shown below in Tables 5.8-24 and 5.8-25 and in accordance with Table 5-3 of the City of Chula Vista MSCP Subarea Plan. These impacts are due to the proposed development and are not associated with Planned or Future Facilities. Mitigation for off-site impacts outside of Otay Ranch will be in accordance with the City of Chula Vista MSCP Subarea Plan and the City's Habitat Loss and Incident Take (HLIT) ordinance and as provided in the HLIT Findings. Mitigation for impacts associated with the landfill (off-site Area 5) is not required.

Prior to issuance of any land development permits, the Applicant shall mitigate for direct impacts pursuant to Section 5.2.2 of the City's MSCP Subarea Plan. In compliance with the City's MSCP Subarea Plan, the Applicant shall secure mitigation credits within a City/Wildlife Agency-approved Conservation Bank or other approved location offering such credits consistent with the ratios specified in Tables 5.8-24 and 5.8-25.

The Applicant shall be required to provide verification of purchase to the City, prior to issuance of any land development permits.

In the event that a Project Applicant is unable to secure mitigation through an established mitigation bank approved by the City and Wildlife Agencies, the Project Applicant shall secure the required mitigation through the conservation of an area containing in-kind habitat within the City's MSCP Subarea Plan or MSCP Planning Area in accordance with the mitigation ratios contained in Table5-3 of the City's MSCP Subarea Plan and subject to Wildlife Agency concurrence. Prior to issuance of any land development permit, and to the satisfaction and oversight of the City's Development Services Director (or their designee), the Applicant shall secure the parcel(s) that will be permanently preserved for in-kind habitat impact mitigation, prepare a long-term Management and Monitoring Plan (MMP) for the mitigation area, secure an appropriate management entity to ensure long-term biological resource management and monitoring of the mitigation area is implemented in perpetuity, and establish a long-term funding mechanism for the management and monitoring of the mitigation area in perpetuity.

The long-term MMP shall provide management measures to be implemented to sustain the viability of the preserved habitat and identify timing for implementing the measures prescribed in the MMP. The mitigation parcel shall be restricted from future development and permanently preserved through the recordation of a conservation easement or other mechanism approved by the Wildlife Agencies as being sufficient to insure that the lands are protected in perpetuity. The conservation easement or other mechanism approved by the Wildlife Agencies shall be recorded prior to issuance of any land development permits.

The Project Applicant shall be responsible for maintaining the biological integrity of the mitigation area and shall abide by all management and monitoring measures identified in the MMP until such time as the established long-term funding mechanism has generated sufficient revenues to enable a City-approved management entity to assume the long-term maintenance and management responsibilities.

Impacts to jurisdictional waters and wetlands would occur as a result of the proposed project. Impacts to jurisdictional waters total 0.56 acre and are all permanent. Impacts to jurisdictional wetlands total 1.03 acres. 0.05 acre of which includes a compatible use while the remaining acres are permanently impacted. A total of 1.35 acres of jurisdictional areas under the ACOE, RWQCB, and CDFW would be impacted. Impacts to jurisdictional areas under CDFW only are 0.23 acre. Impacts to ephemeral and intermittent unvegetated waters and jurisdictional wetlands are considered significant prior to mitigation.

1) MM BIO-8

Prior to issuance of grading permits in portions of the SPA Plan areas that are adjacent to the Preserve, the Project Applicant shall develop a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP shall be developed, approved, and implemented during construction to control storm water runoff such that erosion, sedimentation, pollution, and other adverse effects are minimized. The following performance measures contained in the Edge Plans shall be implemented to avoid the release of toxic substances associated with urban runoff:

- Sediment shall be retained on-site by a system of sediment basins, traps, or other appropriate measures.
- Where deemed necessary, storm drains shall be equipped with silt and oil traps to remove oils, debris, and other pollutants. Storm drain inlets shall be labeled "No Dumping–Drains to Ocean." Storm drains shall be regularly maintained to ensure their effectiveness.
- The parking lots shall be designed to allow storm water runoff to be directed to vegetative filter strips and/or oil-water separators to control sediment, oil, and other contaminants.
- Permanent energy dissipaters shall be included for drainage outlets.
- The BMPs contained in the SWPPP shall include, but are not limited to, silt fences, fiber rolls, gravel bags, and soil stabilization measures such as erosion control mats and hydro-seeding.
- The project area drainage basins will be designed to provide effective water quality control measures, as outlined in the Water Quality Technical Report. Design and operational features of the drainage basins will include design features to provide maximum infiltration, maximum detention time for settling of fine particles; maximize the distance between basin inlets and outlets to reduce velocities; and establish maintenance schedules for periodic removal of sedimentation, excessive vegetation and debris.

2) MM BIO-9

The City requires that impacts to wetlands be avoided to the maximum extent possible and where impacts are unavoidable, compensatory mitigation within the Chula Vista Subarea or Chula Vista Planning Area shall be required resulting in no overall net loss of wetlands. A total of up to 1.03 acres of wetland and 0.56 acre of waters of the U.S./State within the project may be impacted within the Development Area. Off-site areas may impact a total of up to 0.98 acre of wetlands and 0.38 acre of waters (0.24 acre of waters of the U.S. and 0.14 acre of water of the State). Prior to issuance of land development permits, including clearing, grubbing, and grading permits that impact jurisdictional waters, the Project Applicant shall prepare a Wetlands Mitigation and Monitoring Plan to the satisfaction of the City, ACOE, and CDFW. This plan shall include, at a minimum, an implementation plan, maintenance and monitoring program, estimated completion time, and any relevant contingency measures. Areas under the jurisdictional authority of ACOE and CDFW shall be delineated on all grading plans. Mitigation areas shall occur within the Otay River watershed in accordance with the Wetlands Mitigation and Monitoring Plan subject to the oversight of the City, ACOE, and CDFW.

3) MM BIO-10

Prior to issuance of land development permits, including clearing, grubbing, and grading permits for areas that impact jurisdictional waters, the Project Applicant shall provide evidence that all required regulatory permits, such as those required under Section 404 of the federal Clean Water Act, Section 1600 of the California Fish and Game Code, and the Porter Cologne Water Quality Act have been obtained.

4) MM BIO-11

The Project Applicant shall implement one of the following prior to the issuance of grading permits for areas impacting vernal pools within Village Three North:

- The Project Applicant shall restore 240 square feet of vernal pools within the Village Thirteen (resort) planning area. The restoration would involve reconfiguration and reconstruction of the mima mounds and basins, removal of weedy vegetation, revegetation of the mounds with upland sage scrub species and inoculation of the pools with vernal pool species. The property owner has prepared a Conceptual Vernal Pool Mitigation Plan (Dudek 2008). The Plan includes, but is not limited to an implementation plan, maintenance and monitoring program, estimated completion time, and relevant contingency measures.
- 2. The Project Applicant shall restore 240 square feet of vernal pools somewhere other than the Village Thirteen (resort) planning area. The restoration would still involve reconfiguration and reconstruction of the mima mounds and basins, removal of weedy vegetation, revegetation of the mounds with upland sage scrub species and inoculation of the pools with vernal pool species.
- 3. The Project Applicant shall buy into a mitigation bank in an amount that would mitigate for impacts to 120 square feet of vernal pool.

Water Quality and Hydrology (Section 4.10)

Potentially Significant Impact #1

Although construction of the proposed project has the potential to violate water quality standards, compliance with the CBC, the Chula Vista Storm Water Management and Discharge Control Ordinance No 2854, the City of Chula Vista Subdivision Manual, Design and Construction Standards of the City of Chula Vista, San Diego Area Regional Standard Drawings, and Standard Specifications for Public Works Construction, as well as the preparation of site-specific SWPPPs, mitigation would further reduce potential impacts. Even with implementation of BMPs, development would still have the potential to violate water quality standards or waste discharge requirements. This impact would be significant prior to mitigation.

1) MM HYD-1

Erosion Control. The developer shall monitor any erosion at the project's outfalls at the Otay River and, prior to the last building permit for the project, obtain approval for and complete any reconstructive work necessary to eliminate any existing erosion and prevent future erosion from occurring, all to the satisfaction of the Development Services Director.

2) MM HYD-2

Storm Water Pollution Prevention Plan. Prior to issuance of each grading permit for each village or any land development permit, including clearing and grading, the Project Applicant shall submit a notice of intent and obtain coverage under the NPDES permit for construction activity from the SWRCB. Adherence to all conditions of the General Permit for Construction Activity is required. The Applicant shall be required under the SWRCB General Construction Permit to develop a SWPPP and monitoring

plan that shall be submitted to the City Engineer and the Director of Public Works. The SWPPP shall be incorporated into the grading and drainage plans and shall specify both construction and post-construction structural and non-structural BMPs on site to reduce the amount of sediments and pollutants in construction and post-construction surface runoff before it is discharged into off-site storm water facilities. Section 7 of the City's Storm Water Manual outlines construction site BMP requirements. The SWPPP shall also address operation and maintenance of post-construction pollution prevention measures, including short-term and long-term funding sources and the party or parties that will be responsible for said measures. The grading plans shall note the condition requiring a SWPPP and monitoring plans.

3) MM HYD-3

Supplemental Water Quality Report. Prior to issuance of each grading permit, the Applicant shall submit supplemental reports to the Otay Ranch Villages Three North and Portion of Village Four, Village Eight East, and Village Ten Tentative Map Water Quality Technical Reports, respectively, prepared by Hunsaker and Associates San Diego, Inc. (2014) that identifies which on-site storm water management measures from the Water Quality Technical Report have been incorporated into the project to the satisfaction of the City Engineer. If a storm water management option is chosen by the Applicant that is not shown in the water quality technical report, a project-specific water quality technical report shall be prepared for the parcel, referencing the Otay Ranch Villages Three North and Portion of Village Four, Village Eight East, or Village Ten Tentative Map Water Quality Technical Reports, prepared by Hunsaker and Associates and dated March 2014, for information relevant to regional design concepts (e.g., downstream conditions of concern) to the satisfaction of the City Engineer.

4) MM HYD-4

Post-Construction/Permanent BMPs. Prior to issuance of each grading permit, the City Engineer shall verify that parcel owners have incorporated and will implement post-construction BMPs in accordance with current regulations. In particular, Applicants are required to comply with the requirements of Section 2c of the City of Chula Vista's Standard Urban Storm Water Management Plan (SUSMP), the Chula Vista Development Storm Water Manual, and the Otay Ranch Villages Three North and Portion of Village Four, Village Eight East, and Village Ten Tentative Map Water Quality Technical Report, respectively, or any supplements thereto to the satisfaction of the City Engineer. Specifically, the Applicant shall implement low impact development BMPs in the preparation of all site plans and, the Applicant shall incorporate structural on-site design features into the project design to address site design and treatment control BMPs as well as requirements of the hydromodification management plan. The Applicant shall monitor and mitigate any erosion in downstream locations that may occur as a result of on-site development.

5) MM HYD-5

Limitation of Grading. The Project Applicant shall comply with the Chula Vista Development Storm Water Manual limitation of grading requirements, which limit disturbed soil area to 100 acres, unless expansion of a disturbed area is specifically approved by the Director of Public Works. With any phasing resulting from this limitation, if required, the Project Applicant shall provide, to the satisfaction of the City Engineer, erosion and sediment control BMPs in areas that may not be completed, before grading of additional area begins.

The net increase in runoff discharged to the Otay River would be a result of an alteration in the existing drainage pattern, which could consequently result in substantial erosion or siltation on- or off-site.

1) MM HYD-6

Hydromodification Criteria. The Project Applicant shall comply, to the satisfaction of the City Engineer, with city hydromodification criteria (Municipal Permit Order R9-2007-0001 as may be amended) or the hydrograph modification management plan, as applicable, addressed regionally at the SPA Plan level concurrent with grading and improvement plans for each village.

Potentially Significant Impact # 3

The proposed project would place drainage structures within a 100-year flood hazard area. In the event of a 100-year flood, the drainage structures would not impede or redirect flows in the project area. However, do to the fact that these structures would be placed within a 100-year flood hazard area impacts could be potentially significant and mitigation would be required.

1) MM HYD-7

Scour Analysis. Concurrent with all grading plan submittals, the Applicant shall prepare a scour analysis for all structures within the 100-year flood hazard area. Additionally, all said structures shall be monitored until the last building permit for the project has been issued.