

11. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or is "Potentially Significant Unless Mitigated," as indicated by the checklist on the following pages.

- | | | |
|---|--|--|
| <input type="checkbox"/> Land Use / Planning | <input checked="" type="checkbox"/> Transportation / Traffic | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Population / Housing | <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Utilities / Service Systems |
| <input checked="" type="checkbox"/> Geology / Soils | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Aesthetics |
| <input type="checkbox"/> Hydrology / Water Quality | <input checked="" type="checkbox"/> Hazards and Hazardous Materials | <input checked="" type="checkbox"/> Cultural Resources |
| <input checked="" type="checkbox"/> Air Quality | <input type="checkbox"/> Noise | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Agriculture Resources | <input checked="" type="checkbox"/> Mandatory Findings of Significance | |

DETERMINATION

(To be completed by the Lead Agency)

On the basis of this initial evaluation:

- I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. **A MITIGATED NEGATIVE DECLARATION** will be prepared.
- I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
- I find that the proposed project **MAY** have a "potentially significant impact" or a "potentially significant unless mitigated impact" on the environment, but at least one impact (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, **nothing further is required**.

Signature

Jennifer Villasenor

Printed Name

June 16, 2008

Date

Associate Planner,
City of Huntington Beach

Title

12. ENVIRONMENTAL EVALUATION CHECKLIST

I. LAND USE AND PLANNING Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? (Sources: 29, 31, 33, 34, 35)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. The purpose of the proposed Talbert Lake Diversion Project is the improvement of water quality within the downstream receiving waters of the East Garden Grove – Wintersburg Channel. The majority of the proposed construction would be executed within the boundaries of Central Park, the largest recreational park in the City of Huntington Beach, in and around the existing Talbert Lake. At the present time, Talbert Lake consists of a natural depression functioning to collect drainage and run-off from the surrounding community via a series of storm drains, which overflow in high water conditions into Talbert Channel on the western side of the park across Goldenwest Street.

In addition to the *Citywide Urban Runoff Management Plan* (CURMP), the proposed project would be in compliance with the *City of Huntington Beach General Plan's* Land Use Element goals, objectives, and policies requiring quality development for the City's built environment. This would include Goal LU 4, which calls for the achievement and maintenance of high quality landscape and public open spaces in the city; Objective LU 4.1 promotes the development of sites that convey a high quality visual image and characters, and Policy LU 4.1.1 requires adherence to or consideration of the policies prescribed for Design and Development as appropriate. The proposed project would also be consistent with the requirement to maintain environmental quality in the City of Huntington Beach by being in compliance with Goal LU 5, which ensures that significant environmental habitats and resources are maintained; Objective LU 5.1 provides for the protection and maintenance of environmental resources as redevelopment occurs in the city, and Policy LU 5.1.1 requires that development protect environmental resources via consideration of the policies and standards contained in the Environmental Resources/Conservation Element of the General Plan and State (CEQA) regulations.

The proposed project would also be in compliance with the *City of Huntington Beach General Plan's* Recreation and Community Services Element goals, objectives, and policies calling for renovation and upgrading of existing parks and facilities. This would include Goal RCS 4, which ensures recreation facilities are renovated and upgraded; Objective RCS 4.1 to improve and modernize existing parks and facilities, and Policy 4.1.1 which calls for the evaluation of all physical facilities for renovation needs every five years and to develop a capital improvement program for the renovation of those facilities determined to require renovation. The proposed project is consistent with operations and maintenance requirements, including compliance with Goal RCS 7 to operate and maintain City parks and recreation facilities in the most safe, effective, and efficient manner and Objective RCS 7.1 to enhance park and recreation sites in ways that maximize efficiency and minimize maintenance costs.

Project consistency is also maintained with the *City of Huntington Beach General Plan's* Environmental Resources/Conservation Element goals, objectives, and policies in relation to Open Space. The proposed project would demonstrate compliance with Goal ERC 1, which calls for the improvement and enhancement of the overall aesthetic value and appearance through the provision and maintenance of local public and private open space; Objective ERC 1.2, which calls for the enhancement of environmental quality of the city's parkland and other open spaces; and Policy ERC 1.2.1, which identifies those areas of the city that are important to protect through land use regulation because of their inherent environmental, ecological, and/or aesthetic contribution to the scenic and natural qualities of Huntington Beach.

Accordingly, the Talbert Lake Diversion Project would be consistent with goals, objectives and policies of the Land Use, Recreation, and Community Services, and Environmental Resource Conservation Elements of the City of Huntington Beach General Plan. As such, there would be no impact to land use and planning as a result of project implementation.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict with any applicable habitat conservation plan or natural community conservation plan? (Sources: 6, 8, 34, 35)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. There is no existing habitat conservation plan (HCP) or natural community conservation plan (NCCP) within the proposed project area. As such, project implementation would have no impact on an HCP or NCCP.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Physically divide an established community? (Sources: Exhibit 7.1-2, Exhibit 7.2-2, 34, 35)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. Implementation of the proposed project would not physically divide an established community, would not change existing land uses, nor would it contain any features that would permanently divide the established community of Huntington Beach. Accordingly, there would be no impact.

II. POPULATION AND HOUSING Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extensions of roads or other infrastructure)? (Sources: 35, 41)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. As a water quality improvement project, the proposed project will not induce any changes in new home construction, establishment of new businesses, or transportation infrastructure improvements.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? (Sources: 35, 41)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. The proposed project will have no effect on existing housing patterns as there is no housing proposed through this project.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? (Sources: 35, 41)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. The proposed project will not result in the displacement of residences or community residents as it involves improvements on an existing park property with no residences on site.

III.	<u>GEOLOGY AND SOILS</u> Would the project:	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
	a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Sources: 29, 35)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. There are no known active or potentially active faults traversing the project site. The nearest active fault is the Newport-Inglewood Fault Zone, approximately one mile to the southwest. Therefore, the risk of surface fault rupture is fairly low. In addition, there are no project features that incorporate habitable structures. Accordingly, there would be no impact.

- ii) Strong seismic ground shaking?
- iii) Seismic-related ground failure, including liquefaction?
- ii) Landslides?
(Sources: 29, 35, 41)

Discussion:

Less Than Significant Impact. As described above in the Environmental Setting, the project site is located in a seismically active region and therefore may experience moderate to strong ground shaking, and resultant secondary seismic hazards (such as liquefaction and landslides), from an earthquake on one or more active faults in the region.

The proposed project includes no habitable structures or other components that could pose a substantial risk to people or other structures in the event of strong seismic ground shaking. Further, the proposed project would not change the existing recreational use for the project site. Therefore, potential impacts to people and structures would be less than significant. Regardless, the proposed project would be required to comply with the grading and building specifications in the City of Huntington Beach Municipal Code. Therefore, impacts to the proposed project are considered less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Result in substantial soil erosion, loss of topsoil, or changes in topography or unstable soil conditions from excavation, grading, or fill? (Sources: 29, 35, 41)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

Potentially Significant Unless Mitigation Incorporated. The largest source of erosion, particularly in an urban environment, is uncontrolled drainage during construction. Project implementation would involve grading approximately 173,000 cubic yards (cy) of material during construction (quantities would vary slightly with each diversion concept), with approximately 89,000 cy of excess material disposed off site at the Frank R. Bowerman (FRB) Landfill in Irvine, California. The remaining volume of material would be utilized on site as construction fill or within the new topographic hill feature proposed adjacent to Talbert Lake.

Additionally, to ensure that project implementation would not create or exacerbate any adverse geologic or soils conditions on the project site, Mitigation Measure (MM) GS-1 requires the completion of a geotechnical investigation by a qualified Geotechnical Engineer and/or Engineering Geologist prior to initiation of construction activities. The geotechnical investigation shall define the geologic and soil conditions on the project site and shall determine appropriate engineering measures to alleviate any adverse conditions, such as strong seismic ground shaking or liquefaction.

Erosion potential during construction would be managed to the maximum extent practicable with Best Management Practices (BMPs). Standard Condition SC-2 indicates that the proposed project is covered by the National Pollutant Discharge Elimination System (NPDES) General Construction permit, and construction BMPs would be implemented on the project site during grading and construction activities to minimize erosion impacts. Implementation of the construction-related BMPs would reduce potential impacts to the maximum extent feasible and construction-related impacts would be less than significant. After construction of the proposed project, the site would be landscaped or covered by surface water, reducing the potential for erosion or the loss of topsoil by uncontrolled drainage.

Erosion and sedimentation are not an issue under existing operating conditions, as average flows do not result in enough volume to transport or erode large volumes of material within Central Park. The EGGWC is hardened at the diversion location, and erosion will not occur as a result of the project. Sedimentation behind the full rubber dam is not expected to be significant and can be removed by dam deflation and channel flows, if necessary. Proposed grading of the natural treatment system within Central Park seeks to lengthen flow residence time within the wetland portion of the park by creating a combination of sinuous, shallow water wetland trains and deeper ponds, which would slow-flow velocities and enhance sediment deposition in some areas. The locations and discharge volumes from existing storm drains into the park would not be altered significantly (see discussion under IV[e]) with project implementation. While the proposed project grading and design has incorporated the existing drainage patterns where possible, implementation of the proposed project would adjust the grading contours, and therefore the drainage pattern, of a portion of Central Park. The proposed project has been specifically designed to ensure that new slopes, including slopes created as bank shorelines, and other surface areas would not be prone to erosion in order to ensure the proper functioning of the wetland treatment system. The proposed project would also increase the depth of the lake in the ultimate condition at the project site. Lake deepening would be accomplished by excavating the lake bed to create a water depth of eight to ten feet. Bottom slopes would be designed at a 4:1 ratio (horizontal:vertical) to ensure that slopes are stable, and to limit maximum water depth. Therefore, while the proposed project would alter the drainage pattern on the site, with implementation of SC-2 and mitigation measure GS-1, construction and operation of the proposed project would result in less than significant impacts related to erosion and/or loss of topsoil.

GS-1 Prior to initiation of construction, the Project Applicant shall hire a qualified Geotechnical Engineer and/or Engineering Geologist to complete a geotechnical investigation of areas

to be excavated by the project and to ensure that all recommendations of the geotechnical investigation are incorporated into the final plans and specifications for the project.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? (Sources: 29, 35, 41)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Less Than Significant Impact. As described above in the Environmental Setting, the project site may be susceptible to unstable soil conditions, such as liquefaction, lateral spreading, collapse (e.g., settlement, hydroconsolidation), and/or expansive soils. The presence and extent of such soil conditions would be determined by completion of a geotechnical investigation of the project site, as required in MM GS-1. Additionally, the proposed project would be required to comply with the grading and building specifications in the City of Huntington Beach Municipal Code. As the proposed project would not change the existing recreational use for the project site and would not include habitable structures that would expose people or structures to risk from being located on an unstable geologic unit, there would be less than significant impacts. Although not required to reduce impacts to less than significant, MM GS-1 would further ensure that project implementation would not create or exacerbate any adverse geologic or soils conditions on the project site.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater (Source: 41)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. The proposed project does not include septic tanks or alternative wastewater disposal systems. Therefore, there would be no impact.

IV. <u>HYDROLOGY AND WATER QUALITY</u> Would the project:	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Violate any water quality standards or waste discharge requirements? (Source: 41) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion:

Less Than Significant Impact. The proposed project would enhance the ability of the City of Huntington Beach to support total maximum daily load (TMDL) priorities within the EGGWC watershed. Accordingly, project design is aimed at water quality improvements over existing conditions. Flows off the project site are expected to represent an improved condition.

Final project design will address water quality standards and waste discharge requirements through compliance actions associated with the NPDES permit. These compliance actions include preparation of a Storm Water Pollution Prevention Plan (SWPPP) and Water Quality Management Plan (WQMP), which will be submitted for approval to the City of Huntington Beach, Department of Public Works. The SWPPP and WQMP will establish BMPs for construction and post-construction activities that would ensure compliance with water quality standards and waste discharge requirements. With these BMPs in place (SC-2), project impacts are expected to be less than significant.

Backwash from the biofilters at Talbert Lake during project maintenance could result in discharges laden with nutrients such as phosphorous and nitrogen. As PDF-12 indicates, these discharges will be sent to the sanitary sewer system within the park for treatment, and will not result in a significant impact.

Would the project:	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted? (Sources: 31, 34, 35, 61) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion:

No Impact. WorleyParsons Komex conducted a hydrogeology review study of the Talbert Lake Diversion Project area (2006b) to ascertain the potential for achieving groundwater recharge as a project objective. This study concluded that groundwater elevations in wells near Talbert Lake showed seasonal variations in gradient: downward in summer and upward in winter, with a recent long-term trend toward rising groundwater elevations. There is a potential that a restored Talbert Lake could contribute to groundwater recharge, which would add to groundwater supplies and support objectives of the Regional Water Quality Control Board (RWQCB) and would increase seawater barrier benefits. If technically feasible, recharge would occur through the bottom of Talbert Lake, where treated flows would re-enter the groundwater aquifer during flow residence within the lake. If available, lake water is also proposed for use as a supplemental source of water for park irrigation, which is currently accomplished through a combination of pumped well water and potable water. Consequently, implementation of the proposed project could reduce the amount of groundwater pumping needed to meet irrigation demands. Accordingly, there would be no impact with regard to depletion or negative interference with groundwater resources.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off-site? (Sources: 26, 34, 35, 41)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Less Than Significant. The proposed project would adjust the grading contours of a portion of Central Park such that some modification of existing drainage patterns would occur; however, proposed project design and grading has considered existing drainage patterns and has incorporated these patterns where possible. Diverted flows from the EGGWC would be discharged into the Central Park portion of the project site at locations that currently provide drainage into Talbert Lake, although the site is being reconfigured to achieve specific residence times and treatment for the diverted flows. The existing Talbert Lake portion of the project area, also known as ‘Talbert Meadow’ during dry periods, would continue to serve its hydrologic function as a storage area for flows diverted into the park from both storm drains and EGGWC flows. Proposed project grading of Talbert Lake ensures the capacity to store additional EGGWC diverted flow.

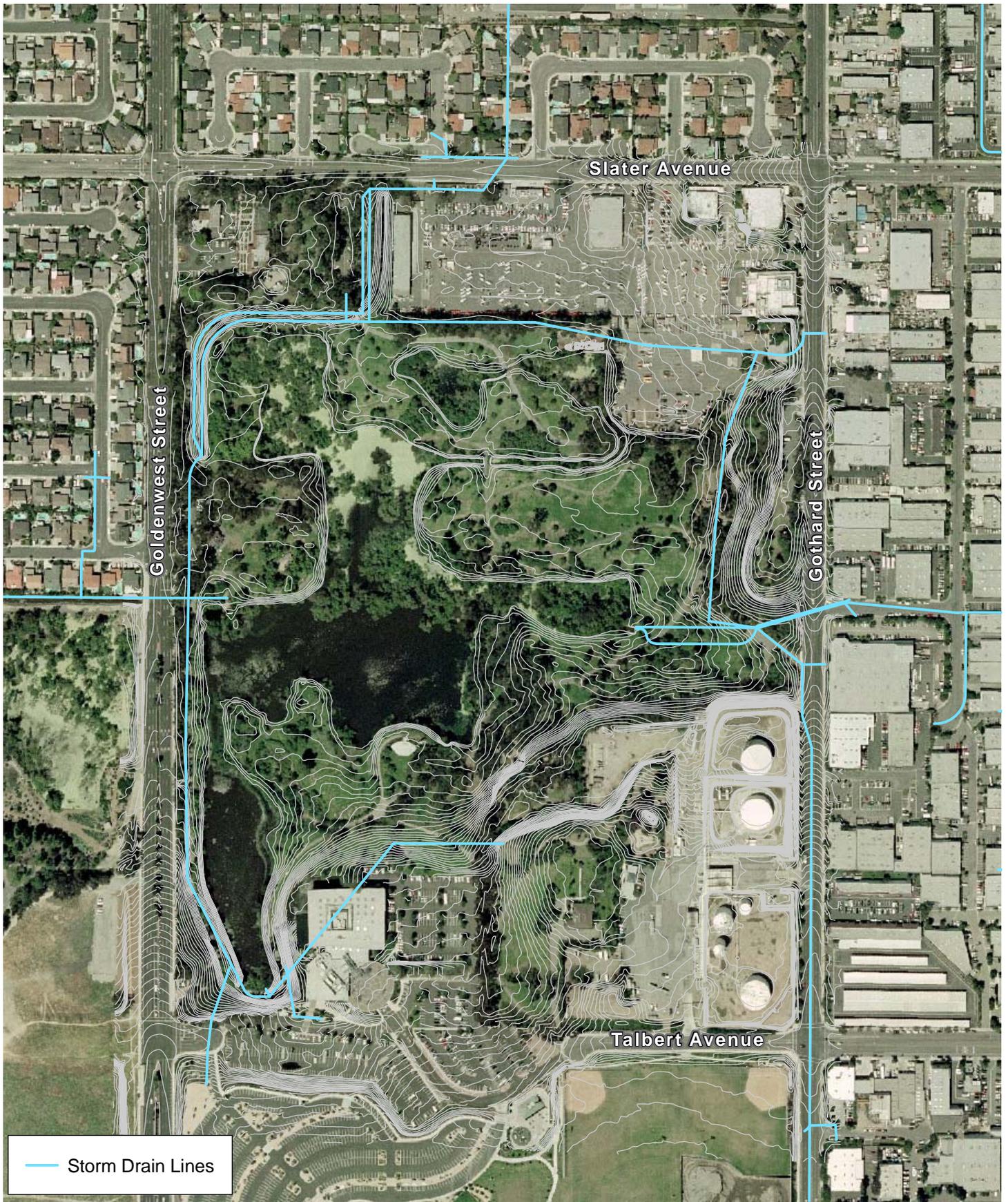
Exhibits 12.4-1 and 12.4-2 illustrate grading contours at the site under existing and post-project conditions. Flow paths are generally the same through the project area.

Erosion and sedimentation are generally not an issue under existing conditions, as average flows do not result in enough volume to transport or erode large volumes of material on site. Under the Gothard Street diversion concepts, diverted flows would enter the park via the existing storm drain adjacent to the Slater Avenue parking lot. If diverted flows reach a maximum of 3 mgd, these flows would equate to an upper limit of 4.6 cfs into the unlined drainage channel alongside the parking lot. These flows are not expected to be fast enough to alter the existing drainage pattern at the site, nor are they expected to significantly affect existing erosion and sedimentation processes.

Design of the diversion structure within the EGGWC incorporates features to remove as much sediment as possible within the channel prior to flow diversion. Proposed project grading of the natural treatment system within Central Park does seek to lengthen flow residence time within the wetland portion of the park by creating a combination of sinuous, shallow water wetland trains and deeper ponds, which would reduce flow velocities and enhance sediment deposition in some areas. However, forebays have been designed into the upstream end of each wetland train to concentrate deposition of sediments that would remain in the diverted flows before they pass into the downstream portions of the system. These forebays would enhance system maintenance by providing a specially designed basin with ease of access for periodic sediment removal. Consequently, although minor localized effects may be evident, impacts on siltation would be less than significant. With the sediment-control features of the project, off-site siltation would not be an issue.

The design of the proposed project has incorporated engineered shorelines in places where, under storm flow conditions, erosion may occur. The proposed project is not expected to substantially alter the existing drainage pattern in a manner that would create conditions under which substantial erosion would occur. Accordingly, proposed project impacts to sedimentation and erosion patterns on site are expected to be less than significant.

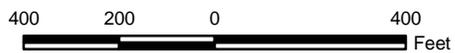
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Existing Topographic Contours, Central Park

Exhibit 12.4-1

Talbert Lake Diversion Project



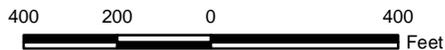
Bonterra
CONSULTING



Post-Project Grading Topography
(Construction Phases 1 and 2 Complete)
Talbert Lake Diversion Project

Exhibit 12.4-2

2



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site? (Sources: 5, 26, 34, 35, 41)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Less Than Significant Impact. As discussed above in Section IV(c), the Gothard Street diversion concepts utilize the existing storm drain system for delivery of diverted flows into the Central Park component of the proposed project. Flows would enter the park by way of the existing storm drain and earthen swale adjacent to the Slater Avenue parking lot. This earthen swale currently has an estimated capacity of about 60 cfs. Current 100-year flow rates in this channel can reach about 287 cfs, resulting in exceedance of channel capacity and flooding. Diverted flows, at maximum flow rates, would occupy approximately five percent of the existing capacity of this earthen swale; however, these diverted flows represent dry weather flows under non-storm conditions. As channel diversion operations would cease under storm flow conditions, diverted flows would have a less than significant effect on existing flooding patterns at the site.

The proposed project would also involve modifications to the topography of Central Park (as discussed above) and modification to the overflow weir at the downstream end of Talbert Lake. The network of wetland treatment cells and Talbert Lake itself would be designed to maintain a consistent operating water level during dry weather conditions (-2 NGVD 88). During dry weather periods, diverted EGGWC flows would constitute the only significant inflow into the natural treatment system and lake, in combination with very low flows through the storm drain system. Design routing of project flows would ideally capture and retain all flows within the lake; treat the flows; and reuse all flows for landscaping, irrigation, and groundwater recharge without any discharge off the site back into Talbert Channel. Proposed project grading would enhance the system’s capability to store flows on site; it is possible that very localized flooding could occur on site within the wetland areas and around the perimeter of Talbert Lake; however, as the project itself improves the stage-storage relationship within the Talbert Lake Ultimate Condition, any localized flooding around the wetlands is anticipated to be short-term in duration and minor as flows move downstream into the restored lake. Weir modifications for Phase 1 of project construction would reduce weir elevation in the Talbert Lake Interim Condition, ensuring a less than significant effect on flooding around the lake in the period between Phase 1 and Phase 2 construction.

The post-project stage-storage relationship indicates that the storage volume in the lake would significantly increase as a result of the Talbert Lake Ultimate Condition. The increase in storage is due to the operating level of the lake and the reconstructed overflow weir. The final post-project lake elevation would be maintained at approximately -2 (NAVD 88), which provides for an extra 40 acre-feet (af) of storage volume over existing conditions that would be available to improve the attenuation of the flood hydrograph routed through Talbert Lake. During large rainfall events, excess water would be discharged downstream into Slater channel via the lake overflow weir and culvert under Goldenwest Street. Proposed modification of the weir would result in changes to the hydraulic operation of the lake and wetland system during a storm event; however, these modifications would ultimately improve the overall storage capability of Talbert Lake, and result in lower outflows into Talbert Channel than those under existing conditions. Tables 12.4-1 and 12.4-2 illustrate that flows off the project site are reduced under final proposed project conditions for all frequencies.

**TABLE 12.4-1
TALBERT LAKE PRE-PROJECT HYDROLOGY RESULTS**

Return Period Peak Inflow	Peak Inflow (cfs)	Peak Outflow (cfs)	Max Stage Elev (NAVD 88)
100-year	892	174	3.3
50-year	811	167	3.0
25-year	720	160	2.7
10-year	566	144	2.3
5-year	373	95	1.6
2-year	233	52	1.0

Source: PACE 2007.

**TABLE 12.4-2
TALBERT LAKE POST-PROJECT (ULTIMATE CONDITION) HYDROLOGY RESULTS**

Return Period Peak Inflow	Peak Inflow (cfs)	Peak Outflow (cfs)	Max Stage Elev (NAVD 88)
100-year	892	170	3.1
50-year	811	159	2.7
25-year	720	152	2.3
10-year	566	128	1.7
5-year	373	51	0.7
2-year	233	29	-0.3

Source: PACE 2007.

Accordingly, although the site's drainage pattern is being slightly modified by the proposed project, impacts to surface runoff and on- and off-site flooding are expected to be less than significant under both Interim and Ultimate conditions.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff? (Sources: 26, 34, 41, 53)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Less Than Significant Impact. As discussed above in checklist Section IV(d), diverted flows that enter the park in the earthen swale off Slater Avenue would cease under storm flow conditions. Under non-storm conditions, maximum diverted flow represents about five percent of the swale's carrying capacity and would occur under non-storm flow conditions; accordingly, these flows would have a less than significant impact on this swale.

The proposed project also increases total water volumes moving through Central Park. However, as discussed in IV(d) above and IV(m) below, the proposed project is actually expected to reduce runoff from the project site. BMPs consistent with NPDES requirements would be developed during final project design (SC-2) and would be approved by the City of Huntington Beach, Department of Public Works in order to minimize construction-related runoff to the maximum extent feasible. Project design objectives assist in reducing polluted runoff from the EGGWC system. Accordingly, the project would have a less

than significant effect on storm water drainage systems, and would not provide substantial additional sources of polluted runoff.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Otherwise substantially degrade water quality? (Source: 41)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. As discussed in detail above within the Project Description, the proposed project would enhance water quality consistent with TMDL priorities. Accordingly, there would be no impact relative to water quality degradation.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? (Sources: 34, 35, 41, 53)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. The proposed project site is designated as Flood Zone X on the area Flood Insurance Rate Map (FIRM) issued by the Federal Emergency Management Agency (FEMA), which indicates that the site is not subject to development restrictions that would affect, or be affected by, the proposed project. Notwithstanding, the proposed project has no effect on local area housing or the 100-year floodplain as mapped by the FEMA.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows? (Sources: 29, 31, 34, 35, 41)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. As discussed in Section IV(g) above, the proposed project site is designated as Flood Zone X on the area Flood Insurance Rate Map (FIRM) issued by FEMA (with no development restrictions). In addition, Figure EH-11 from the *City of Huntington Beach General Plan* indicates the site is subject to between one and three feet of flooding, with the northwestern corner of the site subject to the highest level of flooding. Exhibit 12.4-3 illustrates the post-project flooding elevations for the site, which are not appreciably changed from those under existing conditions. The proposed project does not alter existing land uses and does not construct any structures within the project footprint other than low-profile project features such as pumps and forebays. The amount of vegetation on site would be balanced with existing conditions. Accordingly, there would be no effect on impeding or redirecting flood flows.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? (Sources: 29, 34, 35, 41, 53)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. The proposed project does not involve the construction of habitable structures within Central Park. As discussed above in Section IV(d), the proposed project would actually enhance the flood storage capability of Talbert Lake under ultimate conditions. Accordingly, there would be no increased risk of loss, injury, or death from proposed project implementation.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
j) Inundation by seiche, tsunami, or mudflow? (Sources: 34, 35, 41)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

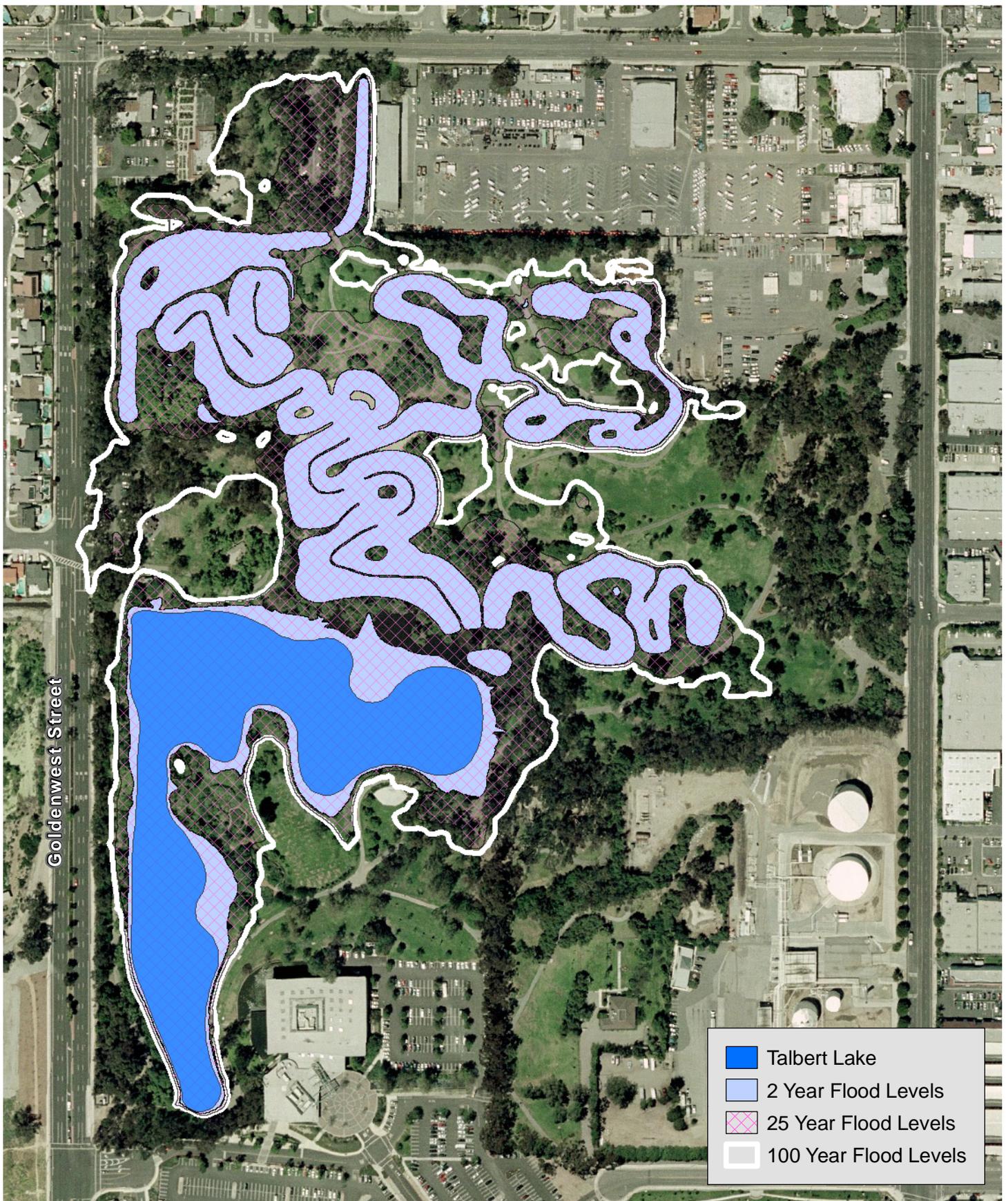
Less Than Significant Impact. The proposed project would have no effect on the characteristics of the site relative to mudflow or tsunami. Minimal localized flooding around the lake perimeter could occur if the lake was subjected to an extended period of seismic shaking; however, this effect is expected to be relatively minor and short-term in duration, and would pose no significant risk related to seiche; therefore, the project impact would be less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
k) Potentially impact storm water runoff from construction activities? (Source: 41)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Less Than Significant Impact. Proposed project construction involves excavation of sediments that would require dewatering prior to reuse or disposal. Dewatering would occur as materials are placed within the permanent on-site disposal feature at the southern side of Talbert Lake and in temporary stockpiles around the perimeter of the site. Dewatering the permanent on-site disposal area or around the perimeter of the lake itself would result in runoff from dewatering moving back down into the lake bottom, with no change over existing conditions.

All BMPs contained in the City's NPDES permit will be applied to construction activities (SC-2), which will ensure that impacts from construction-related storm water runoff remain less than significant.

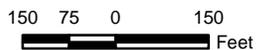


Post-Project Flooding Levels

Exhibit 12.4-3

Talbert Lake Diversion Project

2



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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- l) Potentially impact storm water runoff from post-construction activities? (Source: 41)

Discussion:

No Impact. As the proposed project maintains the existing land use at the site and does not increase the amount of impervious surfaces contributing to runoff volumes, the proposed project would have no effect on storm water runoff post-construction.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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- m) Result in a potential for discharge of storm water pollutants from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas, loading docks or other outdoor work areas? (Source: 41)

Discussion:

Less Than Significant Impact. Vehicles and equipment would be stored on paved surfaces in areas currently designated for use by maintenance personnel and privately owned vehicles. Construction equipment would be kept away from existing drainages when not operating or engaging in fueling and/or maintenance activities. Temporary stockpiles located in the staging areas for dewatering purposes would be kept away from construction vehicles such that runoff is not contaminated with petroleum hydrocarbons, oil, or grease. As construction is proposed for the dry season, it is not anticipated that these activities would result in the generation of significant volumes of water; BMPs will be applied to minimize the risk of accidental discharge of materials related to equipment storage (SC-2). Accordingly, project impacts would be less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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- n) Result in the potential for discharge of storm water to affect the beneficial uses of the receiving waters? (Sources: 29, 41)

Discussion:

Less Than Significant Impact. The beneficial uses of the receiving waters for the EGGWC are listed in Table 12.4-3. The impaired water bodies of Anaheim Bay and Huntington Harbour would actually be enhanced through the reduction/removal of poor quality dry weather flows from the EGGWC into these systems. Any flows that are discharged back into these waters through Talbert Channel would be significantly improved by the project; Table 12.4-4 illustrates the water quality improvement performance modeled for project flows of 0.5 mgd. This table confirms that project effectiveness for treatment of flows

ranges from 70 to 97 percent in effectiveness, depending upon the constituent. Accordingly, beneficial uses of receiving waters will be enhanced by the discharge of improved project flows back into Talbert Channel. Accordingly, project impacts will be beneficial.

**TABLE 12.4-3
BENEFICIAL USES OF ANAHEIM BAY AND HUNTINGTON HARBOUR**

Receiving Waters	Navigation	Recreation (water contact)	Recreation (non-water contact)	Commercial and Sport fishing	Biological Habitats of Special Significance	Wildlife Habitat	Rare, Threatened, or Endangered Species	Spawning, Reproduction, and Development	Marine Habitat	Shellfish Harvesting
Anaheim Bay – Outer Bay	X	X	X		X	X	X	X	X	
Sunset Bay – Huntington Harbour	X	X	X	X		X	X	X	X	
Bolsa Bay		X	X	X	X	X	X	X	X	X

Source: SARWQCB 1995.

**TABLE 12.4-4
PROJECT MODEL RESULTS, WATER QUALITY**

0.5 mgd of Nuisance Flow								
Constituent	Channel Data			Model Input Conc. (mg/L ^a)	Model Output Concentration / Removal %			
	# samples	Max Conc. (mg/L ^a)	Avg. Conc. (mg/L ^a)		Winter		Summer	
					Conc. (mg/L ^a)	Removal %	Conc. (mg/L ^a)	Removal %
Total Nitrogen as N ^b	11	8	3	3	1.1	64	0.2	92
Total Phosphorus as P ^c	11	0.4	0.2	0.5	0.2	61	0.2	70
Total Suspended Solids	11	28	12	12	0.1	99	0.1	99
BOD	0	NA	NA	10	0.9	91	0.6	94
Diazinon	5	0.00002	0.000005	0.000005	0.000003	50	0.000003	50
DDT	0	NA	NA	0.000005	0.0000004	92	0.0000004	92
Dimethoate	5	0	0	0.000005	0.000001	74	0.000001	74
Cr	8	0.009	0.003	0.003	0.0004	88	0.0003	91
Zn	8	0.09	0.02	0.02	0.006	74	0.004	81
Cu	8	0.02	0.007	0.007	0.0008	88	0.0006	91
Total Coliform (CFU/100mL)	28	1,520,000	156,000	150,000	9,000	94	5,100	97

^a concentrations as mg/L except coliform, which is expressed as colony forming unit (CFU)/100mL
^b total nitrogen estimated based on sum of TKN and NO₃
^c total phosphorus estimated based on doubling concentration of PO₄-P

Source: PACE 2007.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
o) Create or contribute significant increases in the flow velocity or volume of storm water runoff to cause environmental harm? (Sources: 35, 41)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. As discussed above in IV(d) and (e) above, the proposed project would not increase storm water runoff volumes from the project site. As discharges from the site that flow back into Talbert Channel would be reduced for all frequencies (per Tables 12.4-1 and 12.4-2), flow velocities are anticipated to be lower than under existing conditions. Accordingly, no impact is expected.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
p) Create or contribute significant increases in erosion of the project site or surrounding areas? (Sources: 34, 35, 41)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Less Than Significant. As discussed above in IV(c), the proposed project would not induce any significant impacts relative to erosion of the project site or surrounding area.

V. AIR QUALITY

The city has identified the significance criteria established by the applicable air quality management district as appropriate to make the following determinations. Would the project:

Potentially Significant Impact Potentially Significant Unless Mitigation Incorporated Less Than Significant Impact No Impact

- a) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? (Source: 45, 46, 47, 48, 49, 52)

Discussion:

Less Than Significant Impact. The South Coast Air Quality Management District (SCAQMD) has divided the air basin into 38 air monitoring areas with a designated ambient air monitoring station representative of each area. The air quality monitoring station designated for this area is the Costa Mesa Station, which is the nearest air quality monitoring station to the project site. The Costa Mesa Station is located near Mesa Verde Drive west of Harbor Boulevard, approximately four miles southeast of the project site. The air pollutants measured at the Costa Mesa Station include ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), and sulfur dioxide (SO₂). Particulate matter (PM10 and PM2.5) concentrations are not measured at the Costa Mesa Station. The nearest station where PM10 and PM2.5 are monitored is the Mission Viejo Station. The monitoring data show that ozone is the air pollutant of primary concern in the project area.

In the 1993 CEQA Air Quality Handbook, the SCAQMD established significance thresholds to assess the regional impact of project-related air pollutant emissions. Table 12.5-1 presents these significance thresholds (revised December 2007). There are separate thresholds for short-term construction and long-term operational emissions. A project with daily emission rates below these thresholds is considered to have a less than significant effect on regional air quality throughout the Southern California Air Basin (SoCAB). Given that the proposed project would produce negligible emissions associated with long-term maintenance of the proposed project, the air quality impact analysis focuses on short-term construction emissions.

**TABLE 12.5-1
SCAQMD REGIONAL POLLUTANT EMISSION
THRESHOLDS OF SIGNIFICANCE**

	Pollutant Emissions (lbs/day)					
	VOC	CO	NOx	SOx	PM10	PM2.5
Construction	75	550	100	150	150	55
Operation	55	550	55	150	150	55

Source: SCAQMD 1993, as amended.

Regional construction-related air quality impacts from the project were determined using data derived from the CARB Emissions Factors Model (EMFAC 2007), including on-road vehicle (SCAQMD 2007b) and off-road (construction) vehicle (SCAQMD 2007c) emissions, formulas from the CEQA Air Quality Handbook (SCAQMD 1993), and updated methodologies in the Draft CEQA Air Quality Guidance Handbook (SCAQMD 2007a) to calculate emissions resulting from project activities. The emissions calculations assumed that the individual phases would be constructed consecutively and not concurrently, unless otherwise noted. The results of the calculations are presented in their entirety in Attachment 2 and are summarized in Tables 12.5-2 through 12.5-6 below.

The main purpose of an Air Quality Management Plan (AQMP) is to bring an area into compliance with the requirements of federal and State air quality standards. For a project to be consistent with the AQMP, the pollutants emitted from the project should not exceed the SCAQMD's daily thresholds or cause a significant impact on air quality. However, if feasible mitigation measures are implemented and shown to

reduce the impact level from significant to less than significant, the project is deemed consistent with the AQMP. The AQMP uses the assumptions and projections of local planning agencies to determine control strategies for regional compliance status. Since the AQMP is based on local General Plans, projects that are consistent with the General Plan are usually found to be consistent with the AQMP. The proposed project would not directly or indirectly result in population growth. Additionally, the proposed project is expected to comply with State and federal ambient air quality standards. It is consistent with the air quality management policies in the current AQMP, and its emissions would be below the emissions thresholds established in SCAQMD's CEQA Handbook, as demonstrated in the responses to Questions V(b) through V(e) which follow. Therefore, the proposed project would result in a less than significant impact, and no mitigation is required.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Expose sensitive receptors to substantial pollutant concentrations? (Source: 1, 51)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Less Than Significant Impact. The SCAQMD developed a localized significance threshold (LST) methodology (SCAQMD 2003) and mass rate look-up tables by source receptor area (SRA) to determine whether a project would generate significant adverse localized air quality impacts. LSTs represent the maximum NOx, CO, PM10, and PM2.5 emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each SRA. The LST tables in Appendix C of the LST Methodology are calculated by project size in 1-, 2-, and 5-acre increments and by distance from sensitive receptors in 25-, 50-, 100-, 200-, and 500-meter increments. A project with daily emissions rates below the thresholds for the appropriate increments is considered to have a less than significant impact. Projects larger than five acres in size that meet the five-acre standard are held to a more stringent emissions threshold than would otherwise be applied; as such, they are considered to result in a less than significant impact. As discussed, the proposed project tasks would be completed consecutively, unless otherwise noted, and the largest area of disturbance during any one of these tasks is 13 acres.

The project is located in SRA 18, and the closest residential use is within 25 meters (82 feet) of the proposed EGGWC diversion site. The closest residential units to the proposed Talbert Lake Restoration and Wetlands Treatment System project elements are approximately 75 meters (246 feet) to the west. The LST thresholds for the proposed project are shown in Tables 12.5-2 through 12.5-5 above. The assumptions for calculating the LSTs are provided in the LST Worksheets in Attachment 2. A project with daily emissions rates below the thresholds is considered to have a less than significant impact.

Air pollutant emissions associated with construction activities include fugitive dust (from site preparation and grading) and emissions from equipment exhaust. Short-term construction emissions are quantified separately for the different project elements (i.e., EGGWC Diversion, Wetland Treatment System, Interim Talbert Lake, and Ultimate Talbert Lake) in Tables 12.5-2 through 12.5-5. As shown in the tables, peak day construction emissions would not exceed established SCAQMD thresholds assuming consecutive implementation of construction phases. Peak day construction emissions for concurrent project phases are provided in Table 12.5-6 above.

**TABLE 12.5-2
EGGWC PEAK DAY CONSTRUCTION EMISSIONS (lbs/day) BY PHASE**

Project Phase	Criteria Pollutants					
	VOC	CO	NOx	SOx	PM10	PM2.5
Concept 1						
Clearing of Vegetation/Debris	0.0	1.6	6.8	5.9	12.0	1.7
Reinforced concrete (RC) Channel Wall Demolition	0.0	1.3	5.7	0.6	8.1	0.5
Inlet & Pump Station Construction	4.1	14.6	27.8	0.0	1.7	1.5
Rubber Dam Construction	3.0	10.0	12.3	0.0	1.0	0.9
RC Channel Wall Construction	2.7	15.6	9.9	0.0	0.7	0.1
Pipeline to Goldenwest right-of-way (R/W)	4.2	16.3	32.5	0.0	1.6	1.5
Concept 2						
Clearing of Vegetation/Debris	0.0	1.6	6.8	5.9	12.0	1.7
RC Channel Wall Demolition	0.0	1.3	5.7	0.6	8.1	0.5
Inlet/Forebay/Pump Station Construction	4.3	15.3	29.9	0.0	1.8	1.6
Mod. Channel/Rubber Dam Construction	3.0	10.0	12.3	0.0	1.0	0.9
RC Channel Wall Construction	2.7	15.6	9.9	0.0	0.7	0.1
Pipeline to Goldenwest R/W Line	4.2	16.3	32.5	0.0	1.6	1.5
Concept 3						
Clearing of Vegetation/Debris	0.0	1.6	6.8	2.8	12.0	1.1
RC Channel Wall Demolition	0.0	1.3	5.7	0.6	8.1	0.5
Inlet/Forebay/Pump Station Construction	5.0	23.4	28.7	0.0	1.8	1.6
Mod. Channel/Rubber Dam Construction	2.7	15.6	9.9	0.0	0.7	0.1
RC Channel Wall Construction	4.2	16.3	32.5	0.0	1.6	1.5
Concept 4						
Clearing of Vegetation/Debris	1.6	6.8	12.0	0.0	5.9	1.7
RC Channel Wall Demolition	1.3	5.7	8.7	0.0	0.6	0.5
Inlet/Pump/Rubber Dam Construction	4.3	15.3	29.9	0.0	1.8	1.6
Central Park Pump Station Construction	3.4	12.6	25.0	0.0	1.5	1.3
Air Compressor/Dam Controls	3.0	10.0	12.3	0.0	1.0	0.9
RC Channel Wall Construction	2.7	15.6	9.9	0.0	0.7	0.6
Pipeline to Gothard St. Storm Drain	6.3	24.6	59.5	0.1	3.0	2.8
Concept 5						
Clearing of Vegetation/Debris	1.6	6.8	12.0	0.0	5.9	1.7
RC Channel Wall Demolition	1.3	5.7	8.1	0.0	0.6	0.5
Inlet/Pump/Rubber Dam Construction	4.3	15.7	30.4	0.0	1.8	1.6
Central Park Pump Station Construction	3.4	12.6	25.0	0.0	1.5	1.3
Modified Low Flow Channel	0.6	3.6	4.4	0.0	0.2	1.3
Air Compressor/Dam Controls	3.0	10.0	12.3	0.0	1.0	0.9
RC Channel Wall Construction	2.7	15.6	9.9	0.0	0.7	0.6
Pipeline to Gothard St. Storm Drain	6.3	24.6	59.5	0.1	3.0	2.8
Concept 6						
Clearing of Vegetation/Debris	1.6	6.8	12.0	0.0	5.9	1.7
RC Channel Wall Demolition	1.5	6.3	10.2	0.0	0.7	0.6
Inlet/Pump/Forebay Construction	4.3	15.3	29.9	0.0	1.8	1.6
Central Park Pump Station Construction	3.4	12.6	25.0	0.0	1.5	1.3
Modified Low Flow Channel	2.7	15.6	9.9	0.0	0.7	0.6
RC Channel Wall Construction	2.7	15.6	9.9	0.0	0.7	0.6
Pipeline to Gothard St. Storm Drain	5.3	20.8	47.1	0.0	2.4	2.2
Peak Daily Emissions*	6.3	24.6	59.5	5.9	12.0	2.8
Localized Significance Threshold	N/A	950	335	N/A	14	8
SCAQMD CEQA Threshold	75	550	100	150	150	55
Exceed Significance?	NO	NO	NO	NO	NO	NO
* Peak daily emissions calculated as a worst-case from the diversion concept with the highest emissions output.						
Source: BonTerra Consulting 2008.						

**TABLE 12.5-3
WETLAND TREATMENT SYSTEM
CONSTRUCTION EMISSIONS (lbs/day) BY PHASE**

Project Phase	Criteria Pollutants					
	VOC	CO	NOx	SOx	PM10	PM2.5
Concept 1						
Vegetation Clearing & Grubbing	8.3	32.3	96.2	0.1	20.1	7.5
Wetland & Pond Grading	3.7	20.9	33.2	0.0	1.7	5.2
Pond Construction	1.2	8.7	6.4	0.0	0.3	4.8
Pipeline Construction	2.8	13.2	26.0	0.0	1.2	1.1
Distribution System	5.8	24.1	30.2	0.0	1.8	1.7
Peak Daily Emissions	8.3	32.3	96.2	0.1	20.1	7.5
Localized Significance Threshold	N/A	1,124	335	N/A	43	18
SCAQMD CEQA Threshold	75	550	100	150	150	55
Exceed Significance?	NO	NO	NO	NO	NO	NO
Source: BonTerra Consulting 2008.						

**TABLE 12.5-4
TALBERT LAKE RESTORATION INTERIM CONDITION
CONSTRUCTION EMISSIONS (lbs/day) BY PHASE**

Project Phase	Criteria Pollutants					
	VOC	CO	NOx	SOx	PM10	PM2.5
Concept 1						
Vegetation Clearing & Grubbing	8.2	33.6	91.6	0.1	10.1	5.3
Riparian Habitat Earthfill	6.7	25.9	43.0	0.0	21.2	6.5
Dewatering	6.4	28.6	49.6	0.1	2.2	2.1
Landscaping	1.5	8.4	6.4	0.0	0.5	0.5
Temporary Lake Overflow Pipe	1.7	10.3	6.6	0.0	0.5	0.5
Peak Daily Emissions	8.2	33.6	91.6	0.1	21.2	6.5
Localized Significance Threshold	N/A	1,124	335	N/A	43	18
SCAQMD CEQA Threshold	75	550	100	150	150	55
Exceed Significance?	NO	NO	NO	NO	NO	NO
Source: BonTerra Consulting 2008.						

**TABLE 12.5-5
TALBERT LAKE RESTORATION ULTIMATE CONDITION
CONSTRUCTION EMISSIONS (lbs/day) BY PHASE**

Project Phase	Criteria Pollutants					
	VOC	CO	NOx	SOx	PM10	PM2.5
Concept 1						
Vegetation Clearing & Grubbing	4.6	19.6	45.9	0.0	7.3	3.0
Excavation & Stockpiling	7.0	29.6	43.4	0.0	12.6	4.7
Soil Disposal	5.2	28.5	42.7	0.0	17.5	5.4
Subsurface Wetland Construction	7.1	32.7	48.5	0.0	2.7	2.5
Berm Construction	6.8	29.0	48.1	0.0	2.7	2.4
Weir Construction	4.3	27.1	27.1	0.0	6.8	2.5
Pump Station Construction	5.1	31.8	27.3	0.0	1.4	1.3
Biofilters & Pipeline	3.9	22.2	22.3	0.0	1.2	1.1
Aeration Blower & Lines	4.6	29.9	21.1	0.0	1.1	1.1
Wetlands & Lake Edge Construction	5.3	31.8	23.9	0.0	1.4	1.3
Peak Daily Emissions	7.1	32.7	48.5	0.1	17.5	5.4
Localized Significance Threshold	N/A	1,124	335	N/A	43	18
SCAQMD CEQA Threshold	75	550	100	150	150	55
Exceed Significance?	NO	NO	NO	NO	NO	NO
Source: BonTerra Consulting 2008.						

**TABLE 12.5-6
CONCURRENT TASKS PEAK
CONSTRUCTION EMISSIONS (lbs/day) BY PHASE**

Project Phase	Criteria Pollutants					
	VOC	CO	NOx	SOx	PM10	PM2.5
Channel Diversion*						
Inlet/Forebay/Pump Station Construction	4.3	15.3	29.9	0.0	1.8	1.6
Mod. Channel/Rubber Dam Construction	3.0	10.0	12.3	0.0	1.0	0.9
Total Peak Daily Emissions	7.3	25.3	42.2	0.1	2.8	2.5
Localized Significance Threshold	N/A	950	335	N/A	14	8
SCAQMD CEQA Threshold	75	550	100	150	150	55
Exceed Significance?	NO	NO	NO	NO	NO	NO
Talbert Lake Ultimate Condition						
Excavation & Stockpiling	7.0	29.6	43.4	0.0	12.6	4.7
Weir Construction	4.3	27.1	27.1	0.0	6.8	2.5
Total Peak Daily Emissions	11.3	56.7	70.5	0.1	19.4	7.2
Localized Significance Threshold	N/A	1124	335	N/A	43	18
SCAQMD CEQA Threshold	75	550	100	150	150	55
Exceed Significance?	NO	NO	NO	NO	NO	NO
* Peak daily emissions represent the EGGWC division concept with the highest emissions values (Concepts 2 & 4).						
Source: BonTerra Consulting 2008.						

As shown on Tables 12.5-2 and 12.5-6, the calculated emissions for the proposed construction and operational activities are below the established SCAQMD significance thresholds. Therefore, the proposed construction activities would result in a less than significant air quality impact, and no mitigation is required. Standard Condition SC-3 would further reduce any potential impacts.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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- c) Create objectionable odors affecting a substantial number of people? (Sources: 39, 41)

Discussion:

Potentially Significant Unless Mitigation Incorporated. Ponding and stagnant water behind the dam may produce foul odors, requiring the weekly application of Epoleon® (or similar product) for odor control as a Project Design Feature (PDF-1). Epoleon® products neutralize odors through chemical reactions that break down odor-causing gases into a non-toxic, biodegradable, water-soluble compound (Epoleon Corporation, 2008). Odors may result during construction from diesel particulate emissions from construction equipment and trucks. However, these odors would be short term (only occurring during construction activities) and would only be generated during the daytime and weekday hours of construction. Although the proposed project would not substantially alter the existing uses on the project site, ponded water behind the diversion concepts could create long-term objectionable odors from stagnant water. However, with the incorporation of Mitigation Measure AQ-1 below, this impact is expected to be less than significant and would not be expected to result in long-term generation of odors substantially different from those occurring on the site in the existing condition.

AQ-1 Epoleon® (or similar odor-control measure) shall be applied as needed by the City of Huntington Beach Park, Tree and Landscape Division to ponded water behind the diversion structure.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Conflict with or obstruct implementation of the applicable air quality plan? (Source: 46)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Less Than Significant Impact. In addition to the regional thresholds established by SCAQMD, short- and long-term emissions are held to stricter LSTs due to proximity to sensitive receptors (e.g., residential units). If the project does not cause emissions that exceed localized significance thresholds, it would not be expected to contribute substantially to an existing or projected air quality violation. Given the fact that the proposed project would not be expected to increase emissions associated with the existing land use and because emissions associated with project construction would not exceed LSTs (see Tables 12.5-2 through 12.5-6), the proposed project would not result in emissions that would cause a conflict with, or obstruct implementation of, the AQMP.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? (Sources: 1, 41)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Less Than Significant Impact. The project would contribute criteria pollutants to the area temporarily during project construction. As shown on Tables 12.5-2 through 12.5-5, the construction of the proposed project would not result in significant short-term air quality impacts because construction emissions would not exceed established SCAQMD thresholds. As temporary increases associated with project implementation are below SCAQMD thresholds, the project's contribution of these pollutants would not be cumulatively considerable and would represent a less than significant impact. There are no identified operational air quality impacts because the proposed project would require a similar level of maintenance as the existing condition and would not generate a measurable increase in long-term local and/or regional air quality. Therefore, the proposed project would result in a less than significant impact, and no mitigation is required.

VI.	<u>TRANSPORTATION AND TRAFFIC</u> Would the project:	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
	a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (e.g., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections? (Sources: 55)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Less Than Significant Impact. Construction assumptions for the assessment of traffic-related project effects are as follows:

From the Central Park construction site:

- All project staging is to occur from the Central Park parking lot immediately south of Gothard Street just south of Slater Avenue.
- 89,000 total cubic yards (cy) of material would be hauled off site for permanent disposal.
- The disposal site for all excavated material would be the FRB Landfill, approximately 20 miles from the project site.
- The designated haul route for the material is presented in Exhibit 12.6-1.
- A maximum of 40 truck trips per day for a duration of 10 weeks (50 days) would be needed to dispose of project-generated excess material.
- A maximum of 40 employees would be present on the project site and were assumed to commute approximately 22 miles each.
- Construction duration is approximately 32 weeks for the first phase of construction; up to 23 weeks for the second phase.

For the EGGWC Diversion Construction site:

- Staging would occur at the Central Park parking lot immediately south of the intersection of Gothard Street and Slater Avenue, and construction vehicles would access the diversion site each morning by exiting the parking lot onto Gothard Street, traveling north on Gothard Street to the EGGWC, and turning left onto the channel maintenance road. A flagperson would be present during construction vehicle egress from and ingress to the staging area each day (see PDF-9).
- 645 total cy of material would be generated from the diversion site.
- Construction duration is up to 20 weeks.
- All material would be hauled for disposal at the FRB Landfill.
- The designated haul route can be found on Exhibit 12.6-1.
- Construction schedule is described in NOI-1 (see Section X).

The proposed project would not construct new buildings or land uses that would generate new long-term vehicle trips. As such, the project would only result in temporary effects resulting from construction-related traffic.

Construction-related vehicle trips and movements would temporarily contribute to traffic congestion. Based on the material disposal requirements, it has been estimated that a maximum of 40 truck trips would occur per day roundtrip between the project site and the FRB Landfill approximately 22 miles to the

southeast in the City of Irvine. Additionally, a maximum of 40 workers would drive to and from the site during the AM and PM peak hour. The 40 truck trips associated with the disposal of excavated material would occur throughout the work day and would not add appreciably to the existing traffic load, particularly during peak hour conditions. The addition of 40 worker trips to the AM and PM peak hour traffic load represents a 0.01 percent increase in traffic. These short-term, temporary traffic increases would not be considered substantial in relation to the existing traffic load and street system capacity, and impacts would be considered less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? (Sources: 55)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

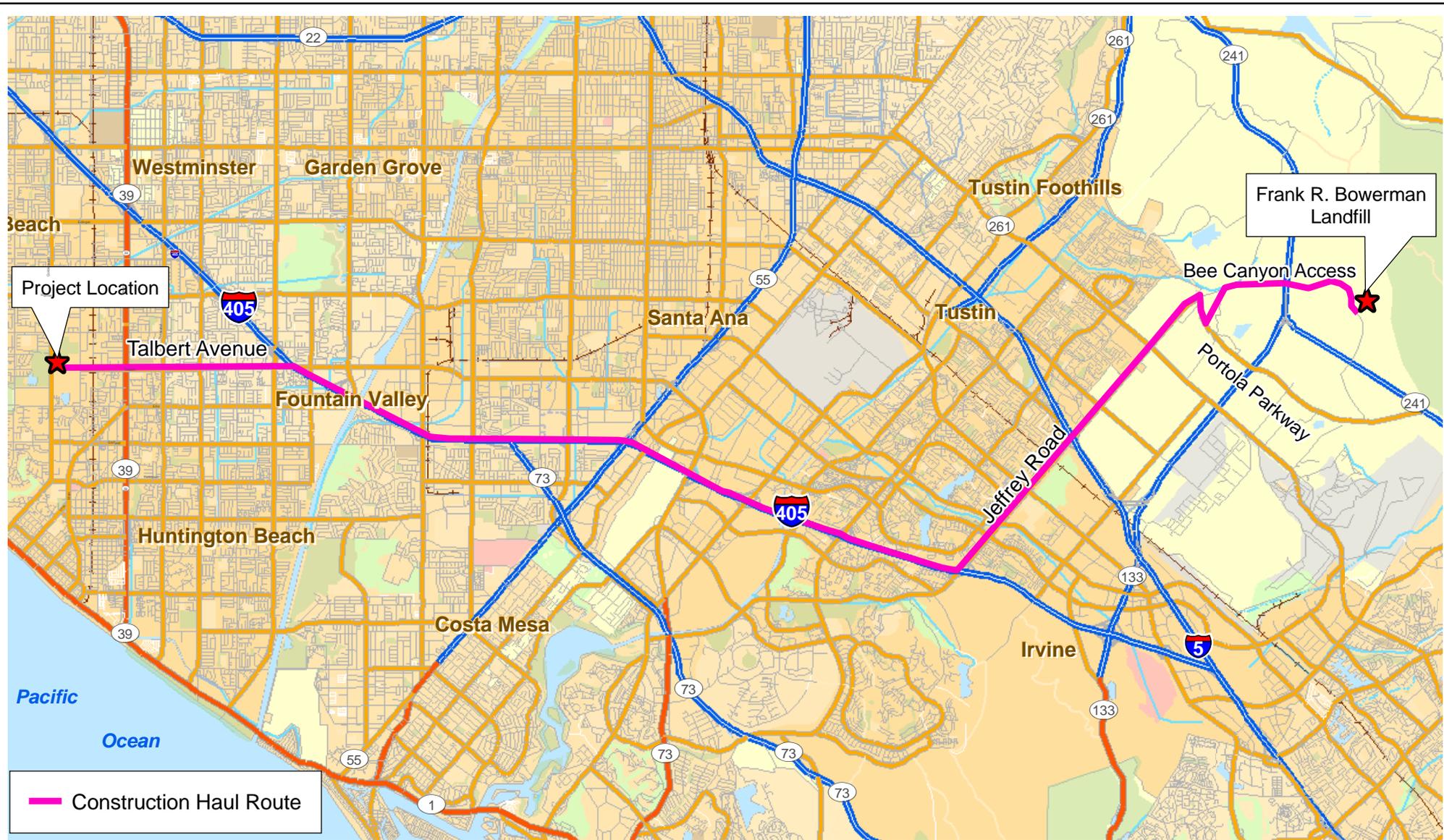
Discussion:

Less Than Significant Impact. The proposed project would not create any new permanent vehicle trips, but would only result in temporary effects resulting from construction-related vehicle trips and traffic diversions. The proposed project would result in the closure of 2 northbound travel lanes approximately 1,400 feet in length along Goldenwest Street between Slater Avenue and Talbert Avenue for the EGGWC Diversion Concepts 1 through 3. This closure would last approximately two weeks during excavation and installation of the pipeline connecting the EGGWC Diversion and the Central Park Distribution System. Exhibit 12.6-2 presents the proposed traffic diversion plan for Goldenwest Street.

The proposed project would result in lane closures at the intersection of Gothard Street and Warner Avenue for the EGGWC Diversion Concepts 4 through 6. The traffic closures would occur in four phases (described below) and are depicted on Exhibits 12.6-3 through 12.6-6:

- **Phase A:** Closure of the bike lane and one southbound travel lane on Gothard Street for approximately 1,400 feet in length north to Warner Avenue, and the closure of the bike lane and one westbound travel lane on Warner Avenue for approximately 200 feet in length east and west of Gothard Street. Phase A lane closures would occur for two days.
- **Phase B:** Closure of the bike lane and one southbound travel lane on Gothard Street for approximately 200 feet in length north to Warner Avenue; the closure of the bike lane and one westbound travel lane on Warner Avenue for approximately 200 feet in length east and west of Gothard Street; and the closure of one eastbound left-turn lane of Warner Avenue for approximately 200 feet in length west to Gothard Street. Phase B lane closures would occur for two days.
- **Phase C:** Closure of the bike lane and one southbound travel lane on Gothard Street for approximately 200 feet in length north to Warner Avenue, and the closure of the bike lane and two eastbound travel lanes on Warner Avenue for approximately 200 feet in length west of Gothard Street. Phase C lane closures would occur for one day.
- **Phase D:** Closure of the bike lane and one southbound travel lane on Gothard Street for approximately 200 feet in length north and south of Warner Avenue; the closure of the bike lane, one eastbound travel lane, and the right-turn lane on Warner Avenue for approximately 200 feet in length west of Gothard Street. Phase D lane closures would occur for three days.

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Construction Haul Route

Designated Haul Route

Talbert Lake Diversion Project



Exhibit 12.6-1



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Source: Pacific Advanced Civil Engineering, September 2007

Traffic Diversion Plan – Concepts 1-3

Exhibit 12.6-2

Talbert Lake Diversion Project

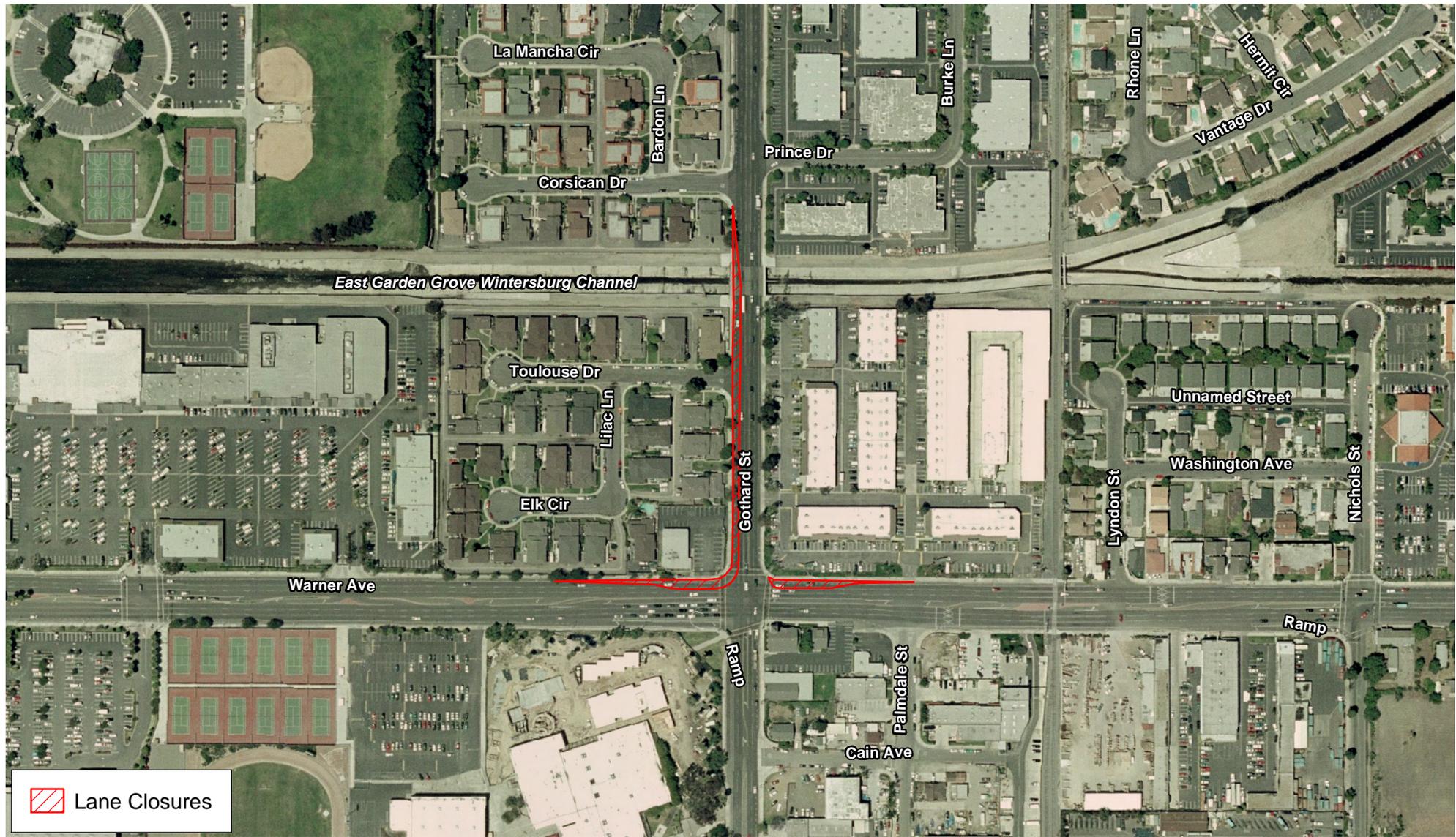


BonTerra
CONSULTING

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Traffic Diversion Plan - Concepts 4-6 (Phase A)

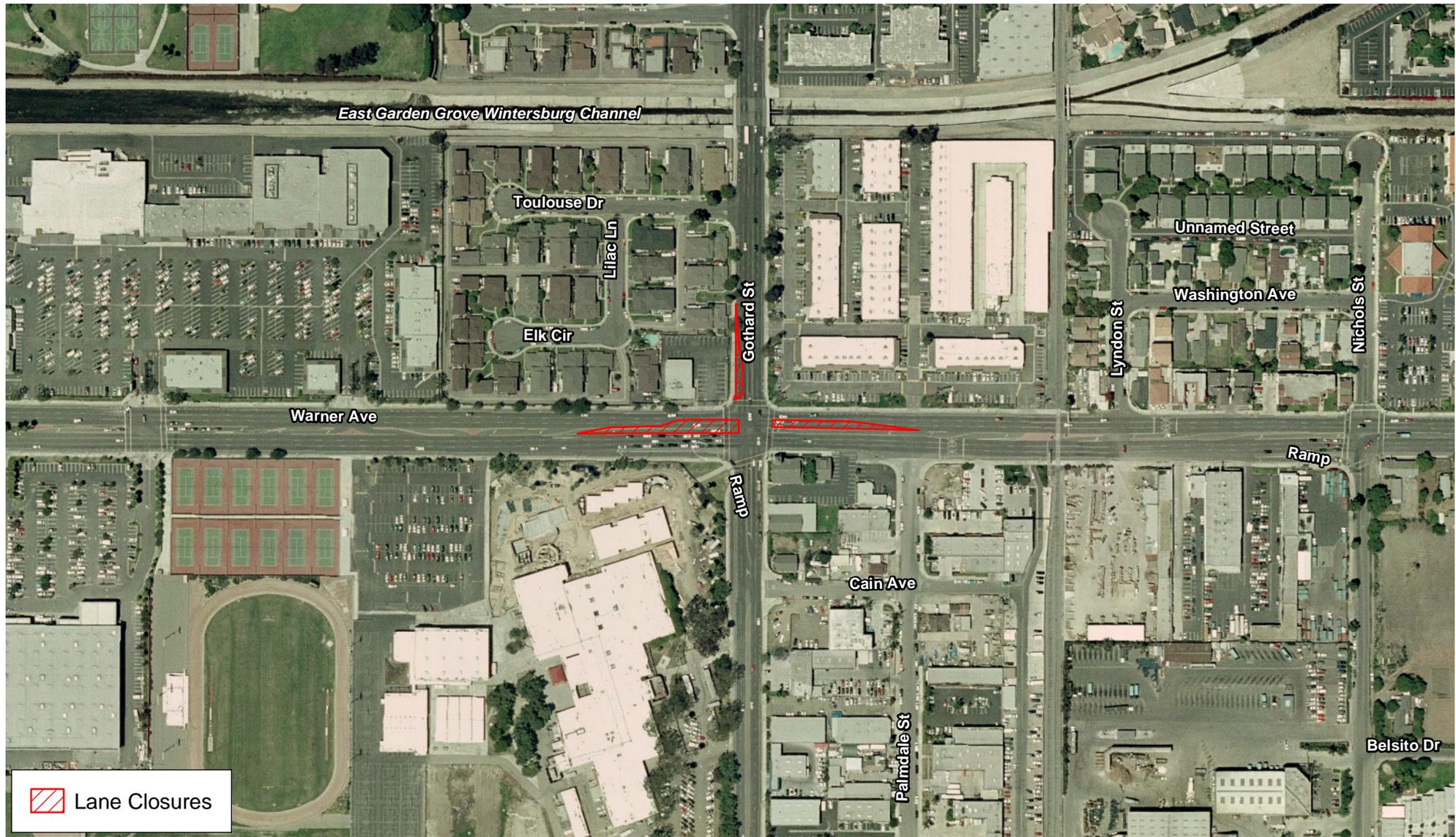
Exhibit 12.6-3

Talbert Lake Diversion Plan

2



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 Lane Closures

Traffic Diversion Plan - Concepts 4-6 (Phase B)

Exhibit 12.6-4

Talbert Lake Diversion Plan

2



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 Lane Closures

Traffic Diversion Plan - Concepts 4-6 (Phase C)

Exhibit 12.6-5

Talbert Lake Diversion Plan

2



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Traffic Diversion Plan - Concepts 4-6 (Phase D)

Exhibit 12.6-6

Talbert Lake Diversion Plan

2



The EGGWC Diversion Concepts may result in traffic delays and congestion along Gothard Street and either Goldenwest Street or Warner Avenue; however, vehicle travel would remain open in both directions of travel, and the associated traffic delays would be short term and temporary in nature, occurring over a period of 2 weeks for Diversion Concepts 1 through 3 and no more than 10 days for Diversion Concepts 4 through 6. Given the temporary nature of these impacts, they would be an annoyance, but would be a less than significant impact. Additionally, although not required to reduce impacts to less than significant, implementation of MM TRAF-1, discussed below under section e, would further reduce temporary impacts associated with the lane closures.

As described above, a maximum of 40 truck trips would occur per day roundtrip between the project site and the FRB Landfill approximately 22 miles to the southeast in the City of Irvine. Additionally, a maximum of 40 workers would drive to and from the site during the AM and PM peak hours. The 40 truck trips would occur throughout the work day and would not add appreciably to the existing traffic load, particularly during peak hour conditions. The addition of 40 worker trips to the AM and PM peak hour traffic load represents a 0.01 percent increase in traffic and would be distributed over all intersections in the project vicinity. Given that none of the intersections analyzed are at or near level of service (LOS) E or LOS F in the existing condition, a 0.01 percent increase would not be expected to result in LOS E or LOS F at any of the intersections analyzed, nor would it result in a change of 0.01 in the ICU for any intersection currently at LOS E or LOS F (see Table 7.2-9 for intersections analyzed and existing LOS values). Therefore, the temporary increase in traffic associated with the proposed project would be considered less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? (Sources: 40, 41)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. Although the City is located within the Planning Area for the Joint Forces Training Center in Los Alamitos, the project site is not located within the height restricted boundaries identified in the Airport Environs Land Use Plan or within two miles of any known public or private airstrip. Furthermore, the proposed project does not propose any structures with heights that would interfere with existing airspace or flight patterns. No impacts are anticipated.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses? (Sources: 41)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. The proposed project would not include the construction of new roads or traffic improvements that could result in hazardous design features or incompatible uses. The proposed project includes improvements to the existing Talbert Lake and would not alter the existing roadways or access to the existing Central Park. No impacts are anticipated.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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e) Result in inadequate emergency access?
(Sources: 41)

Discussion:

Less Than Significant Impact. The proposed project would not result in permanent improvements that would affect emergency access. Portions of the existing four-lane Goldenwest Street would be closed temporarily to allow for construction of the EGGWC distribution system. Exhibit 12.6-2 provides a conceptual plan of lane closures for work within the Goldenwest Street right-of-way. The work will be sequenced so that no more than two lanes in either direction are closed at any one time and will also be scheduled to occur during non-peak traffic hours. Although there is no significant impact to emergency service projected, Mitigation Measure TRAF-1 has been provided to further ensure that emergency access is not temporarily affected by project construction activities.

TRAF-1 A Traffic Control Plan will be developed for all construction activities proposed within and adjacent to public road rights-of-way that would delay or disrupt local roadway traffic. The Traffic Control Plan shall include, but not be limited to:

- Limiting road closures to identified portions of Goldenwest Street directly west of the project site and to only two lanes in each direction at any given time;
- Limiting road closures to portions of Gothard Street and Warner Avenue as described in Exhibits 12.6-3 through 12.6-6 for a total of no more than 10 days (only applicable if Diversion Concept 4, 5, or 6 is chosen);
- Limiting lane closures to between 9:00 AM and 3:00 PM on weekdays and Saturday, with no closures on Sunday;
- Installing traffic-control devices as specified in the California Department of Transportation’s Manual of Traffic Control for Construction and Maintenance Works Zones;
- Providing alternative routes (detours), as necessary, to route local traffic around roadway construction;
- Providing notification of road closures to residents in the vicinity of construction; and
- Consulting with emergency service providers and developing an Emergency Access Plan for emergency vehicle access in and adjacent to the construction zone.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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f) Result in inadequate parking capacity?
(Sources: 35, 41)

Discussion:

Less Than Significant Impact. The proposed project would not create additional long-term demand for parking and would not affect long-term parking capacity. However, the proposed project would require short-term, temporary parking for construction employees and construction equipment staging.

Construction vehicle parking and equipment staging would occur at the Central Park eastern parking lot on the western side of Gothard Street approximately 700 feet south of Warner Avenue. Vehicles and

equipment would occupy approximately 53 parking spaces during project construction, which would result in the temporary loss of public parking at this location. However, existing parking capacity at the Huntington Beach Central Park and Public Library parking lots can accommodate all public uses of the park during project construction. The loss of parking at the eastern parking lot would be temporary and, given the restriction of access to certain parts of the park during construction, the demand for recreational use and associated demand for parking, would be expected to decrease temporarily. Therefore, given their minimal and temporary nature, impacts to public parking capacity would be considered less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)? (Sources: 41)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. The proposed project does not involve traffic improvements, nor does it propose development that would permanently affect existing traffic infrastructure or require traffic improvements. Therefore, the proposed project would not be expected to conflict with adopted policies supporting alternative transportation.

VII. BIOLOGICAL RESOURCES Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? (Sources: 2, 3, 5, 8, 9, 10, 16, 22, 23, 31, 34, 35, 41, 42)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

Potentially Significant Unless Mitigation Incorporated. The willow riparian vegetation types on the project site provide habitat with the potential to support breeding of the southwestern willow flycatcher (SWF) (*Empidonax traillii eximius*) and least Bell’s vireo (LBV) (*Vireo belli pusillus*). Both of these avian species are listed as Endangered by the California Department of Fish and Game (CDFG) and the U. S. Fish and Wildlife Service (USFWS). The SWF and LBV were formerly more common and widespread, but are now rare and local summer residents of southern California’s lowland riparian woodlands (Grinnell and Miller 1944; Garrett and Dunn 1981). The substantial population declines of these two avian species over the latter half of the twentieth century is attributable to the loss and degradation of riparian habitats and, perhaps more importantly, brood parasitism by the brown-headed cowbird (*Molothrus ater*).

The willow flycatcher is generally an uncommon spring and fall migrant at Central Park with most individuals representing the northern subspecies (presumably *brewsteri*). Spring migrants occur in the park from about May 10 to June 20. One willow flycatcher observed on May 3, 1992, at Central Park represents one of the earliest dates for Orange County (Hamilton and Willick 1996). A total of 12 willow flycatchers observed on June 13, 1997, at the park was a “high, single location count” for Orange County (Willick 1997). Although Central Park provides potentially suitable habitat for SWF and is within the historical range for that subspecies, no breeding SWF have occurred to date.

The LBV was first recorded at Central Park as a fall migrant on September 7, 1985. This individual stayed through the winter and was last observed on March 22, 1986. With protection and management (i.e., cowbird control) of important riparian habitats in southern California, the population of LBV has increased and the species returned once again in the 1990s as a breeder to Orange County. The breeding population continues to increase; more occurrences at Central Park, including breeding, can be expected. Spring migrants at the park included individuals on April 14, 2001, and May 25, 2003. One singing individual was temporarily on territory at Sully Miller Lake on May 29–30, 2005. On May 14, 2006, a singing individual was present at Central Park in the riparian habitats north of Talbert Lake. This territorial bird eventually moved across Goldenwest Street and occupied the willow riparian scrub habitats in the Shipley Nature Center and stayed until at least August 18, 2006. This individual was a solitary male that never successfully paired with a female. Central Park provides suitable habitat for the LBV and, with continued regional population increases, it may yet breed successfully in the park.

Results of field surveys conducted along the impacted section of the EGGWC from the diversion location down to the tide gates have indicated no adverse effects on any endangered species that occur and potentially occur at the diversion structure project site and downstream (see Biological Report in Attachment 3). The EGGWC does provide foraging habitat for a variety of sensitive bird species especially in the vicinity of the Bolsa Chica Wetlands, but prey for these species are largely associated with saltwater tidal flow and will not be affected by a reduction or removal of dry weather channel flows downstream of the diversion project site. Project implementation is expected to reduce freshwater flows in the EGGWC during low-flow conditions, and this may affect water conditions immediately downstream of the diversion structure project site in that it may lead to increased salinity levels. Water diversion during low-flow conditions would not be expected to affect water levels or salinity downstream at the Bolsa Chica Wetlands. Accordingly, impacts from channel diversion construction and operation would be less than significant.

Focused protocol surveys for the SWF and LBV were performed at the project site in 2007 (see Attachment 4 for Results of Focused Survey report submitted to the USFWS). BonTerra Consulting Senior Biologist Brian Daniels (USFWS permit number TE-821401-2) conducted all surveys. No SWF or LBV were determined to be present at the time of the surveys in 2007. However, both of these avian species are migratory species and, as discussed above, have the potential to occur on the project in the future.

The proposed project provides for restoration or enhancement of high-quality riparian habitat equal to or greater than that existing on the site under existing conditions (PDF-4). All restoration and enhancement of riparian habitat would be implemented as part of Phase 1 construction, and would be maintained throughout the Talbert Lake Interim Condition through Phase 2 construction. PDF-5 provides for the development of a Restoration Plan ensuring long-term success of riparian habitats. Accordingly, long-term project impacts to the LBV and SWF would be less than significant.

Although existing riparian habitat on site is of high quality, it is intermixed with a variety of exotic plants. Some of these exotics (such as passion vine) are detrimental to habitat quality and, if uncontrolled, can affect habitat quality. Since LBV has occupied nearby habitats in the park (such as Shipley Nature Center and Sully Miller Lake) and since these habitats will remain available during and after construction of the project, temporary impacts associated with the project would be considered less than significant.

With the implementation of mitigation measure BIO-1 (which requires a permitted Biological Monitor on site for all construction occurring during nesting season) and BIO-2 (regarding construction and maintenance operations), project impacts would be considered less than significant.

BIO-1 A permitted Biological Monitor shall be on site for all construction activities occurring during the least Bell's vireo nesting season (March 15 to September 15). If the Biologist determines that the least Bell's vireo is present on or within 500 feet of the project site, construction operations shall cease. To resume construction operations, the appropriate permits must be obtained from the California Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife Service (USFWS).

BIO-2 Post-construction maintenance operations shall occur outside the least Bell's vireo breeding and nesting season (March 15 to September 15) and shall be confined to vector-control activities and manual removal of vegetal debris in open water areas.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service? (Sources: 2, 3, 8, 9, 10, 23, 31, 33, 34, 35)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Less Than Significant Impact. Vegetation types on the project site were identified and mapped by BonTerra Consulting's Senior Biologists Sandy Leatherman and Brian Daniels on January 16 and February 22, 2007. Five vegetation types were identified on and in the vicinity of the Central Park project site: willow riparian scrub, fresh water marsh, mule fat scrub, ornamental, and turf grass with scattered ornamental trees (Exhibit 7.2-10). There is some intermixing between vegetation types, particularly where ornamental tree species have spread into the willow riparian scrub vegetation type; vegetation types were identified and mapped based on the dominant tree canopy within any given area.

Three native tree species occur on the project site that are planted as ornamental trees; these include white alder (*Alnus rhombifolia*), sycamore (*Platanus* sp.), and cottonwood (*Populus* sp.). California

sycamore (*Platanus racemosa*) is native to the region, but the sycamore trees on the project site appear to be a hybrid between London plane tree (*Platanus acerifolia*) and the California sycamore or another sycamore species. The cottonwood trees may be the native Fremont cottonwood (*Populus fremontii*), but some appear to be a non-native cottonwood species (*Populus* sp.). These trees are not located within jurisdictional areas. Although most of these trees will be avoided during construction, the loss of some may be unavoidable. Since these trees are ornamental plantings and located outside jurisdictional areas, loss of these trees would be considered less than significant and would not require mitigation.

Implementation of the project would result in the temporal loss of 33.38 acres of native and non-native (i.e., ornamental vegetation and turf grass) within the project disturbance limits, as illustrated in Exhibit 12.7-1 and shown in Table 12.7-1 below.

**TABLE 12.7-1
IMPACT AND RESTORED HABITAT ACREAGE**

Vegetation Type	Impact Acreage	Post-Project Acreage
Developed Areas	0.69	0.76
Fresh Water Marsh	0.28	5.78
Mule Fat Scrub	0.01	0.00
Open Water	9.34	9.61
Ornamental	9.74	6.39
Turf Grass with Scattered Ornamental	5.41	2.88
Willow Riparian Scrub	7.90	7.96
Total	33.38	33.38

The impacts on 15.15 acres of ornamental vegetation types (9.74 acres of ornamental and 5.41 acres of turf grass and scattered ornamental) would be considered less than significant and would not require mitigation. If funding is available for implementation of proposed aesthetic features, enhancement of the drainage ditch at the northwestern corner of the park would impact up to 0.87 acre of turf grass (not included above in Table 12.7-1) vegetation. Construction of a recirculating stream in this area and the planting of native riparian vegetation would provide additional biological benefit to this portion of the park. Construction of a cascading water feature near the library may impact 0.07 acre of turf grass vegetation, and is not considered an impact on biological resources.

Implementation of the project would impact a total 17.53 acres of wetland vegetation types through project construction and habitat redesign. These wetland types include 9.34 acres of open water, 0.01 acre of mule fat scrub, 0.28 acre of fresh water marsh, and 7.90 acres of willow riparian scrub; impacts to these wetland vegetation types would be considered significant. Standard Condition (SC-6) indicates the City will obtain a Section 404 permit from the U.S. Army Corps of Engineers (USACE) for project implementation. Impacts on these vegetation types would be offset by the incorporation of PDF-4, which requires the restoration or enhancement of all wetland vegetation types to an acreage equal to or greater than existing conditions, as negotiated between the resource agencies and the City during the permitting process.

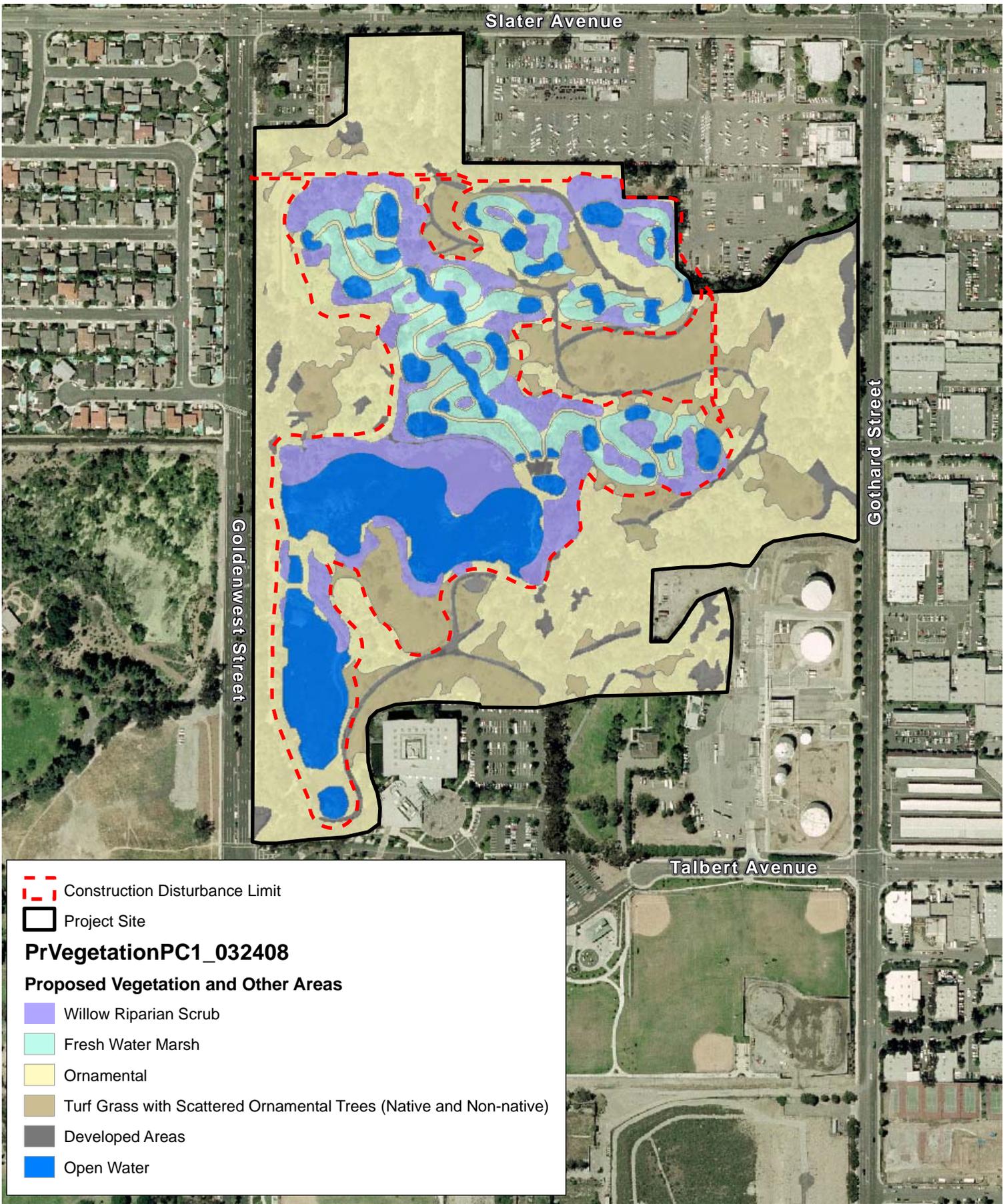
Exhibit 12.7-1 presents proposed project vegetation/habitats, which represents a net increase in all wetland types over existing conditions. The increase in quality of post-project habitats is considered an offset for temporary project impacts; accordingly, with the incorporation of SC-4 and PDF-4, impacts to riparian habitats and sensitive communities would be considered less than significant.

The proposed project includes a diversion structure to be located in the East Garden Grove – Wintersburg Channel that would divert seasonal low flows to Central Park. Three alternative diversion structures are available for the Talbert Lake Diversion Project, each of which was evaluated for biological constraints of both direct and potential indirect impacts downstream associated with the proposed project (see Biological Report in Attachment 3). In addition, a study area was designed for all three alternative diversion structure sites, and vegetation mapping was conducted by which vegetation impacts were determined. Table 12.7-2 shows the vegetation impacts for each concept.

**TABLE 12.7-2
IMPACTS TO VEGETATION TYPES BY
DIFFERENT CHANNEL DIVERSION STRUCTURES**

Vegetation	Impact Acreage
Full Rubber Dam (1)	
Ruderal	0.02
Developed	0.09
Open Water	0.05
Total	0.16
Partial Rubber Dam (2)	
Developed	0.78
Open Water	0.06
Total	0.84
Low-Flow Channel Modification (3)	
Developed	0.75
Open Water	0.05
Total	0.80

The ruderal vegetation type dominates the EGGWC study area for the three proposed diversion structures. Fresh water marsh vegetation type is also present, but very limited in its extent within the study area. As proposed, implementation of any one of the three alternative diversion structures would not be expected to impact native vegetation types. Therefore, impacts on vegetation types associated with any one of the three diversion structures would be considered as less than significant and would not require mitigation.



Construction Disturbance Limit

Project Site

PrVegetationPC1_032408

Proposed Vegetation and Other Areas

- Willow Riparian Scrub
- Fresh Water Marsh
- Ornamental
- Turf Grass with Scattered Ornamental Trees (Native and Non-native)
- Developed Areas
- Open Water

Proposed Project Vegetation Map

Talbert Lake Diversion Project

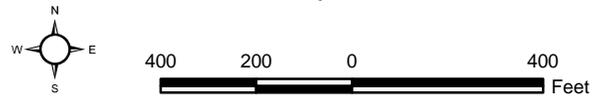


Exhibit 12.7-1



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? (Sources: 2, 3, 23, 31, 33, 34)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Less Than Significant Impact. Relative to federal regulatory authorities, a total of 9.21 acres of wetlands would be impacted by the proposed project. Three alternative channel diversion structures are proposed. No wetlands occur within these concepts. A total of 19.10 acres of USACE jurisdictional waters would be impacted by project implementation, including 0.02 acre of “Non-Wetlands” and 9.87 acres of “Open Water” (Table 12.7-3). Based on the most current concept layout, a total of 0.06, 0.18, or 0.11 acre of non-wetland “waters of the U.S.,” including open water, would be impacted by channel diversion structures 1, 2, and 3, respectively (Table 12.7-3).

**TABLE 12.7-3
JURISDICTIONAL WATERS IMPACTED BY PROJECT IMPLEMENTATION**

USACE Jurisdiction	Talbert Lake		EGGWC Full Rubber Dam (1)		EGGWC Partial Rubber Dam (2)		EGGWC Low-Flow Channel Modification (3)	
	Perm	Temp	Perm	Temp	Perm	Temp	Perm	Temp
Wetlands	8.52	0.69	0.00	0.00	0.00	0.00	0.00	0.00
Non-Wetlands Waters of the U.S.	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Open Water	9.82	0.05	0.00	0.05	0.05	0.13	0.02	0.09
Total Waters of the U.S.	18.36	0.74	0.00	0.06	0.05	0.13	0.02	0.09

Regulatory authorization will be required in the form of an Individual Permit (IP) from the USACE Regulatory Branch-Los Angeles District Office if any permanent and/or temporary construction related activity results in a discharge of material into USACE jurisdiction for impacts to “waters of the U.S.” that are greater than ½ acre or 300 linear feet (SC-6 above). Approximately 19.10 acres within the USACE’s jurisdiction would be impacted as a result of project implementation, as well as 0.06, 0.17, or 0.11 acre for the alternative channel diversion structures. Therefore, the proposed project would require authorization under an IP. However, as all impacts to federally protected wetlands are being offset by the incorporation of new habitat areas of equal or greater acreage (PDF-4) impacts to federally protected wetlands are considered less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(Sources: 2, 23, 31, 33, 34)

Discussion:

Potentially Significant Unless Mitigation Incorporated. The project site is surrounded by suburban habitats that are relatively unfavorable for most wildlife species. Harriett Wieder Regional Park provides some connectivity across Edwards Street at the southeastern corner of Central Park, and limited Central Park wildlife movement from Bolsa Chica Wetlands and Harriett Regional Park to Central Park can occur as the project site is located within Central Park east of Goldenwest Street; project implementation would not result in any impact to this wildlife movement through Harriett Wieder Regional Park. Implementation of the project would not impact general wildlife movement in this movement corridor to Central Park.

Although the project site provides valuable habitats for migratory birds, it represents a relatively small part of Central Park and migratory birds use all habitats in the park. As a result, project implementation would result in a temporal loss of habitats for migratory birds in Central Park that is not substantial enough to be considered as significant. Therefore, impacts on migratory birds resulting from project implementation would be less than significant and would not require mitigation.

Central Park does support nesting raptors including white-tailed kite (*Elanus leucurus*), red-shouldered hawk (*Buteo lineatus*), red-tailed hawk (*Buteo jamaicensis*), Cooper’s hawk (*Accipiter cooperii*), and great horned owl (*Bubo virginianus*). The white-tailed kite and Cooper’s hawk are California Species of Special Concern, but the other raptor species do not have a special status with the resource agencies. The white-tailed kite has nested in the Shipley Nature Center and has the potential to nest on the project site. In recent years, multiple pairs of Cooper’s hawk have nested in Central Park with more than one pair nesting in the vicinity of the project site in 2007. Sections 3503 and 3503.5 of the *California Fish and Game Code* provide protection for nesting migratory birds and raptors, respectively. Project construction has the potential to impact nesting migratory birds and raptors; however, suitable habitat for these species remains readily available and in close proximity in Shipley Nature Center and Harriett Wieder Regional Park. Furthermore, the habitats to be restored after project construction are expected to also provide suitable nesting habitats for migratory birds and raptors. Notwithstanding, impacts on nesting migratory birds should be minimized by the implementation of MM BIO-3, which requires a Biological Monitor to flag tree-harboring nesting birds prior to construction.

BIO-3 Nesting Migratory Birds

If construction commences during the migratory bird nesting season (March 1 to August 31), a qualified Biologist will survey the project impact area for the presence of any active bird nest (common or special status) within 72 hours prior to the onset of construction activities. Any nest found during the survey efforts will be mapped on the construction plans. If no active nests are found, no further mitigation is required. Results of the surveys will be provided to the CDFG and the City of Huntington Beach.

If any active migratory bird nest is present, the nest will be protected until nesting activity has ended to ensure compliance with Section 3503 of the *California Fish and Game Code*. To protect any active nest, the following restrictions on construction are required until the nests are no longer active, as determined by a qualified Biologist: (1) clearing limits will be established with a 300-foot buffer around any occupied nest, or as otherwise determined by a qualified Biologist. Any encroachment into the buffer area around the known nest will only be allowed if the qualified Biologist determines that the proposed construction activities would not disturb the nest occupants. Construction during the

nesting season can occur only at the sites if a qualified Biologist has determined that the construction activities are not a disruption to the breeding activities or if the fledglings have left the nest.

Nesting Raptors

If construction commences during the raptor nesting season (February 1 to June 30), a qualified Biologist shall survey within 500 feet of the project impact area for the presence of any active raptor nests (common or special status) at least seven days prior to the onset of construction activities. Any nest found during survey efforts shall be mapped on the construction plans. If no active nests are found, no further mitigation is required. Results of the surveys shall be provided to the CDFG and the City of Huntington Beach.

If nesting activity is present at any raptor nest site, the active site will be protected until nesting activity has ended to ensure compliance with Section 3503.5 of the California *Fish and Game Code*. To protect any nest site, the following restrictions on construction are required until nests are no longer active, as determined by a qualified Biologist: (1) clearing limits shall be established with a 500 foot buffer, or as otherwise determined by a qualified Biologist, around any occupied nest. Any encroachment into the buffer area around the known nest shall only be allowed if the qualified Biologist determines that the proposed construction activities would not disturb the nest occupants. Construction during the nesting season can occur only at the sites if a qualified Biologist has determined that the construction activities are not a disruption to the breeding activities or if the fledglings have left the nest.

If an inactive nest is observed within the area to be directly impacted during the non-nesting season, the nest site shall be monitored by a qualified Biologist, and when the raptor is away from the nest, the nest will be removed so raptors cannot return to it. The qualified Biologist will supervise the removal of the nest.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (Sources: 23, 31, 33, 34, 35)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. The *City of Huntington Beach General Plan* (1996) provides the following goal that relates to the biological resources at the project site:

Protect and preserve significant habitats of plant and wildlife species, including wetlands, for their intrinsic values.

Although implementation of the project would result in the temporal loss of 33.38 acres of native and non-native (i.e., ornamental vegetation and turf grass) habitats that support wildlife, especially avian species, the proposed project enhances habitat values through its design objective of water quality improvements. In addition, the incorporation of PDF-4 establishing riparian, freshwater marsh, and open water habitats in acreage equal to or greater than those impacted directly support the above-stated goal. Accordingly, there would be no impact regarding conflicting local policies or ordinances.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (Source: N/A)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. There are no Habitat Conservation Plans, Natural Community Conservation Plans, or other local, regional, or State habitat conservation plans that include the project site. Therefore, project implementation would not result in impacts to any such plan.

VIII. <u>MINERAL RESOURCES</u> Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

(Source: 34)

Discussion:

No Impact. According to the Environmental Resources Conservation Element of the *City of Huntington Beach General Plan*, the project site is not a source of mineral resources currently or historically produced in the City of Huntington Beach, which includes oil and gas, sand, and gravel (Huntington Beach 1996). Additionally, the proposed project would maintain the existing recreational use of the project site. Therefore, the proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. There would be no impact.

IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

Potentially
Significant
Impact

Potentially
Significant
Unless
Mitigation
Incorporated

Less Than
Significant
Impact

No Impact

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (Sources: 18, 38, 39, 41)

Discussion:

Less Than Significant Impact. Operation of the proposed project would not result in the routine transport, use, or disposal of any hazardous materials. However, ponded water behind the proposed diversion structures, dependent on the diversion concept selected, could result in unwanted algal growth and the potential for foul odors to emanate from the EGGWC, requiring chemical treatment. According to the Orange County Resources and Development Management Department (RDMD), odors are primarily an issue at tidal diversion structures, where low flows can leave behind tidal muds and result in strong odors. Adverse odors from diversion structures in areas outside tidal influence, such as those proposed at the EGGWC, are rarely an issue that requires treatment by the RDMD. When determined necessary, generally as a result of an odor complaint, the RDMD either flushes the ponded water out from behind the diversion structure or applies the chemical odor neutralizer Epoleon[®],⁹ approved for use in Orange County's flood-control facilities by the Regional Water Quality Control Board (McPeck 2008).

Epoleon[®] products neutralize odors through chemical reactions that break down the odor-causing gases into a non-toxic, biodegradable, water-soluble compound. There are a variety of Epoleon[®] formulations for both industrial and home use that are aimed at specific odors and/or gases (i.e., skunks, hydrogen sulfide, ammonia). Epoleon[®] is designed to be used anywhere from full strength or diluted up to 200 times, depending on the type and intensity of odor and method of application (Epoleon Corporation 2008). As noted above, Orange County is currently permitted to apply Epoleon[®] to control odors in the County's flood-control facilities, including the Talbert Channel and the Huntington Beach Channel. Based on previous experience, the RDMD would anticipate, at most, occasional odor treatment at the proposed EGGWC diversion structures (McPeck 2008). However, the application of Epoleon[®] would not represent a significant impact related to hazardous materials, because the substance is a non-hazardous material and is permitted for use by the RDMD and the SARWQCB.

Additionally, aluminum treatment would be used in the final wetland pond adjacent to Talbert Lake when phosphorus concentrations and/or turbidity is high. If necessary, the target concentration to be used on the project site would be 1 to 3 milligrams per liter (mg/L), which would require an application of 8 to 25 pounds (lbs) per day per 1 million gallons of water. This quantity of aluminum is not toxic to aquatic species and would not represent a hazardous condition at the project site or to water bodies downstream. (Komor 2007)

With Phase 2 implementation, Talbert Lake would have a constructed lake edge designed to prevent shoreline erosion, enhance project safety, and minimize impact from breeding mosquito populations. However, Talbert Lake would be stocked with *Gambusia affinis*, or mosquitofish, for added vector-control efficiencies (PDF-2). Mosquitofish are hardy in a range of conditions and feed readily on the larval and pupal stages of the mosquito. Additionally, wetland treatment areas have been designed to support ease of access for vector-control activities as required. At this time, chemical vector-control activities are not anticipated to be necessary.

Therefore, the proposed project is expected to have a less than significant impact related to the routine transport, use, and disposal of hazardous materials and no mitigation is required.

⁹ Information on Epoleon products can be found at the Epoleon Corporation website: www.epoleon.com.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? (Sources: 12, 13, 34, 35, 37, 41)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

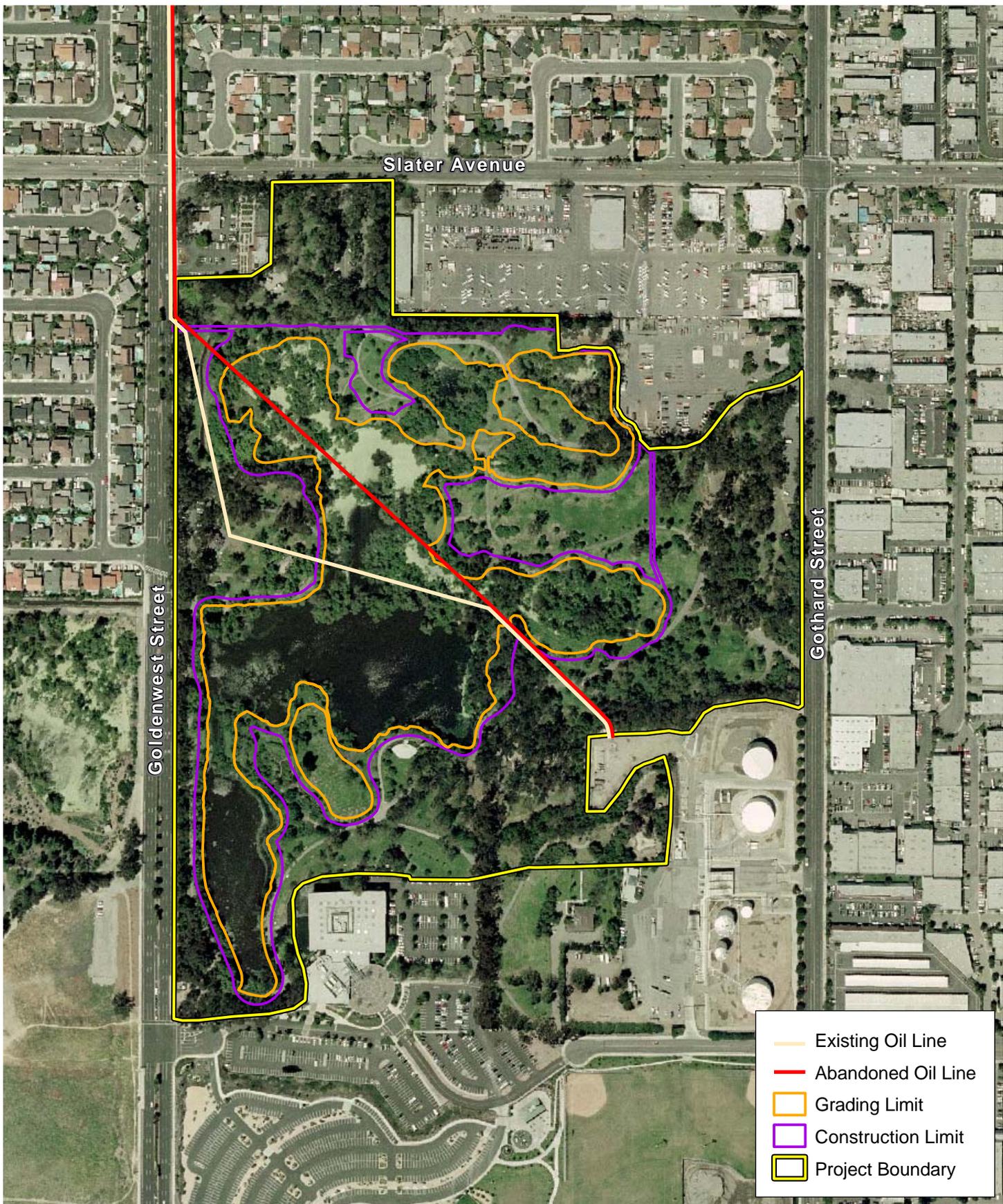
Potentially Significant Unless Mitigation Incorporated. The *City of Huntington Beach General Plan's* Hazardous Materials Element has identified 20 hazardous materials operations within city limits, and 2 are located near the project site. The first is Chevron's Huntington Beach Terminal at 17881 Gothard Street, which is located immediately adjacent to the southeastern corner of Central Park. Additionally, the Chevron facility has two abandoned-in-place oil pipelines and active pipelines that run in a northwesterly direction from Chevron across Central Park through the project area (Exhibit 12.9-1). The active pipelines cross between Talbert Lake and the existing wetlands along the location of the proposed berm between the wetlands and lake. Although the alignments of the active and abandoned pipelines differ somewhat, they begin and end at the same locations. Based on correspondence with and data provided by Chevron, the abandoned lines appear to be eight inches in diameter; however, the method of abandonment is unknown. Additionally, Chevron does not have data on the current depth of either the abandoned or active pipelines (PACE 2007).

The proposed grading of the wetland treatment cells and Talbert Lake is designed to avoid the pipelines as much as possible. As the depths of these pipelines are unknown, project design has placed the shallow areas of the proposed wetlands over the pipelines to avoid impacts. In many portions of the project's wetland areas, the existing wetlands are deeper than the proposed wetlands, resulting in the addition of soil cover over the existing pipelines. It is not anticipated that any pipelines would have to be removed or relocated during construction.

To ensure that construction of the proposed project does not damage or otherwise interfere with these pipelines, all pipelines shall be potholed prior to any construction activities to determine the exact horizontal and vertical locations in accordance with Chevron policy and to implement all necessary measures to avoid impacting the pipelines, as described in MM HM-1. With implementation of this mitigation measure, there would be less than significant impacts on the operations of these pipelines within the project site.

The second hazardous materials operations site is the former Huntington Beach Police Officer's Association (POA) Range (Huntington Beach 1996). This site is located to the south of the project site within what is now the Central Park Sports Complex (Huntington Beach 1999). This facility operated from 1971 to 1998 as the gun range for the Huntington Beach POA, and was also used by federal agents, police officers from neighboring cities, private security companies, public agencies, and individuals. Due to its location and distance from the project site, this site is not anticipated to have any effect on the proposed project.

According to the California Department of Toxic Substances Control's (DTSC's) EnviroStor database (also called the Hazardous Waste and Substances List), there are several listed sites within one-quarter mile of the project site. All but one of these sites are Leaking Underground Fuel Tank (LUFT) sites. A LUFT site is one that is undergoing cleanup due to an unauthorized release from an Underground Storage Tank (UST) system. There are a total of 12 LUFT sites within approximately one-quarter mile of the project site: 4 are near the EGGWC project area and are clustered at the intersection of Goldenwest Street and Warner Avenue and 8 are located near Central Park, largely to the north and east consistent with the commercial and industrial land uses present in these areas.

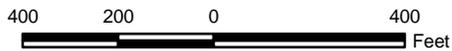


-  Existing Oil Line
-  Abandoned Oil Line
-  Grading Limit
-  Construction Limit
-  Project Boundary

Existing Oil Lines, Central Park

Exhibit 12.9-1

Talbert Lake Diversion Project



Also listed on the EnviroStor database near the project site is one “military evaluation” site, Ryan Aeronautical Corporation near the intersection of Gothard Street and Talbert Avenue to the southeast of the project site. The database has limited information on the nature of this listing other than it is or was part of the DTSC’s Site Mitigation and Brownfield Reuse Program and, as of July 2005, it was inactive and required evaluation (2007). This listed site would not adversely affect construction or operation of the proposed project.

Finally, there are existing storm drains that outlet into Central Park, directing storm water runoff from the surrounding areas onto the site to percolate back into the subsurface. Therefore, soils on the project site may be impacted by contaminants that can be entrained in runoff (such as petroleum hydrocarbons, fertilizers, metals, etc.), as well as from the on-site pipelines if there have been historic leaks, and the proximity of LUFT sites, particularly near the diversion site at the EGGWC (approximately one-eighth mile south), and other hazardous materials sites in the immediate area.

Therefore, mitigation measure HM-2 requires the preparation of a Phase I Environmental Site Assessment (ESA) for the project site prior to final project specifications. A Phase I ESA involves a search of current and historical records of land uses on a site as well as site reconnaissance to determine the potential presence of contaminants. Additionally, mitigation measure HM-3 requires that the soils displaced during potholing operations for the existing pipelines and soils excavated on the remainder of the project site be tested for potential contaminants, either as part of or prior to, completion of the ESA. If contamination is encountered, one of the most common and efficient forms of remediation involves the removal and transport of the contaminated material to a permitted disposal and/or recycling facility. If this is the remediation method selected (via consultation with the City and regulatory oversight agencies), construction of the proposed project would have the potential to result in the transport of hazardous materials. These materials would be handled and transported by a licensed hazardous waste hauler in accordance with applicable federal and State regulations, as per mitigation measure HM-4. However, other remediation methods may be selected, dependent on site-specific conditions that cannot be predetermined. Regardless, with appropriate site investigation, regulatory agency consultation, and compliance with applicable hazardous material transport regulations (as described in mitigation measures HM-1 through HM-4), the potential risk related to release of hazardous materials into the environment during construction activities, transportation and handling would be reduced to the maximum extent practicable and would not be considered a reasonably foreseeable condition. Therefore, potential impacts during construction would be less than significant.

Under the Goldenwest Diversion Concepts 1–3, the existing water line within Goldenwest Street would be used to deliver channel diversion water to Central Park and would also be used to deliver irrigation water to the Senior Center, Sports Complex, and Murdy Park when Talbert Lake volumes alone are not sufficient to fulfill all irrigation requirements. Connection and subsequent use of potable water within Well 8 (located within Murdy Park) for irrigation is part of a separate Capital Improvement Project approved in the City of Huntington Beach. Only trace amounts of diverted channel water would remain in the Goldenwest water line prior to transitioning the line to Well 8 irrigation use. In addition, water quality constituent concentrations in the diversion flows are already within the recommended limits for irrigation use; consequently, dual use of this water line would not result in a significant adverse environmental effect regarding irrigated water quality. Notwithstanding, Well 8 groundwater would be used to flush out any residual channel diversion water in the water line into Central Park prior to the transition to irrigation water (Holloway 2008a).

Project design features have been added to the project to further safeguard the quality of Well 8 groundwater in the event of a back-up through the line from the channel diversion (PDF-1). The Goldenwest water line will be designed with an “air gap” connection, commonly used where a potable water source is used to supplement a reclaimed water system. The purpose of an air gap connection is to protect one source of water from being contaminated by the other by eliminating the possibility of the channel water flowing back into the well and contaminating the groundwater source (Well 8) (Holloway 2008a). Engineering details for integrating both projects and the shared use of this line would include these safeguards and be fully developed during project final design. Therefore, operation of the proposed project through the use of the existing water line within Goldenwest Street would result in less than significant impacts related to the potential release of hazardous materials into the environment through joint use of the existing Goldenwest water line.

- HM-1** The existing and abandoned oil pipelines shall be potholed prior to initiation of construction activities to determine the exact locations of the pipelines and to allow for implementation of any additional measures necessary to avoid impact.
- HM-2** Prior to the preparation of final plans and specifications, the Project Applicant shall have prepared a Phase I Environmental Site Assessment (ESA) for the entirety of the project to determine the potential to encounter hazardous materials during project implementation. This documentation shall be prepared by a Registered Environmental Assessor (REA) or other qualified personnel, as determined by the State of California.
- HM-3** The Project Applicant shall have the soils displaced during all potholing operations and all excavation activities on the remainder of the project site tested for the presence of petroleum hydrocarbons and other potential hazardous materials. The soil testing shall be overseen by an REA or other qualified personnel, as determined by the State of California. The results of the tests on the soils collected during potholing operations shall be finalized before initiating further construction activities. If soil testing during site excavations positively identifies the presence of hazardous materials, the City of Huntington Beach shall coordinate with the appropriate regulatory agency(s) to determine the oversight and remediation method to be implemented.
- HM-4** If any hydrocarbon-contaminated soils or other hazardous materials on proposed project construction sites are to be transported off site, the transport shall be conducted by a properly licensed Hazardous Waste Hauler, who will be in compliance with all applicable State and federal requirements, including the federal Department of Transportation regulations under Title 49 of the *Code of Federal Regulations* (CFR); the California Department of Transportation (Caltrans); the federal Occupational Safety and Health Administration (OSHA) standards; and under 40 CFR 263 (Subtitle C of Resource Conservation and Recovery Act).

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous material, substances, or waste within one-quarter mile of an existing or proposed school? (Sources: 18, 54)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Less Than Significant Impact. There are two schools located within approximately one-quarter mile of both portions of the project site:

- Ocean View High School, 17071 Gothard Street; approximately halfway between Central Park and the EGGWC.
- Mesa View Middle School, 17601 Avilla Lane; approximately one-quarter mile due west of Central Park.

Exposure to hazardous materials at schools would have the potential to occur through the accidental dispersal of contaminated soil or materials (if found on site) during the transportation of the materials from the site to the FRB Landfill, located at 11002 Bee Canyon Access Road in Irvine. The planned truck route to the landfill is to follow Interstate 405 (I-405) south to the Jeffrey Road exit, to Portola Parkway, to Bee Canyon Access Road. The most direct route from the staging area to I-405 is to follow Gothard Street south to Talbert Avenue, and travel east on Talbert to I-405 (see Exhibit 12.6-1).

Ocean View High School is located near the southeastern corner of Goldenwest Street and Warner Avenue and, as such, is located less than one-quarter mile from a likely travel route for transport of contaminated materials, if necessary. Mesa View Middle School is separated from Central Park by one-quarter mile of residential development and is not along an arterial roadway; therefore, the potential

travel route for contaminated materials transport would not be expected to pass near this school. In addition to the two schools identified in the project site vicinity, as expected in a dense urban environment, there would be other schools located within one-quarter mile of the planned transport route or alternate routes, if determined necessary. However, potential impacts from these activities would be temporary, short-term, and subject to applicable federal and State regulations regarding the handling and transport of hazardous materials, as ensured via mitigation measure HM-4. Through compliance with applicable hazardous material transport regulations (as described in mitigation measure HM-4), the potential risk related to release of hazardous materials into the environment during transportation and handling would be reduced to the maximum extent practicable and would not be considered a reasonably foreseeable condition. Therefore, potential impacts would be less than significant.

As described in IX(a) above, operation of the proposed project may involve the occasional application of Epoleon® to control odor in the portion of the EGGWC with diverted water, which is a non-hazardous material. Additionally, aluminum treatment may be necessary for the wetland treatment train when phosphorus and/or turbidity is high. The projected quantity of aluminum to be applied, if necessary, is not toxic to aquatic species and would not represent a hazardous condition on the project site. Further, the application of these chemicals would involve localized, discrete, application. Therefore, the periodic use of these substances would not involve an unusually hazardous material, nor would it involve a large quantity of a material with the potential to create an environmental hazard in the immediate area if it was accidentally released outside the project site. Operation of the proposed project would result in a less than significant impact related to exposure of schools to hazardous materials.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? (Sources: 12, 13)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. The DTSC maintains a list of hazardous materials sites pursuant to *Government Code* Section 65962.5, also called the Cortese List. The Cortese List identifies: public drinking water wells with detectable levels of contamination; hazardous substance sites selected for remedial action; sites with known toxic material identified through the abandoned site assessment program; sites with underground storage tanks (USTs) having a reportable release; and all solid waste disposal facilities from which there is known migration. The project site was not identified on the Cortese List (CalEPA 2007). Therefore, there would be no impact.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

(Source: 54)

Discussion:

No Impact. The project site is not located within an airport land use plan or within two miles of a public airport or public use airport, and would pose no threat to aircraft. The nearest public airport or airstrip is John Wayne International, located approximately eight miles south-southwest of the project site. Therefore, there would be no impact.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (Source: 41)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Less Than Significant Impact. A portion of the proposed diversion connector pipeline would cross Goldenwest Street, an arterial roadway, adjacent to the southern side of the EGGWC; therefore, construction of this pipeline segment could temporarily impact traffic conditions on Goldenwest Street. However, construction impacts involve only a single lane closure for short-term period of time (please see VI[e] above). Therefore, impacts from construction would be less than significant.

These temporary impacts also will occur at Gothard Avenue for the diversion concepts utilizing a tie-in to the existing storm drain system (concepts 4–6). There is a fire station located on Gothard Avenue south of the staging area that could be affected by the Gothard Avenue traffic control plan. These impacts are anticipated to be temporary and less than significant; however, although not required to reduce impacts to a level less than significant, MM TRAF-1 further reduces any impact by requiring consultation with emergency service providers and the development of an Emergency Access Plan prior to the initiation of construction.

Operation of the proposed project would not impair implementation or physically interfere with any emergency response plan for the surrounding community. Project components located outside the Talbert Lake restoration area (i.e., pipelines, pump station) would be located underground or along the City’s private access road and within the channel and would not, therefore, interfere with traffic circulation in the event of an emergency.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? (Sources: N/A)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. The project site is located within a fully urbanized environment and is not proximate to wildlands; therefore, the project site would have little to no risk from wildfires. Additionally, the proposed project would not include habitable structures or otherwise provide land uses that would introduce population onto the site that would be exposed to wildfire risks. There would be no impact.

X. <u>NOISE</u> Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? (Source: 35)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Less than significant impact. The proposed project would result in a temporary increase in noise levels associated with construction activities. To clear vegetation from the park, equipment such as chainsaws, brush chippers, dump trucks, and front-end loaders would be utilized. Demolition and construction activities in the EGGWC and Goldenwest Street or Gothard Street would require use of equipment such as breakers, excavators, drill rigs, cranes, mixers, and concrete pumps. Grading and excavation of the pond and wetlands would require the use of much of the same equipment as well as bulldozers and graders. During demolition and construction activities, noise generated by construction equipment could reach levels ranging from 70 to 95 decibels (dB) at 50 feet from the source, and ambient noise levels on the project site and in the project vicinity could potentially exceed City noise standards. However, project construction would not occur within 50 feet of sensitive receptors and would be required to comply with the City Noise Ordinance (Chapter 8.40.090[d], Noise Control), which restricts construction activities to weekdays and Saturdays between the hours of 7:00 AM and 8:00 PM, and prohibits construction at any other time and/or during Sundays and federal holidays. Projects that comply with these limitations on construction hours are exempted from City noise standards. Although not required to reduce impacts to less than significant, implementation of mitigation measures NOI-1 and NOI-2 would ensure that the noise ordinance is not violated and construction noise is minimized. Additionally, mitigation measure NOI-1 would prohibit construction noise on Saturdays when it is otherwise permitted by the City Noise Ordinance in an effort to minimize noise impacts on surrounding residences.

NOI-1 During construction, the project applicant shall ensure that all noise-generating activities be limited to the hours of 7:00 AM to 8:00 PM on weekdays. No noise-generating activities shall occur on Saturdays, Sundays, or holidays. Noise-generating activities are also prohibited within 100 feet of the Park Bench Café between the hours of 11:00 AM and 1:00 PM.

NOI-2 Prior to the issuance of any grading permits, the Construction Contractor shall produce evidence acceptable to the City of Huntington Beach, Manager, Building Permits Services, that:

- (1) All construction vehicles or equipment (fixed or mobile) operated within 1,000' of a residential dwelling shall be equipped with properly operating and maintained mufflers.
- (2) Stockpiling and/or vehicle staging areas shall be located as far as practicable from residential dwellings.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? (Sources: 24, 41)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Less than significant impact. As discussed above, the proposed project would result in a temporary increase in noise levels associated with construction activities. Along with increased noise-generating construction activities, some groundborne vibration may occur, particularly during concrete demolition and drilling activities.

Groundborne vibration is measured in terms of the velocity of the vibration oscillations. As with noise, a logarithmic decibel scale (VdB) is used to quantify vibration intensity. When groundborne vibration exceeds 72 to 80 VdB, it is usually perceived as annoying to building occupants. The degree of annoyance is dependent upon individual sensitivity to vibration, and the frequency of the vibration events. Typically, vibration levels must exceed 100 VdB before building damage occurs.

The primary vibratory source during project construction would be jackhammers. Typical jackhammers generate an approximate vibration level of 79 VdB at a distance of 25 feet. Therefore, it is possible but unlikely that vibration would be perceived by residents if jackhammering occurs within 50 feet. However, most jackhammer use would occur more than 50 feet away from residences; would be of short duration; and would be conducted within the constraints of the City of Huntington Beach Noise Ordinance. Therefore, potential impacts associated with groundborne vibration would be considered less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? (Source: 41)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. Project-related construction activity would result in a temporary increase in ambient noise levels in the project vicinity that would cease once construction is completed. Once construction is complete, activities on the site would be the same as they are in the park and EGGWC current condition. No long-term or permanent noise impacts are, therefore, anticipated.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? (Source: 41)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Less Than Significant Impact. As discussed above, ambient noise levels in the vicinity of the project have the potential to exceed City noise standards during construction; although ambient noise levels in the project vicinity would increase during project construction, the proposed construction activities and associated equipment would not generate noise levels that would be considered substantial in relation to existing noise levels in the project vicinity. The annoyance of construction noise can be limited with the implementation of standard noise-control measures, such as those proposed in mitigation measures NOI-1 and NOI-2. No significant impacts are anticipated.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? (Sources: 19, 35, 41)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No impact. The proposed project site is not located within an airport land use plan or within two miles of a public airport or public use airport. The nearest public airport is John Wayne International (JWI) in Newport Beach, located approximately eight miles to the southeast of the project site. the nearest private air strip is the Joint Forces Training Center in Los Alamitos approximately 6.5 miles north of the project site. Furthermore, the proposed project would not expose people to noise associated with airport uses. No impacts are anticipated.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? (Sources: 19, 35)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No impact. As discussed above, the project site is not located within the vicinity of a private airstrip. No impacts are anticipated.

XI. PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Fire protection? (Sources: 33, 34, 35)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Police Protection? (Sources: 33, 34, 35, 36)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools? (Sources: 33, 34, 35)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. The proposed project does not require the provision of new governmental facilities or entail physical alteration of existing governmental facilities that would affect fire protection, police protection, or schools. Accordingly, there would be no impact to these services.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Parks? (Sources: 33, 34, 35)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Less Than Significant Impact. The proposed project site is located within the largest public park in the City of Huntington Beach; however, there are no project features that incorporate the establishment of new park facilities, or proposed physical alteration of existing park facilities. The new topographic hill represents a physical alteration of the park environment; however, it does not create a new park facility or alter existing land use in a manner that negatively impacts park uses. Land uses within the project footprint are not being substantially altered, and no ancillary park facilities are needed to support the proposed project. Although there could be a temporary minor impact on park usage during construction, this impact is short term in duration, and the overall long-term project effect on park usage is expected to be positive. Accordingly, impacts to parks would be considered less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Other public facilities or governmental services? (Sources: 33, 34, 35)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. The proposed project does not create new facilities that would affect existing governmental services or other public facilities. No impacts are anticipated from the proposed project.

XII. UTILITIES AND SERVICE SYSTEMS		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? (Sources: 34, 35)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. The proposed project does not result in the creation of new wastewater treatment facilities or an increased demand on existing wastewater treatment facilities as no structural development is proposed. No impact would occur.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? (Sources: 36, 37, 56)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Less than Significant Impact. The proposed project does provide modification to the overflow weir from Talbert Lake into Talbert Channel; however, this modification is a design feature of the natural treatment system as proposed, and does not constitute a facility expansion. The existing overflow weir is trapezoidal in shape with the bottom width of 13', a height of approximately 1.7', and side slopes of about 1.75:1 (horizontal:vertical). The existing weir would be modified, in the interim condition, to include a 2' wide by 2' deep notch in the center of the weir. This modification would maintain the flood-control and storage characteristics provided by the existing lake and weir. As such, the modified weir would ensure the lake's water elevation and the discharge to Talbert Channel during any storm event in the Interim and Ultimate conditions would be equal to or less than that of the existing condition. The modified weir would be a static feature that would only operate during significant storm events in which the lake levels rise above the weir elevation. Although the existing storm drain adjacent to the Slater Avenue parking lot would convey diverted flows to the park under Diversion Concepts 4–6, these flows are not expected to have a significant impact on the existing storm drain system (see discussion under checklist Section IV[d]). Existing storm drain features are not being altered or affected by the project. The proposed project will also include a pump station to ensure adequate lake water circulation; however this pump station footprint will be minimal and located adjacent to Talbert Lake itself. Impacts would, therefore, be less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? (Sources: 35, 36)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. The proposed project utilizes non-potable water from the EGGWC and local storm drain runoff. There would be no impact to existing entitlements.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? (Sources: 3, 17)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. As discussed in Sections XII(a) and XII(b), the proposed project would have no effect on wastewater treatment facilities or capacities as no structures are proposed.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste? (Sources: 3, 35, 36)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

Less Than Significant. Although a portion of the material excavated from the project site will be transported to the FRB Landfill, it is not anticipated that these volumes will significantly affect total landfill capacity or operations. The project will not generate solid waste upon project operation. Therefore, impacts relative to solid waste are less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
h) Include a new or retrofitted storm water treatment control Best Management Practice (BMP), (e.g. water quality treatment basin, constructed treatment wetlands?) (Sources: 3, 35, 36)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Less Than Significant Impact. The proposed project would enhance the City of Huntington Beach's ability to support total maximum daily load (TMDL) priorities within the EGGWC watershed. Accordingly, project design is aimed at water quality improvements over existing conditions. Flows off the project site are expected to represent an improved condition.

Final project design will address water quality standards and waste discharge requirements through compliance actions associated with the National Pollution Discharge Elimination System (NPDES). These compliance actions include preparation of a Storm Water Pollution Prevention Plan (SWPPP) and a Water Quality Management Plan (WQMP), which will be submitted for approval to the City of Huntington Beach, Department of Public Works (see SC-2). The SWPPP and WQMP will establish BMPs for construction and post-construction activities that would ensure compliance with water quality standards and waste discharge requirements. Development of a constructed wetland within Central Park has been formulated as a BMP within the CURMP with the objective of improving overall water quality within the watershed, and within the impaired hydrological systems of Huntington Harbour and Anaheim Bay. In addition, Talbert Lake would be used as a project BMP by collecting and storing any runoff so sediment and other pollutants can settle out of suspension as the water either percolates or evaporates. With these BMPs in place, project impacts are expected to be less than significant.

XIII. AESTHETICS	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Have a substantial adverse effect on a scenic vista? (Sources: 11, 34)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? (Sources: 11, 34)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. Based on review of the City’s General Plan and Caltrans’ website (Caltrans 2007), there are no designated scenic vistas or local or State scenic highways within the project site’s vicinity. Central Park is designated as a “landmark” in the city, which is defined as “a significant reference point, either a structure, space, landscape, or freestanding element, which helps to identify a particular area in the City.” Central Park is also defined as a “visual asset” by “providing landscaping, recreational opportunities, and natural open space areas” (General Plan Urban Design Element pg. II-UD-10). As previously discussed, the majority of the proposed construction would occur within the boundaries of Central Park, particularly in and around Talbert Lake. The visual change associated with the Talbert Lake portion of the project would be an aesthetic improvement and is discussed further in Checklist Response XIII(c) below. The proposed changes to the EGGWC, also discussed below in Checklist Response XIII(c), would occur in a portion of the channel near Goldenwest Street and is not a scenic vista or resource. As such, the proposed project would not have a permanent adverse effect on a scenic vista and would not damage scenic resources.

	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Less Than Significant Impact. To assess the existing visual character and to determine the potential aesthetic impact that may result from implementation of the proposed project, site reconnaissance was conducted. Views of the project site (Exhibit 12.13-1) are described below:

- **Views 1 and 2 (Exhibit 12.13-2): Views from Goldenwest Street at the southern side of the EGGWC looking east and west.** This view represents the views of the EGGWC from the surrounding area near Goldenwest Street. The view is of a rectangular concrete channel with storm water/runoff and vegetation in the channel. The channel is surrounded on either side by security fencing. In View 1, looking east toward the diversion site of the partial dam or low-flow channel modifications, the background view includes mature vegetation and residential structures as well as aboveground electrical lines. Murdy Park is on the northern side of the channel, but is screened from view by mature landscaping. In View 2, the background view is similar: the existing asphalt/concrete maintenance road (paralleling the channel on both sides) is also visible in View 2. This road is closed to the public and only used for operational maintenance activities for the channel.

The proposed changes to the channel as a result of the project would include a diversion structure

(e.g., an inflatable dam or equivalent). The location of the full rubber dam diversion is just west of Goldenwest Street and south of single-family residential units. The partial rubber dam and low-flow channel modifications would be located south of Murdy Park. In addition, for all diversion methods, the channel would be located at a lower elevation than surrounding land uses and would not be the primary visual feature in the area. With any of the diversion structures, ponding of water would occur upstream behind the structures to act as a desilting area for the removal of coarse sediment and debris prior to diverting the flow to Central Park. The visual effect of ponding would not be significantly different than what currently exists in the channel. There are no recreational trails along the channel that would have views of the channel.

Short-term impacts would occur during the construction period at the diversion site, estimated at up to 25 weeks. During this time, views of the channel would consist of an altered channel structure and construction equipment/workers. Since construction would be temporary, views of construction equipment/activities is considered less than significant.

The permanent visual change associated with the rubber structures or channel modifications would not degrade the existing visual character or quality of the site, which is currently developed as a concrete structure with minimal vegetation.

- **View 3 (Exhibit 12.13-3): View from Gothard Avenue from the southern side of the East Garden Grove – Wintersburg Channel looking west.** This view represents views of the EGGWC diversion site (partial dam and low-flow channel modifications) from the intersection of Gothard Avenue and the channel. The view is similar to Views 1 and 2 and consists of a rectangular concrete channel with low volumes of storm water/runoff. The channel is surrounded on either side by security fencing. Background views include residential structures and mature trees. The existing asphalt/concrete road (visible adjacent to the channel) is closed to the public and used for channel operations and maintenance.

The proposed project changes to the channel include modification incorporating an inflatable dam or equivalent diversion structure. Concepts 4 through 6 would divert channel water to Central Park via a newly constructed pipeline to Gothard Avenue, and into an existing storm drain that enters the park at the northern end of the project area in a swale adjacent to the parking lot.

Short-term construction impacts would be the same as with Concepts 1 through 3. Construction would create temporary impacts that are considered less than significant.

The permanent visual change associated with the channel modifications would not degrade the existing visual character or quality of the site.

- **View 4 (Exhibit 12.13-3): View from north of Talbert Lake (during dry conditions) looking south at the proposed Talbert Lake restoration area.** View 4 shows existing Talbert Lake, which is a lake in name only as standing water is limited to small areas of the lake and most of the lake bed remains dry much of the time. The lowest elevation of the lake bed has held water for several years, but was periodically dry as recently as 2003. Higher portions of the lake bed hold water only occasionally following large rains, and have been managed as lawns for years. With the proposed Talbert Lake restoration, a complete reconstruction of the existing lake would occur to create a deeper, permanent lake with features to continually treat the lake water to improve water quality. The lake would be completely reconstructed through deepening, shoreline reconstruction, and construction of lake water quality treatment systems. The lake would have a constructed lake edge designed to prevent shoreline erosion, enhance safety for visitors, and provide an attractive appearance. Various shoreline designs would be used but all would be similar and would serve to enhance the aesthetics of the lake. Each design would incorporate durable material such as concrete veneer or grouted rock beneath the finished surface. The finished surface of the constructed lake edge may include an eroded concrete finish, a wetland planter shelf shoreline, grass shoreline, rock, or naturalized shoreline. The view of Talbert Lake would only be visible by park users. Overall, the proposed modifications are considered aesthetically enhancing since they would provide a permanent open water feature.

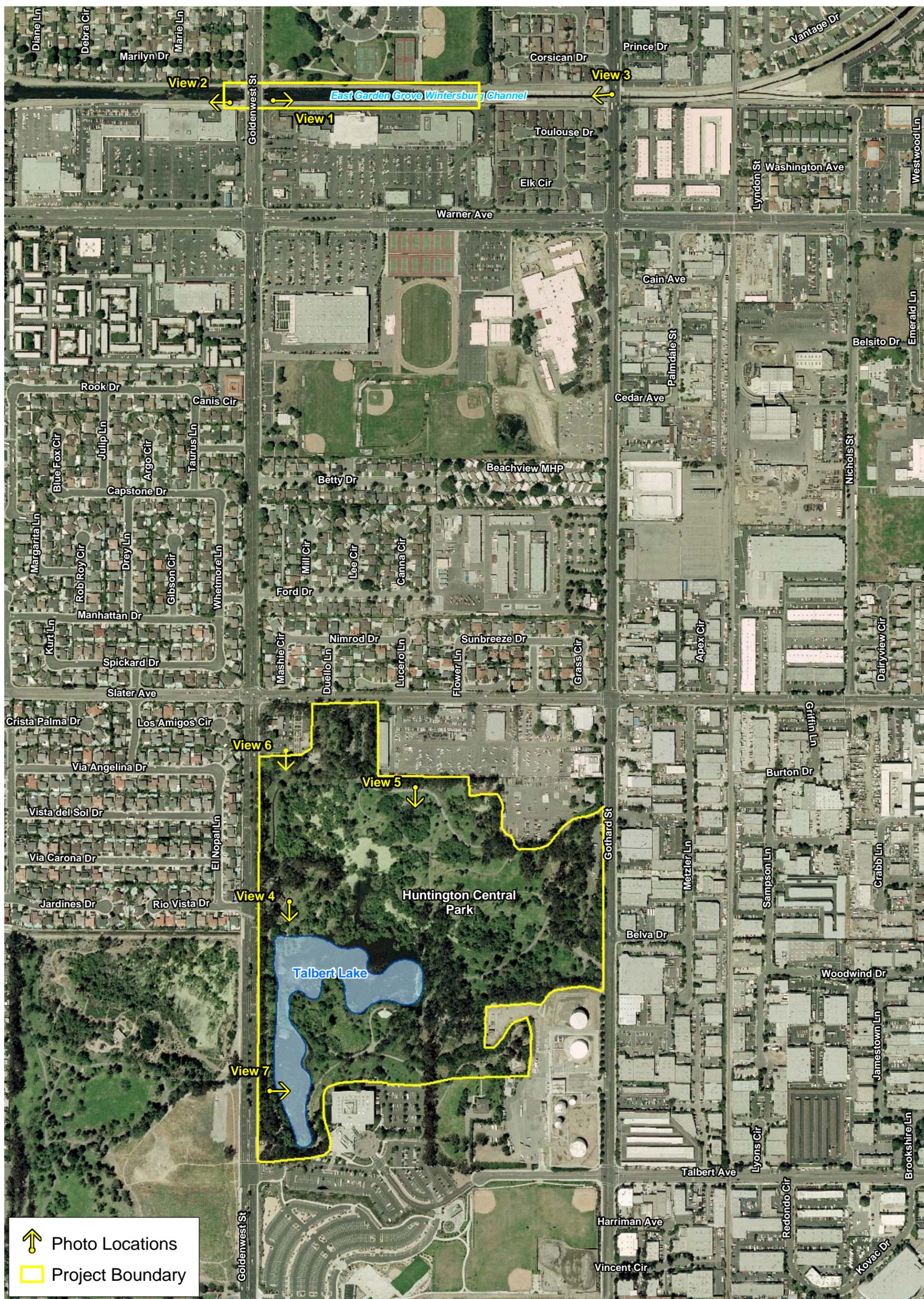
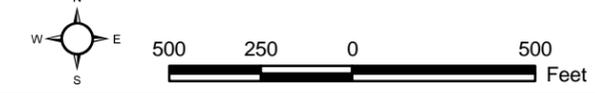


 Photo Locations
 Project Boundary

View Locations
Talbert Lake Diversion Project



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View 1: View from Goldenwest Street from south side of the East Garden Grove-Wintersburg Channel looking east.



View 2: View from Goldenwest Street from south side of the East Garden Grove-Wintersburg Channel looking west.

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Site Photographs, EGGWC Diversion Location

Exhibit 12.13-2

Talbert Lake Diversion Project

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View 3: View from Gothard Street from south side of the East Garden Grove-Wintersburg Channel looking west toward site of partial dam/low flow channel modification.



View 4: View from north of Talbert Lake (during dry conditions) looking south at the proposed Talbert Lake restoration area.

Site Photographs, Central Park

Exhibit 12.13-3

Talbert Lake Diversion Project

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Short-term impacts would occur during the construction period for both the Interim and Ultimate conditions for clearing, grubbing, and earthwork activities. Lake construction is estimated to require 8–11 weeks in Phase 1 and 23 weeks in Phase 2. During this time, views of Talbert Lake would consist of disturbed dirt/soil and equipment required for earthwork. Construction equipment and construction workers would be present during this period. For the entire construction period, views of Talbert Lake would be altered; however, since the views of the lake would only be altered temporarily, this impact would be considered less than significant. Temporary visual impacts would be further reduced through the implementation of PDF-6, which identifies installation of a chain-link fence with a green screen to shield views of the construction site from park users.

- **View 5 (Exhibit 12.13-4): View from the north looking at the proposed wetland treatment system area in Central Park.** Post-construction views of the wetland treatment areas would be similar to existing conditions in including riparian areas of varying height and canopy cover, grass and turf areas, and areas of open water. Project views would be enhanced through the creation of permanent pools of water and the sound of running water through the area.

Short-term visual impacts would occur during the construction period that is estimated to require a total of 18 weeks. During this time, views of the proposed wetland treatment system location would consist of disturbed dirt/soil and equipment required for earthwork, which would largely be screened from public view by green construction fences (PDF-6). Since construction would be temporary, views of construction equipment/activities would be considered less than significant.

- **View 6 (Exhibit 12.13-4): View from north looking south towards the drainage ditch in the area of the proposed aesthetic improvements.** View 6 shows the existing drainage ditch that extends from Slater storm drain in the northwestern portion of the project site adjacent to Slater Avenue. The ditch is surrounded by turf grass and isolated mature trees. The proposed changes to the drainage ditch would include a re-circulating stream with cobblestones and rocks in the creek bed. Vegetation would also be added along the tops of the banks. The visual effect associated with these aesthetic improvements would be considered beneficial. It should be noted that these aesthetic improvements would not affect the capacity of the swale as no grading is proposed. No adverse impacts would occur to this viewshed and no mitigation is required.
- **View 7 (Exhibit 12.13-5): View from west looking east toward the library in the area of the proposed aesthetic improvements.** View 7 shows the area adjacent to the library, which consists of a slope covered largely by turf grass. The proposed project changes would include a water feature in the form of a cascading stream that flows from the library down to the lake. The visual effect associated with this aesthetic improvement would be considered beneficial. No significant long-term adverse impacts would occur and no mitigation is required.

The aesthetic features visible in Views 6 and 7 that have been identified for the proposed project are dependent on availability of funding. Short-term, construction-related impacts would result in a temporary viewshed disruption. However, construction would be temporary and views of construction equipment and activities are considered less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No Impact. Permanent lights would not be required as part of the proposed project. During construction, there would be security lighting at the staging area; however, there are no off-site sensitive receptors that would be affected. Accordingly, there would be no impact and no mitigation is required.



View 5: View from the north looking at the proposed wetland treatment system area in Central Park.



View 6: View from north looking south towards the drainage ditch in the area of the proposed aesthetic improvements.

Site Photographs, Central Park

Exhibit 12.13-4

Talbert Lake Diversion Project

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View 7: View from west looking east toward the library in the area of the proposed aesthetic improvements.

XIV. CULTURAL RESOURCES

Would the project:

- | | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|--------------------------|
| a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? (Sources: 4, 41) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? (Sources: 4, 41) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Discussion:

Potentially Significant Unless Mitigation Incorporated. A cultural resources records search for the project area and its surrounding one-mile radius was conducted by staff at the South Central Coastal Information Center (SCCIC) on February 5, 2007. The SCCIC is the designated repository of the California Historical Resources Information System for records concerning archaeological and historical resources and associated studies in Orange County.

The records search provided data on known prehistoric and historic archaeological sites, built-environment (constructed) resources, and previous studies that have been conducted within one mile of the project area. Sources consulted at the SCCIC included archaeological site and artifact records, Archaeological Determinations of Eligibility (DOE) listings, and the Office of Historic Preservation's (OHP) Historic Property Data File (HPDF). The HPDF contains listings for the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), State Historical Landmarks (SHL), and California Points of Historical Interest (PHI).

In compliance with Section 106 of the National Historical Preservation Act (NHPA), the resource identification effort was expanded to include consultation with the Native American Heritage Commission (NAHC) regarding the possibility of important Native American resources in the project vicinity. In a letter dated February 13, 2007, the NAHC indicated that the Sacred Lands File contained no reference to sites within or adjacent to the proposed project area of potential effect (APE). The ten Native American individuals/organizations provided by the NAHC were contacted via letter notifications on February 13, 2007. No written replies from any of the groups or individuals (by letter, phone, or email) were received in response to these notifications.

The letters were followed-up with telephone calls from March 24 through April 2, 2007, as summarized in a Native American Consultation Record table (Appendix C of Attachment 6). The results of the consultation varied, and included: (1) no concerns; (2) general concerns regarding resources in the area; (3) requests for notification of the tribe; and (4) recommendations for monitoring and treatment in the event that artifacts or human remains found during construction.

An archaeological field survey of the proposed project area was conducted by Mr. Brian K. Glenn of BonTerra Consulting on February 2, 2007. This included a pedestrian survey of the entire Project APE. The survey consisted of a combination of linear and contour-based transects spaced no greater than 15 meters (49 feet) apart. Given the abundance of turf grasses throughout the Project APE, special attention was given to inspection of rodent backdirt piles due to the propensity of these animals to expose and unearth buried near-surface materials (including cultural materials). Special attention was also given to all areas not covered by turf grass.

The results of the records search at the SCCIC indicated that 28 cultural resources studies have been conducted within a 1-mile radius of the project area. Four of these studies included all or portions of the current Project APE: OR0001, OR0908, OR1031, and OR1757.

A total of 26 previously recorded cultural resources (17 archaeological and 9 built-environment cultural resources) have been identified within 1 mile of the proposed project area. None of the previously identified resources are within the Project APE, though two archaeological resource sites (CA-ORA-142 and CA-ORA-372/595) were directly adjacent.

No archaeological sites or potentially significant cultural resources were identified within the proposed project corridor as a result of the field survey; however, surface soils visibility was virtually non-existent throughout a large portion of the project corridor given the existing turf grass. Prehistoric period resources are present directly adjacent to the project corridor.

The review of the historic U.S. Geologic Survey (USGS) quadrangle maps indicates that various roads and structures were developed along the terrace overlooking the Project APE as early as 1896. A substantial structure appears on the 1941 series on the location that is now occupied by the modern library (which was constructed between 1974 and 1975). In addition, lesser structures appear on the 1941 map at the location of the present snack bar. No structures are illustrated at this location on the 1965/81 Seal Beach quadrangle, which indicates that the snack bar is a recent construction.

The failure of reconnaissance survey to identify traces of prehistoric or early historic occupation substantiates the apparent degree of historic disturbance of the Project APE. However, archival data citing previously recorded prehistoric sites on the bluff areas overlooking what is now the lake indicates the area is sensitive with regard to cultural resources. Archaeological monitoring is recommended throughout the Project APE to identify potentially significant cultural resources, should they exist, and to mitigate impacts to a level considered less than significant through proper treatment prior to further disturbance associated with project construction.

CR-1 Prior to approval of any rough, precise, or stockpiling grading plans, the City shall hire a certified Archaeologist to ensure that the following actions are implemented:

- a. The Archaeologist must be present at the pre-grading conference in order to establish procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of artifacts if potentially significant artifacts are uncovered. If artifacts are uncovered and determined to be significant, the Archaeological Observer shall determine appropriate actions in cooperation with the City for exploration and/or salvage.
- b. Specimens that are collected prior to or during the grading process shall be donated to an appropriate educational or research institution.
- c. Any archaeological work at the site shall be conducted under the direction of the certified Archaeologist. If any artifacts are discovered during grading operations when the Archaeological Monitor is not present, grading shall be diverted around the area until the Monitor can survey it.
- d. A final report detailing the findings and disposition of the specimens shall be submitted to the City. Upon completion of the grading, the Archaeologist shall notify the City as to when the final report will be submitted.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Directly or indirectly destroy a unique paleontological resource or site unique geologic feature? (Sources: 4, 41)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

Potentially Significant Unless Mitigation Incorporated. A review of the paleontological sensitivity and previously identified fossil resources in proximity to the Project APE and/or within similar formations was conducted by Dr. Samuel McLeod of the Vertebrate Paleontology Section of the Natural History Museum of Los Angeles County (NHMLAC) on January 26, 2007. Dr. McLeod identified and discussed previous finds, and determined the paleontological sensitivity of the deposits represented within the Project APE.

The NHMLAC’s review of the Project APE with regard to paleontological sensitivity indicates that no fossil resources have been discovered within the Project APE. The northwestern portion of the Project APE consists of younger Quaternary alluvium, which is unlikely to yield fossil specimens in the uppermost layers. Specimens of reptiles, birds, rodents, horses, and deer of “very late Holocene age” (BonTerra Consulting 2007c) were recovered from peat deposits at the intersection of Warner Avenue and Goldenwest Street between four and eight feet below the surface.

The more elevated southern and eastern portions of the Project APE contain deposits of Quaternary materials of either marine or terrestrial origins. No fossil resources have been discovered within the Project APE. Localities of similar deposits along Warner Avenue close to Bolsa Chica Street produced Pleistocene-aged specimens of mammoth (*Mammuthus*) and bison (*Bison*). Other locations at the Sunset and Bolsa Chica beaches with similar deposits produced mammoth, sea otter (*Enhydra*), horse (*Equus*), camel (*Camelops*), ground sloth (*Paramylodon*), and bison.

A paleontological records search conducted by the NHMLAC indicates a high likelihood of encountering buried fossil resources within deeper excavations into younger Quaternary deposits in the northwestern portions of the Project APE and within older Quaternary terrace deposits found in the eastern and southern portions of the Project APE. Deep excavations into the younger Quaternary deposits and all excavations within the older Quaternary terrace deposits present in the more elevated eastern and southern portions of the Project APE should be monitored by a qualified Paleontologist. Monitoring should be prefaced with development of a Paleontological Mitigation Plan.

CR-2 Prior to approval of any rough, precise, or stockpiling grading plans, the City shall hire a certified Paleontologist to ensure that the following actions are implemented:

- a. The Paleontologist must be present at the pre-grading conference in order to establish procedures to temporarily halt or redirect work to permit the sampling, identification, and evaluation of fossils if potentially significant paleontological resources are uncovered. If artifacts are uncovered and found to be significant, the Paleontological Observer shall determine appropriate actions in cooperation with the City for exploration and/or salvage.
- b. Specimens that are collected prior to or during the grading process will be donated to an appropriate educational or research institution.
- c. Any paleontological work at the site shall be conducted under the direction of the certified Paleontologist. If any fossils are discovered during grading operations when the Paleontological Monitor is not present, grading shall be diverted around the area until the Monitor can survey the area.
- d. A final report detailing the findings and disposition of the specimens shall be submitted. Upon completion of the grading, the Paleontologist shall notify the City as to when the final report will be submitted.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Disturb any human remains, including those interred outside of formal cemeteries? (Sources: 4, 41)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

Potentially Significant Unless Mitigation Incorporated. It is not expected that project implementation would disturb any human remains, including those interred outside formal cemeteries. The proposed project area has been previously disturbed and construction would be predominantly within those disturbed areas. Project implementation would include MMs CR-1 and CR-2 that would reduce any potential for impact to a less than significant level.

XV. RECREATION

Would the project:

Potentially
Significant
Impact

Potentially
Significant
Unless
Mitigation
Incorporated

Less Than
Significant
Impact

No Impact

- a) Would the project increase the use of existing neighborhood, community and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? (Sources: 31, 33, 34, 35)

Discussion:

Less than Significant Impact. The goal of the Talbert Lake Diversion Project is to improve water quality within the downstream receiving waters of the East Garden Grove – Wintersburg Channel. The majority of the proposed construction would take place within the boundaries of Central Park. Central Park is a major recreational amenity on over 350 acres that provides numerous active and passive recreational opportunities such as a disc golf course, adventure playground, a dog park, Huntington Lake and Talbert Lake, a group picnic shelter, and a youth campground. During the construction phase of the proposed project, the areas of disturbance in Central Park where Talbert Lake is located would be made inaccessible to the public. Recreational experiences within this section of the park would be affected during project construction, owing to inconveniences and restrictions. Accordingly, there is a potential for an increase in use of other area park/recreational facilities. However, these temporary disruptions would be short term in nature and are not expected to exceed 32 weeks maximum for the Central Park component of Phase 1 and 23 weeks for Phase 2. Should other recreational facilities experience a temporary increase in usage, it is not expected that the increase would be anything other than minimal, and would not cause substantial physical deterioration of any facility or accelerate any existing deterioration within another park/recreational facility. A less than significant impact would occur.

Potentially
Significant
Impact

Potentially
Significant
Unless
Mitigation
Incorporated

Less Than
Significant
Impact

No Impact

- b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? (Sources: 33, 34, 35)

Discussion:

No Impact. No new recreational facilities are proposed as part of the project. Although a restored Talbert Lake would be a valuable park amenity, overall park uses would remain unchanged and no facility development is required. Accordingly, there would be no impact.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Affect existing recreational opportunities? (Sources: 33, 34, 35)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Less than Significant Impact. As stated above, the majority of the proposed construction would take place within the boundaries of Central Park. During the construction phase of the proposed project, restricted access in the construction area would pose the potential for impact on walking trails and the exercise parcourse. A Public Access Plan (PDF-8) would be developed to maximize access to perimeter areas and recreational facilities during construction. Indirect impacts during construction may affect the outdoor dining experience at the Park Bench Café. Visual screening contained in PDF-6 would reduce visual impacts, and construction effects will be short-term in nature. Mitigation Measure NOI-1, restricting construction activities within 100 feet of the Park Bench Café during the hours of 11:00 AM to 1:00 PM Monday through Friday, would ensure impacts during construction are less than significant.

XVI. AGRICULTURAL

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? (Sources: 33, 34, 35, 37) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion:

No Impact. There are no agricultural uses on site in Central Park, and the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses. As such, no impact would occur.

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? (Sources: 30, 33, 34, 35, 37) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion:

No Impact. The proposed project is currently zoned OS-P (Open Space – Park uses), and would not conflict with or change the existing zoning for agricultural use, or any Williamson Act contract. Accordingly, no impact would occur.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? (Sources: 33, 34, 35, 36, 37)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No impact. The proposed project would not involve any changes in the existing environment that could result in the conversion of Farmland to non-agricultural uses. No impact would occur as a result of project implementation.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

Potentially Significant Unless Mitigation Incorporated. The proposed project has the potential to affect the least Bells' vireo and southwestern willow flycatcher through impacts to existing riparian habitat. Nesting migratory birds could also be affected by disruption or removal of trees within which nests have been established. However, with the incorporation of the standard conditions, project design features, and mitigation measures discussed above, project impacts would be considered less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Less Than Significant Impact. The Talbert Lake Diversion Project and the Senior Center project across Goldenwest Street are both located in areas that provide habitat value for biological resources utilizing Central Park. Should construction of these two projects occur simultaneously, cumulative impacts on wildlife use of Central Park could occur. The combined construction activities may inhibit use of the park by some wildlife species, especially birds. However, these cumulative impacts would be short-term in duration and would therefore be considered a less than significant impact.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

Potentially Significant Unless Mitigation Incorporated. The proposed project has been designed to incorporate features that reduce adverse impacts to human beings living, working, and performing recreational activities in the project vicinity. Mitigation measures have also been incorporated that reduce the potential impacts from project effects on geology and soils, air quality, traffic, and hazards. With the incorporation of the standard conditions, project design features, and mitigation measures as discussed above, direct and indirect project impacts on human beings are reduced to a level considered less than significant.

XVIII. EARLIER ANALYSES

Earlier analyses may be used where, pursuant to tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(D).

Earlier Documents Prepared and Utilized in this Analysis:

Ref #	Document Title	Available for Review at:
1	BonTerra Consulting. 2008 (March). <i>Local Significance Threshold Worksheets</i> . Costa Mesa, CA: BonTerra Consulting. (BonTerra Consulting 2008).	Attachment 2
2	BonTerra Consulting. 2007a. <i>Biological Resources Report: Talbert Lake Diversion Project</i> . Costa Mesa, CA: BonTerra Consulting. (BonTerra Consulting 2007a).	Attachment 3
3	BonTerra Consulting. 2007b. <i>Jurisdictional Delineation Report: Talbert Lake Diversion Project</i> . Costa Mesa, CA: BonTerra Consulting. (BonTerra Consulting 2007b).	Attachment 5
4	BonTerra Consulting. 2007c. <i>Phase I Historic Properties Identification Survey, Talbert Lake Restoration Project, City of Huntington Beach, Orange County, California</i> . Costa Mesa, CA: BonTerra Consulting. (BonTerra Consulting 2007c).	Attachment 6
5	BonTerra Consulting. 2007d. <i>Results of Focused Surveys for the Southwestern Willow Flycatcher and Least Bell's Vireo on the Talbert Lake Diversion Project Site, City of Huntington Beach, Orange County, California</i> . Costa Mesa, CA: BonTerra Consulting. (BonTerra Consulting 2007d).	Attachment 4
6	California Environmental Protection Agency, Air Resources Board (CARB). 2007. <i>Area Designations (Activities and Maps)</i> . Sacramento, CA: CARB. (CARB 2007).	http://www.arb.ca.gov/desig/desig.htm
7	California Environmental Protection Agency, Air Resources Board (CARB). 2006 (April 12, last updated). <u>Air Monitoring Site Information Interactive Map</u> . Sacramento, CA: CARB. (CARB 2006).	http://www.arb.ca.gov/qaweb/mapdemo/map_module.php
8	California Department of Fish and Game (CDFG). 2007a. <u>California Natural Diversity Database</u> . Records of Occurrence for the project site. Sacramento, CA: CDFG. (CDFG 2007a).	
9	California Department of Fish and Game (CDFG). 2007b. <i>Special Animals</i> . Sacramento, CA: CDFG. (CDFG 2007b).	
10	California Department of Fish and Game (CDFG). 2007c. <i>Special Vascular Plants, Bryophytes, and Lichens List</i> . Sacramento, CA: CDFG. (CDFG 2007c).	
11	California Department of Transportation (Caltrans). 2007 (December 7, last update). <i>California Scenic Highway Mapping System</i> . Sacramento, CA: Caltrans. (Caltrans 2007).	www.dot.ca.gov/hq/LandArch/scenic_highways
12	California Department of Toxic Substances Control (DTSC). 2007. <i>EnviroStor: Hazardous Waste and Substances Site List</i> . Sacramento, CA: DTSC. (DTSC 2007).	http://www.envirostor.dtsc.ca.gov/public/search.asp?cmd=search&reporttype=CORTESE&site_type=CSITES%2COPEN%2CFUDS%2CCLOSE&status=ACT%2CBKLG%2CCOM&reporttitle=HAZARDOUS%20WASTE%20AND%20SUBSTANCES%20SITE%20LIST

Ref #	Document Title	Available for Review at:
13	California Environmental Protection Agency (CalEPA). 2007. Cortese List Data Resources. Sacramento, CA: CalEPA. (CalEPA 2007).	http://www.calepa.ca.gov/SiteCleanup/CorteseList/default.htm
14	California Governor's Office of Planning and Research. 2005. California Environmental Quality Act. Sacramento, CA: California Resource Agency. (OPR 2005).	http://ceres.ca.gov/ceqa/index.html
15	California Governor's Office of Planning and Research. 2007 (July, as amended). California Environmental Quality Act Guidelines. Sacramento, CA: California Resource Agency. (OPR 2007).	http://ceres.ca.gov/ceqa/guidelines/
16	California Native Plant Society (CNPS). 2007. <u>Electronic Inventory of Rare and Endangered Vascular Plants of California</u> . Records of Occurrence for the project site. Sacramento, CA: CNPS. (CNPS 2007).	
17	California Regional Water Quality Control Board, Santa Ana Region (SARWQCB). 1995 (January). <i>Water Quality Control Plan, Santa Ana River Basin (8)</i> . Riverside, CA: SRWQCB. (SARWQCB 1995).	http://www.waterboards.ca.gov/santaana/pdf/R8BPlan.pdf .
18	Epoleon Corporation. 2008. Epoleon: Products. Torrance, CA: Epoleon Corporation. (Epoleon Corporation 2008).	http://www.epoleon.com/
19	Federal Aviation Administration. 2008 (current through February 14). Airport Data (5010) & Contact Information. Records for Los Alamitos Airport. (FAA 2008).	http://www.faa.gov/airports_airtraffic/airports/airport_safety/airportdata_5010/
20	Federal Emergency Management Agency (FEMA). 2008 (March 24, last updated). Mapping Information Platform: Map Viewer for Project Site Address (FEMA 2008).	https://hazards.fema.gov/femaportal/wps/portal
21	Garrett, K. and J. Dunn. 1981. <i>Birds of Southern California: Status and Distribution</i> . Los Angeles, CA: Los Angeles Audubon Society. (Garrett and Dunn 1981).	
22	Grinnell, J. and A.H. Miller. 1944. The Distribution of the Birds of California. <i>Pacific Coast Avifauna No. 27</i> . Albuquerque, NM: Cooper Ornithological Society. (Grinnell and Miller 1944).	
23	Hamilton, R.A. and D.R. Willick. 1996. <i>The Birds of Orange County, California: Status and Distribution</i> . Irvine, CA: Sea and Sage Audubon Society. (Hamilton and Willick 1996).	
24	Harris, Miller and Hanson, Inc. 1995 (April). <i>Transit, Noise and Vibration Assessment</i> . Newport Beach, CA: Harris, Miller, and Hanson. (Harris, Miller and Hanson 1995).	
25	Holloway, A. 2008a (March 18). Personal communication. Telephone conversation between A. Holloway (PACE) and P. Castens (BonTerra Consulting). (Holloway 2008a).	
26	Holloway, A. 2008b (March 11). Personal communication. Telephone conversation between A. Holloway (PACE) and P. Castens (BonTerra Consulting). (Holloway 2008b).	
27	Holloway, A. 2008c (February 29). Personal communication. Email from A. Holloway (PACE) to P. Castens (BonTerra Consulting) including an excel spreadsheet entitled "Construction Element Matrix." (Holloway 2008c).	
28	Huntington Beach Public Library (HBPL). 2007 (October 31, last modified). About the Library/History. Huntington Beach, CA: HBPL. (HBPL 2007).	http://www.hbpl.org/info_library.htm
29	Huntington Beach, City of. 2007. <i>Huntington Beach Senior Center Draft Environmental Impact Report and Appendices</i> . Huntington Beach, CA: the City. (Huntington Beach 2007).	

Ref #	Document Title	Available for Review at:
30	Huntington Beach, City of. Information Services Department. 2006 (March). <u>Huntington Beach Zoning Map</u> . Huntington Beach, CA: the City. (Huntington Beach 2006).	http://www.ci.huntington-beach.ca.us/files/users/planning/zoning_map.pdf
31	Huntington Beach, City of. 2005a. <i>City of Huntington Beach Citywide Urban Runoff Management Plan</i> . Huntington Beach, CA: the City. (Huntington Beach 2005a).	
32	Huntington Beach, City of. 2005b. <i>Final 2004 Annual Brown-Headed Cowbird Trapping and Removal Program Report for the City of Huntington Beach Huntington Central Park Sports Complex, Orange County, California</i> . Huntington Beach, CA: the City. (Huntington Beach 2005b).	
33	Huntington Beach, City of. 2002. <i>Huntington Beach CEQA Procedures Handbook</i> . Huntington Beach, CA: the City. (Huntington Beach 2002).	
34	Huntington Beach, City of. 1999. <i>Final Master Environmental Impact Report for Master Plan of Recreation Uses for Central Park, City of Huntington Beach, California</i> . Huntington Beach, CA: the City. (Huntington Beach 1999).	
35	Huntington Beach, City of. 1996. <i>Huntington Beach General Plan</i> . Huntington Beach, CA: the City. (Huntington Beach 1996).	
36	Huntington Beach, City of. 1995. <i>Huntington Beach General Plan Update Draft Environmental Impact Report</i> . Huntington Beach, CA: the City. (Huntington Beach 1995).	
37	Huntington Beach Independent. Cityscape Roundup: Gun Range Lawsuits Are Settled. Huntington Beach, CA: Huntington Beach Independent. (Huntington Beach Independent 2007).	http://www.hbindependent.com/articles/2007/01/25/news/hbi-csroundup25.rpt
38	Komor, Andrew. 2007 (December 17) Personal Communication. Email communication between A. Komor (Project Manager, PACE) and J. Neary (Assistant Project Manager, BonTerra Consulting). (Komor 2007).	
39	McPeck, D. 2008 (March 10). Personal communication. Telephone conversation between D. McPeck (Orange County Resources and Development Management Department) and P. Castens (BonTerra Consulting). (McPeck 2008).	
40	Orange, County of. 2002 (October 17). <i>Airport Environs Land Use Plan for Joint Forces Training Base Los Alamitos</i> . Santa Ana, CA; the County. (Orange County 2002).	
41	Pacific Advanced Civil Engineering (PACE). 2007. <i>Preliminary Design Report: Talbert Lake Diversion Project</i> . Fountain Valley, CA: PACE. (PACE 2007).	
42	Roberts, F.M. 2007 (November). Personal communication. Phone conversation between F.M. Roberts and S.J. Leatherman regarding the special status plants of Huntington Central Park. (Roberts 2007).	
43	Simons and Li Associates (SLA). 2000a. <i>Flood Hazard Mitigation</i> . Costa Mesa, CA: SLA. (SLA 2000a).	
44	Simons and Li Associates (SLA). 2000b. <i>Hydrology/Hydraulics and Design Study, Talbert Channel Flood Hazard Mitigation</i> . Costa Mesa, CA: SLA. (SLA 2000b).	
45	South Coast Air Quality Management Board (SCAQMB). 2007 (June). <i>2007 Air Quality Management Plan</i> . Diamond Bar, CA: SCAQMB. (SCAQMB 2007).	http://www.aqmd.gov/aqmp/07aqmp/index.html

Ref #	Document Title	Available for Review at:
46	South Coast Air Quality Management Board (SCAQMB). 2003. <i>2003 Air Quality Management Plan</i> . Diamond Bar, CA: SCAQMB. (SCAQMB 2003).	http://www.aqmd.gov/aqmp/AQMD03AQMP.htm
47	South Coast Air Quality Management District (SCAQMD). 2007a (December 18, last updated). <i>Draft CEQA Air Quality Analysis Guidance Handbook</i> . Diamond Bar, CA: SCAQMD. (SCAQMD 2007a).	http://www.aqmd.gov/ceqa/hdbk.html
48	South Coast Air Quality Management District (SCAQMD). 2007b. Highest (Most Conservative) EMFAC2007 (version 2.3) Emission Factors for On-Road Passenger Vehicles & Delivery Trucks (an excel spreadsheet). Diamond Bar, CA: SCAQMD. (SCAQMD 2007b).	http://www.aqmd.gov/ceqa/handbook/onroad/onroadEF07_26.xls
49	South Coast Air Quality Management District (SCAQMD). 2007c. SCAB Fleet Average Emission Factors (Diesel) (an excel spreadsheet). Diamond Bar, CA: SCAQMD. (SCAQMD 2007c).	http://www.aqmd.gov/ceqa/handbook/offroad/offroadEF07_25.xls
50	South Coast Air Quality Management District (SCAQMD). 2007d (December, last revised). SCAQMD Air Quality Significance Thresholds. Diamond Bar, CA: SCAQMD. (SCAQMD 2007d).	http://www.aqmd.gov/ceqa/handbook/signthres.pdf
51	South Coast Air Quality Management District (SCAQMD). 2003 (June). <i>Final Localized Significance Threshold Methodology</i> . Diamond Bar, CA: SCAQMD. (SCAQMD 2003).	http://www.aqmd.gov/ceqa/handbook/LST/Method_final.pdf
52	South Coast Air Quality Management District (SCAQMD). 1993. <i>CEQA Air Quality Handbook</i> . Diamond Bar, CA: SCAQMD. (SCAQMD 1993).	http://www.aqmd.gov/ceqa/oldhdbk.html
53	Tetra Tech and Simon Li and Associates (Tetra Tech and SLA). 1999. <i>Biological Survey Report: Talbert Channel Flood Hazard Mitigation</i> . City of Huntington Beach, California. Costa Mesa, CA: SLA. (Tetra Tech and SLA 1999).	
54	Thomas Brothers Maps. 2005. <i>The Thomas Guide: Los Angeles and Orange Counties</i> . Skokie, IL: Rand McNally. (Thomas Brothers Maps 2005).	
55	Urban Crossroads. 2007. <i>Huntington Beach Senior Center Project Traffic Impact Analysis (Revised)</i> , City of Huntington Beach, California. Irvine, CA: Urban Crossroads. (Urban Crossroads 2007)	
56	U.S. Army Corps of Engineers (USACE). 2006. <i>Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region</i> . Washington, D.C.: USACE. (USACE 2006).	
57	U.S. Environmental Protection Agency (USEPA) 2007 (October 1, last update). Air Trends: Basic Information. Washington, D.C.: USEPA. (USEPA 2007).	
58	U.S. Environmental Protection Agency (USEPA). 2006 (October 25). Proposed 2006 CWA Section 303(d) List of Water Quality Limited Segments: Santa Ana Regional Board. Washington, D.C.: USEPA. (USEPA 2006).	http://www.swrcb.ca.gov/tmdl/docs/303dlists2006/final/r8_final303dlist.pdf
59	Willick, D.R. 1997. Summer 1997 Report for Orange County, CA. Unpublished report submitted to Southern California regional editors for the journal <i>North American Birds</i> . (Willick 1997).	
60	WoleyParsons Komex. 2006a. <i>Talbert Lake Diversion Project – EGGWC Fieldwork Results</i> . Long Beach, CA: WoleyParsons Komex. (WoleyParsons Komex 2006a).	
61	WoleyParsons Komex. <i>Talbert Lake Diversion Project-Hydrogeology Review</i> . Long Beach, CA: WoleyParsons Komex. (WoleyParsons Komex 2006b).	