

Cucamonga Creek Watershed Regional Water Quality Proposal

DRAFT ENVIRONMENTAL ASSESSMENT

September 16, 2011

VIS1	Vegetation Removal	
	Alternative 2B shall be designed with a 20 foot vegetated buffer located along the western edge of the braided bioswale cells adjacent to Mill Creek. The vegetated buffer shall be located and designed in such a manner to support the growth of riparian vegetation. The vegetated buffer shall be planted with riparian species such as willow, mulefat, cottonwood, Mexican elderberry, and sycamore, in sufficient density to create a dense row of trees, similar to the existing condition subject to the review and approval of the USACE.	2B
AIR QUALITY		
AQ1	Grading Emissions	
a.	Construction grading equipment (such as scrapers, dozers, excavators, etc.), with the exception of water trucks, shall have Tier 3 or better technology to reduce emission levels.	2A and 2B
AQ2	Dust Emissions	
a.	The City of Ontario will ensure that its contractor(s) shall apply water at least three times daily to grading operations and use a non-toxic co-polymer soil stabilizer, or equivalent, on all stockpile areas.	2A and 2B
b.	The City of Ontario will ensure that its contractor(s) shall apply a non-toxic co-polymer soil stabilizer to all unpaved haul routes, or equivalent, such as paving, gravel, road base, etc.	2A and 2B
c.	All equipment hauling dirt, sand, soil, or other loose materials shall either be sufficiently watered, covered, or shall have at least two feet of freeboard (i.e. minimum vertical distance between top of the load and the top of the trailer) to prevent dust from leaving the equipment during hauling operations.	2A and 2B
d.	The City of Ontario will ensure that its contractor(s) shall suspend all excavating and grading operations when wind speeds exceed 25 mph.	2A and 2B
BIOLOGICAL RESOURCES		
BIO1	Alternative 2A Native Vegetation	
	Impacts to native vegetation will be compensated as follows:	
a.	Areas of native vegetation impacted by temporary construction impacts will be restored in a 1:1 mitigation ratio, with similar species of plant densities as those impacted. Replacement plants shall be from the following minimum container sizes: trees, 15-gallon; shrubs, 1-gallon; and grasses, 2 ½ inch liners. In cases where the existing vegetation is non-native, replanting will include native vegetation appropriate to the location subject to USACE approval.	2A

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b.	Permanent structures impacts to native vegetation within the designated USFWS LBV critical habitat will be mitigated at a 1:1 ratio for disturbed habitat (4.45 acres) and at a 2:1 ratio for undisturbed habitat of Black Willow and Mulefat (4.80 acres) by planting 9.25 acres of native riparian habitat within the extended detention ponds consistent with the Extended Detention Zone planting, which includes willow, mule fat, and other riparian species commonly used by LBV. The mitigation will be monitored and maintained for 5-years pursuant to a Habitat Mitigation and Monitoring Plan to be prepared by a qualified biologist and subject to the approval of the USACE. The location of the proposed mitigation will occur in the extended detention portion of the ponds, as recommend by the project biologist and approved by the USACE.	2A
BIO2*	Alternative 2B Native Vegetation	
	Impacts to native vegetation will be compensated as follows:	
a.	Areas of native vegetation impacted by temporary construction impacts will be restored, resulting in a 1:1 mitigation ratio, similar species and plant densities as those impacted. Replacement plants shall be from the following minimum container sizes: trees, 15-gallon; shrubs, 1-gallon; grasses, 2 ½ inch liners. In cases where the existing vegetation is non-native, replanting will include native vegetation appropriate to the location subject to USACE approval.	2B
b.	Permanent structures impacts to native vegetation within the designated USFWS LBV critical habitat will be mitigated at a 1:1 ratio for disturbed habitat (6.9 acres) and at a 2:1 ratio for undisturbed habitat of Black Willow and Mulefat (10.38 acres) by planting 17.28 acres of native riparian habitat either on-site and/or at an off-site location, in areas determined suitable by a qualified biologist. The availability of suitable areas on-site is expected to be limited to the wetland and riparian habitat proposed in the wetland / extended detention ponds; the bioswales are expected to wash out every two years and therefore, will not be suitable for establishing LBV habitat. The mitigation will be monitored and maintained for 5-years pursuant to a Habitat Mitigation and Monitoring Plan to be prepared by a qualified biologist.	2B
BIO3	Least Bell's vireo (LBV)	
a.	Grading and construction activities that occur within 300 feet of suitable LBV habitat shall occur outside of the LBV breeding season (March 15 to September 15) unless the following measures are implemented:	2A and 2B
b.	A qualified biologist will conduct a pre-construction survey for nesting LBV birds in suitable habitat within the Proposal footprint and up to 300 feet around the Proposal footprint, as appropriate, during the breeding season (March 15 to September 15). If active nests are found the following measures will be adopted:	2A and 2B

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	b.1 Construction will not occur within a buffer area surrounding the active LBV nest(s) during the breeding season to avoid disturbing the birds. The biologist will determine an appropriate buffer area in consultation with USFWS.	2A and 2B
	b.2 Orange fencing will be used to clearly mark the buffer area prior to construction. The biologist will monitor the installation of the orange fencing.	2A and 2B
	b.3 The biologist will inform construction personnel regarding the location of active LBV nests and required avoidance measures during the pre-construction meeting.	2A and 2B
	b.4 During construction the biologist will monitor the active nests to observe breeding behavior. If normal breeding behavior is not observed and the birds show signs of being disturbed by construction activities, the biologist will halt construction activities and contact USFWS to discuss appropriate remedial measures. These may include measures such as modifying the buffer area or installing sound walls.	2A and 2B
WATERS1	Alternative 2A Jurisdictional Waters	
a.	Permits will be obtained prior to impacts to jurisdictional “waters of the U.S.” and “waters of the State”, including a USACE Section 404 permit, a RWQCB Section 401 WQC, and a Section 1602 CDFG SAA. A Section 7 consultation will also be required between the USACE and USFWS pursuant to the ESA due to impacts to LBV critical habitat. Mitigation proposed to compensate for impacts to jurisdictional waters shall be determined by the regulatory agencies but shall at minimum include a 1:1 ratio of mitigation to structures (permanent) impacts totaling 0.51 acres of “waters of the State”. No permanent impacts will occur to USACE/RWQCB jurisdictional waters. All temporary impacts will be restored to pre-construction conditions.	2A
WATERS2	Alternative 2B Jurisdictional Waters	
a.	Permits will be obtained prior to impacts to jurisdictional “waters of the U.S.” and “waters of the State,” including a USACE Section 404 permit, a RWQCB Section 401 WQC, and a Section 1602 CDFG SAA. A Section 7 consultation will also be required between the USACE and USFWS pursuant to the ESA due to impacts to occupied LBV critical habitat. Mitigation proposed to compensate for impacts to jurisdictional waters shall be determined by the regulatory agencies but shall at minimum include a 1:1 ratio of mitigation to structures (permanent) impacts totaling 3.53 acres of “waters of the State” and 0.15 acre of “waters of the U.S.” All temporary impacts will be restored to pre-construction conditions.	2B
GEOLOGY AND SOILS		
GEO1		

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a.	Prior to grading, final construction drawings shall be prepared and shall incorporate the recommendations from Geosyntec's report titled "Geotechnical Report, Cucamonga Creek Watershed Regional Water Quality Project" and "Existing and Proposed Conditions Related to Scour" dated December, 2008. The City of Ontario's geotechnical engineer shall review the final construction drawings and issue a final geotechnical report. The final geotechnical report shall be submitted to the USACE for review and approval.	2A and 2B
b.	Prior to grading, an exploration trench shall be dug along the entire alignment of the berm. The exploration trench shall be at least as deep as the planned height of the berm, and not less than 6 feet deep. The purpose of the exploration trench is to locate seepage paths or other material unsuitable for the berm's foundation. The City of Ontario's geotechnical engineer shall inspect the exploration trench and include recommendations in the final geotechnical report.	2A and 2B
c.	Construction of the berms surrounding the wetland ponds/ extended detention ponds requires benching of fill material. The final design shall include the design criteria for benching of compacted fill over natural and over cut found in Figure 2-5 of the Geotechnical Report (Geosyntec 2008).	2A and 2B
d.	The City of Ontario's geotechnical engineer shall be on-site during grading activities to inspect and certify construction of the Proposal in accordance with the final plans and final geotechnical report.	2A and 2B
HAZARDS AND HAZARDOUS MATERIALS		
HAZ1	Hazardous Materials	
a.	Prior to the start of grading, a State of California registered Professional Engineer or Professional Geologist with a minimum of five years experience in hazardous materials identification and handling, or personnel under the responsible charge of a such professional, shall conduct random soil sampling to test for the presence of pesticides and methane gas associated with manure spreading. A report shall be prepared that summarizes the findings of the testing and provides recommendations for any necessary remediation. A copy of the report shall be provided to the USACE for review and comment.	2A and 2B

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b.	During the clearing of the Proposal Site, observation of the site by a State of California registered Professional Engineer or Professional Geologist with a minimum of five years experience in hazardous materials identification and characterization, or personnel under the responsible charge of such a professional, to recognize potential environmental conditions shall occur. If any hazardous debris or trash is observed, the clearing shall be redirected around the affected area and the material of concern shall be disposed of in accordance with the California Code of Regulations (CCR) Title 22 – Characterization of Hazardous Materials, CCR Title 27 – Waste, Disposal; and any applicable guidance from the Regional Water Quality Control Board, the California Department of Toxic Substances Control (DTSC), and / or the California Department of Resources Recycling and Recovery (CalRecycle).	2A and 2B
HYDROLOGY AND WATER QUALITY		
HYD1	Alternative 2A Flood Storage Capacity	
	The Proposal shall not reduce flood storage capacity at any one-foot interval below the flood storage limit of 566 feet MSL unless otherwise approved by USACE. Therefore, prior to grading, the City of Ontario shall conduct a flood storage volume study based on the final design plans. Should that study determine that the final design of the Proposal causes a reduction of flood storage volume, either (i) the Proposal shall be redesigned to reduce the height of the proposed berms or make equivalent design changes to eliminate the reduction in flood storage capacity, or (ii) the Proposal shall provide a flood offset of equal or greater capacity than the loss of flood storage volume at the appropriate elevation. If a flood offset is proposed, the location and design of that offset may be subject to additional environmental review to determine if the flood offset causes any new impacts to environmental resources including, but not limited to, air quality, biology, and cultural resources.	2A
HYD2	Alternative 2A Bank Stabilization	
	Prior to grading, the final design plans for Alternative 2A shall include bank stabilization measures for the proposed berm along the eastern Proposal boundary designed to withstand the projected velocities and shear stresses. Additionally, the bank stabilization measures shall be designed in accordance with Mitigation Measure GEO1 and shall incorporate the levee toe-down depths identified in Table 2 of the Scour Report (Appendix E). Table 3 of the Scour Report provides guidance on appropriate bank stabilization measures for various velocities and shear stresses. The bank stabilization strategy chosen for the final design shall be effective to protect against the maximum velocity and shear stress found at any point along the berm.	2A

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HYD3	Alternative 2A and 2B Bank Stabilization	
a.	a. Prior to grading, the City of Ontario shall analyze the potential increase in shear stress and velocity on the left overbank. This analysis shall be based on the final design of the berm, including bank stabilization measures. Should the analysis determine that the left overbank would be subjected to an increase in velocity of 2.0 fps or shear stress of 0.35 lb/ft ² , which is the threshold for bank protection from natural vegetation and therefore non-erosive, due to encroachment and stabilization of the berm, the following measures shall take place:	2A and 2B
a.1	Final design, including but not limited to the berm height and/or location, shall be redesigned to minimize encroachment into the floodplain thereby reducing the increase in velocity and shear stress on the left overbank to less than 2.0 fps and 0.35 lb/ft ² , respectively; or	2A and 2B
a.2	The left overbank shall be modified to include stabilization measures commensurate with the velocity and shear stresses occurring during a 100-year event. In the event the left overbank requires stabilization, the action of stabilizing the left overbank may be subject to additional environmental analysis to determine if the stabilization causes any new impacts to environmental resources including, but not limited to, biology, and cultural resources.	2A and 2B
HYD4	Alternative 2B Bioswale Stabilization	
a.	Prior to grading, City of Ontario shall demonstrate proof of annual funding in a separate account for the annual reconstruction and replanting of the bioswale cells associated with Alternative 2B. Said funding shall be guaranteed by a letter of credit for performance bond. The letter of credit shall be submitted to the USACE for approval in advance of construction.	2B
HYD5*	Water Quality	
a.	Prior to grading, the City of Ontario shall submit a notice of intent (NOI) with the State Water Resources Control Board and prepare a Storm Water Pollution Prevention Plan (SWPPP) consistent with the California Construction General Permit or the City's municipal storm water permit, whichever is more stringent. The SWPPP shall include construction best management practices (BMPs) to manage water quality during construction.	2A and 2B
TRAFFIC AND TRANSPORTATION		
TRF1	Road Closure	
a.	Prior to the closure of Chino Corona Road, the following improvements shall be made at the intersection of Hellman Avenue at Pine Avenue/Schleisman Road:	2A and 2B

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	• Restripe the northbound, southbound, eastbound, and westbound approaches to provide separate left-turn lanes on Hellman Avenue and Pine Avenue/Schleisman Road.	2A and 2B
	• Each left-turn should have 150-feet of storage (minimum) and 90-foot transitions, with the exception of the northbound left-turn lane, which will require 350-feet of storage. In addition, the existing eastbound right-turn lane on Pine Avenue will require 350-feet of storage.	2A and 2B
	• Install a temporary or permanent traffic signal with two-phase operation. The temporary installation of a traffic signal at Hellman Avenue and Pine Avenue/Schleisman Road, and associated signing and striping modifications, is subject to the approval of the City of Chino.	2A and 2B
TRF2	Road Closure	
	Prior to the closure of Chino Corona Road, a Construction Traffic Diversion Plan shall be submitted to the City of Chino for approval. The Construction Traffic Diversion Plan shall show the recommended locations for barricades, signage, and other safety devices to divert area vehicles around the road closure consistent with the Conceptual Traffic Control Plan included in the Traffic Assessment prepared by Linscott, Law, and Greenspan dated November 26, 2008. All temporary structures will be designed and erected to withstand inundation. Furthermore, the Construction Traffic Diversion Plan shall include a turnaround area at either end of the road closure.	2A and 2B

9.0. Agency Coordination

A public notice of the proposed action was made available _____ through _____.
[Corps will insert letters/coordination with other agencies.]

10.0 Applicable Environmental Laws and Compliance

The EA fulfills the requirements of NEPA and other pertinent laws and regulations discussed below.

10.1 National Environmental Policy Act (NEPA) (42 USC 4321 et seq)

The Proposed Action has been analyzed pursuant to the National Environmental Policy Act through the preparation of an Environmental Assessment (EA). Preparation of the EA began with an identified Purpose and Need and reasonable range of project alternatives. The project alternatives were analyzed against the Purpose and Need. Alternatives that did not meet the Purpose and Need and/or were determined not feasible, were eliminated from further consideration. Analysis of the project alternatives identified two build alternatives and a no build alternative. Technical studies were

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completed to determine the potential effects on the environment from the two build alternatives and the no build alternative.

The EA includes a summary of the results of the technical studies and where necessary, identifies mitigation and minimization measures to reduce impacts to less than significant for the Preferred Alternative. Prior to final completion of the EA, a public notice advertising the availability of the document for public review and comment will be distributed.

10.2 U.S. Fish and Wildlife Coordination Act (16 U.S.C. 661-666)

For actions that include impounding, diverting, or controlling Waters of the U.S., consultation must first occur with the US Fish and Wildlife Service (USFWS) and the State agency responsible for administration of wildlife resources for the purpose of determining means and measures that would prevent the loss or damage to such wildlife resources. Since the Proposed Action will include the diversion of water into water treatment ponds greater than 10 acres in size, the US Fish and Wildlife Coordination Act would apply. Consultation between the Corps, USFWS and California Department of Fish and Game has begun. Several meetings and conference calls have occurred between the agencies to discuss potential impacts to wildlife resources and appropriate minimization and mitigation measures.

The EA includes technical studies, including surveys of species listed as threatened or endangered, that analyze the potential impacts from the diversion of flows in Cucamonga Creek during the dry and wet weather seasons. Specifically, during the dry weather season, studies were conducted to determine the change in water surface elevation and flow footprint and the potential effects those changes would have on vegetation and aquatic species. Furthermore, the studies analyze the potential impacts associated with construction of the water treatment ponds on existing vegetation and the listed least Bell's vireo (LBV).

Consultation among agencies will continue following completion of NEPA during the preparation and processing of a Section 404 Individual Permit. The potential impacts to the least Bell's vireo necessitate a consultation with the USFWS under Section 7 of the ESA and consultation with CDFG under Section 2080.1 of the California Fish and Game Code. As such, compliance with the US Fish and Game Coordination Act is occurring during preparation of the NEPA document and during processing of the Section 404 Individual Permit.

10.3 Endangered Species Act, as amended 16 U. S. C. 1531 et seq.

Since the Proposed Action has the potential to adversely affect the (LBV), this EA analyzes compliance with the Endangered Species Act (ESA). Specifically, focused surveys for the LBV were conducted during the past several years to identify nesting and foraging locations. The Proposed Action was designed to avoid and minimize impacts

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on known nesting and foraging locations. Furthermore, the EA includes mitigation in the form of restoration planting of species known to constitute LBV habitat. Additionally, consultation with the USFWS pursuant to Section 7 of the ESA is on-going. The USFWS has made a preliminary determination that the Proposed Action will not likely adversely affect the LBV. Therefore, the Proposed Action complies with the ESA.

10.4 Migratory Bird Treaty Act (MBTA) (16 U. S. C. 715- 715s)

Since the Proposed Action will not remove vegetation during the breeding season (generally March 15 to September 15) without biological monitoring to ensure that migratory birds are not adversely affected, the Proposed Action complies with the Act.

10.5 Clean Water Act 33 U.S. C. 1251 et seq.

The Proposed Action is limited to an approval for use/occupation of Federal land within the Basin that will be conditioned upon the City complying with all permit conditions; therefore, Section 401 certification and acquisition of a Section 402 permit by the Corps is not required.

For Corps actions, the Corps does not issue permits, but demonstrates compliance, or “equivalency,” with Section 404 through a Section 404(b)(1) analysis. In addition, the requirements and conditions of nationwide permits and regional permits may be applied for Corps actions and thus considered when addressing compliance with Section 404. Project proponents must obtain a Section 404 permit from the Corps before undertaking any discharge of dredged or fill materials into waters of the United States, unless determined to be exempt from regulation.

Since the Proposed Action is limited to an approval of Federal land within the Basin, the City will be required to acquire a Section 404 permit if necessary for implementation of the proposed improvements.

10.5 Clean Air Act of 1970 (42 U.S.C. 7401 et seq.)

Based on the air quality analysis described in xxx, a conformity determination for a specific pollutant is not required because for each criteria pollutant or precursor the total of direct and indirect emissions of the criteria pollutant or precursor in the nonattainment area caused by the Federal action would not equal or exceed any of the rates in 40 CFR 93.153(b)(1) or (2). As a result, the Proposed Action conforms to the Federal Clean Air Act, as amended.

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10.6 National Historic Preservation Act (16 U.S.C. 460b, 4701-470n)

The Proposed Action is not in compliance with Section 106 of the Act and its implementing regulations (36 CFR part 800). A test excavation and National Register of Historic Places (NRHP) evaluation is in process for prehistoric archeological site CA-SBR-2845. If the site is determined to not be eligible for the NRHP after this investigation the Corps will consult with the SHPO to obtain concurrence that the project would not have an effect on historic properties. If however, the site is determined to be NRHP eligible, the Corps would develop appropriate mitigation measures in consultation with the SHPO. These mitigation measures would be detailed in a memorandum of agreement and would require additional Native American consultation.

10.7 Comprehensive Environmental Response, Compensation and Liability Act (42 U. S. C. 9601 et seq.)

As there are no known sites within the Basin, this Act is not applicable to this Proposed Action.

11.0 List of Preparers

- AECOM
- Geosyntec Consultants
- Stantec Consulting
- Terra Consulting Group
- Vandermost Consulting Services, Inc.