Final Initial Study and Notice of Intent to Adopt a Mitigated Negative Declaration for the Proposed 14th Street Stormwater Collection and Integration Basin Project (14th Street Water Quality/Drainage Regional Facility)

City of Upland, San Bernardino County, California
(EAR 0008)

Prepared for:
City of Upland

City of Upland
Public Works/Utilities Division
1370 North Benson Avenue
Upland, CA 91786
Contact: Shaun J. Stone, P.E.
Principal Civil Engineer

Prepared by:

Desert Consulting Group, Inc.
2466 Linden Way, Suite E
Palm Springs California 92264
Contact: Nancy M. Ferguson, Principal

August 26, 2010

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Acronyms Used in the Initial Study

AQMP	Air Quality Management Plan
BMPs	Best Management Practices
CAAQS	California Ambient Air Quality Standards
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	Carbon monoxide
CO_2	Carbon dioxide
dBA	A-weighted decibel
FMMP	Farmland Mapping and Monitoring Program
LST	Localized Significance Threshold
MCE	Maximum credible earthquake
Mgd	million gallons per day
MND	Mitigated Negative Declaration
MS4	Municipal Separate Storm Sewer Systems
msl	mean sea level
NAASQ	National Ambient Air Quality Standards
NO_2	nitrogen dioxide
NOD	Notice of Determination
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
O_3	ozone
Pb	lead
$PM_{2.5}$	particulate matter equal to or less than 2.5 microns in diameter
PM_{10}	particulate matter equal to or less than 10 microns in diameter
RWQCB	Regional Water Quality Control Board
SCAG	Southern California Association of Governments
SCAQMD	Southern California Air Quality Management District
SCH	State Clearinghouse
SMP	Stormwater Management Plan
SWPPP	Stormwater Pollution Prevention Plan
WDR	Waste Discharge Requirements

Introduction to Final Initial Study

The Draft Initial Study and Notice of Intent to Adopt a Mitigated Negative Declaration was distributed to the public for 20 days starting on July 27, 2010. The public comment period ended on August 16, 2010. Three comment letters were received from Cable Airport, San Bernardino County Public Works Department, and The South Coast Air Quality Management District. These letters and formal responses are included in Appendix D of this Final document.

The Draft Initial Study concluded that a Mitigated Negative Declaration could be adopted for the proposed project and included mitigation measures for Biological Resources, specifically for the burrowing owl. Therefore, a Mitigation Monitoring and Reporting Program has been prepared and is included in Appendix E

In response to comments from the South Coast Air Quality Management District (SCAQMD), Additional Air Quality analysis for Local Significance Thresholds (LST) was conducted, in addition to the Air Quality modeling that was completed for the project. The LST model output showed that additional mitigation for dust control would be required during construction of the basin near the existing residential neighborhood on 14th Street. The results of the LST analysis did not result in any new impacts that could not be mitigated to less than significant levels. Two mitigation measures have been added to the Mitigation Monitoring and Reporting Program and will be included as notes on the grading/construction plans for the basin.

Minor revisions have been made to the Initial Study to update the Project Description with information on the revised basin plan to eliminate the vegetated bio-swale. Percolation testing has shown that the basin will percolate at up to 5 inches per hour and therefore, there is no longer a need to develop a bioswale downstream of the basin. The Hazards Section has also been revised to include additional information on the Cable Airport Clear Zone and Safety Zone. New text is underlined, while deleted text is shown with ~~strikethrough~~.

Chapter 1 Introduction

Overview

The City of Upland is located in the west end of San Bernardino County at the Los Angeles/San Bernardino counties border. Figure 1 is an aerial photograph showing the regional location of the City. The City is an urban community bounded by the cities of Rancho Cucamonga on the east, Ontario and Montclair on the south and the City of Claremont on the west. North of the City is the unincorporated community of San Antonio Heights which separates the City from the foothills of the San Gabriel Mountains. The east and west boundaries of the City are delineated by two creeks, San Antonio Creek on the west and Cucamonga Creek on the east, both engineered concrete channels that are downstream of dams. The dams and channels along with the 26th Street Interceptor in the north section of the City protect the City from flooding.

The City of Upland Public Works Department is currently updating its Master Plan for Drainage, in order to comply with the recently adopted Waste Discharge Requirements (WDRs) for the County of San Bernardino and the incorporated cities within the County that are located within the Santa Ana Regional Water Quality Control Board's jurisdiction (Order No. R8-2010-0036, NPDES No. CAS618036). The WDRs are also referred to as the Area-wide Urban Storm Water Runoff Management Program, San Bernardino County MS4 Permit.

Associated with the San Antonio Creek and Cucamonga Creek drainages are a series of basins that are used for groundwater recharge. These basins are shown on Figure 2 which also shows the watershed boundaries and flood control basins in the City. Figure 3 shows the underlying groundwater basins. The project site is located in the West Upland (WU) watershed tributary area directly east of the Blue Diamond Basin (now referred to as the Holliday Pit) and the Cable Airport. The other tributary areas are the Northwest (NW) and Northeast (NE) areas located north of the I-210 Freeway, and the West Cucamonga (WC-CC) tributary area that is the largest in the City.

The City is in the process of completing an update to the Master Plan for Drainage. Generally the focus of a drainage master plan is limited to strategies for providing flood protection. However, the City has seized on an opportunity to develop a plan that will provide strategies for an integrated storm water system that combines the need to provide flood protection for residents and property with the need to recharge the underlying groundwater basins while ensuring and enhancing the water quality of storm water runoff and urban drainage flow (irrigation overflow). The 14th Street Stormwater Collection and Integration Basin Project is part of the City's strategy. Because the City is urban and close to build out, opportunities for storm water retention/detention are limited by the lack of undeveloped land that could be used for this purpose. The project site, with its location in close proximity to existing groundwater recharge facilities, provides the City with the opportunity to create a dual function system.

The City's goal is to capture as much rain storm runoff north of 14th Street as possible and convey it to retention/detention basins where it will percolate into the groundwater basins for future use. Therefore, the City's approach to compliance with the WDRs is two-fold, that is, to capture and convey stormwater into integrated stormwater capture and retention facilities to control flooding and to maximize water recharge to local groundwater basins.

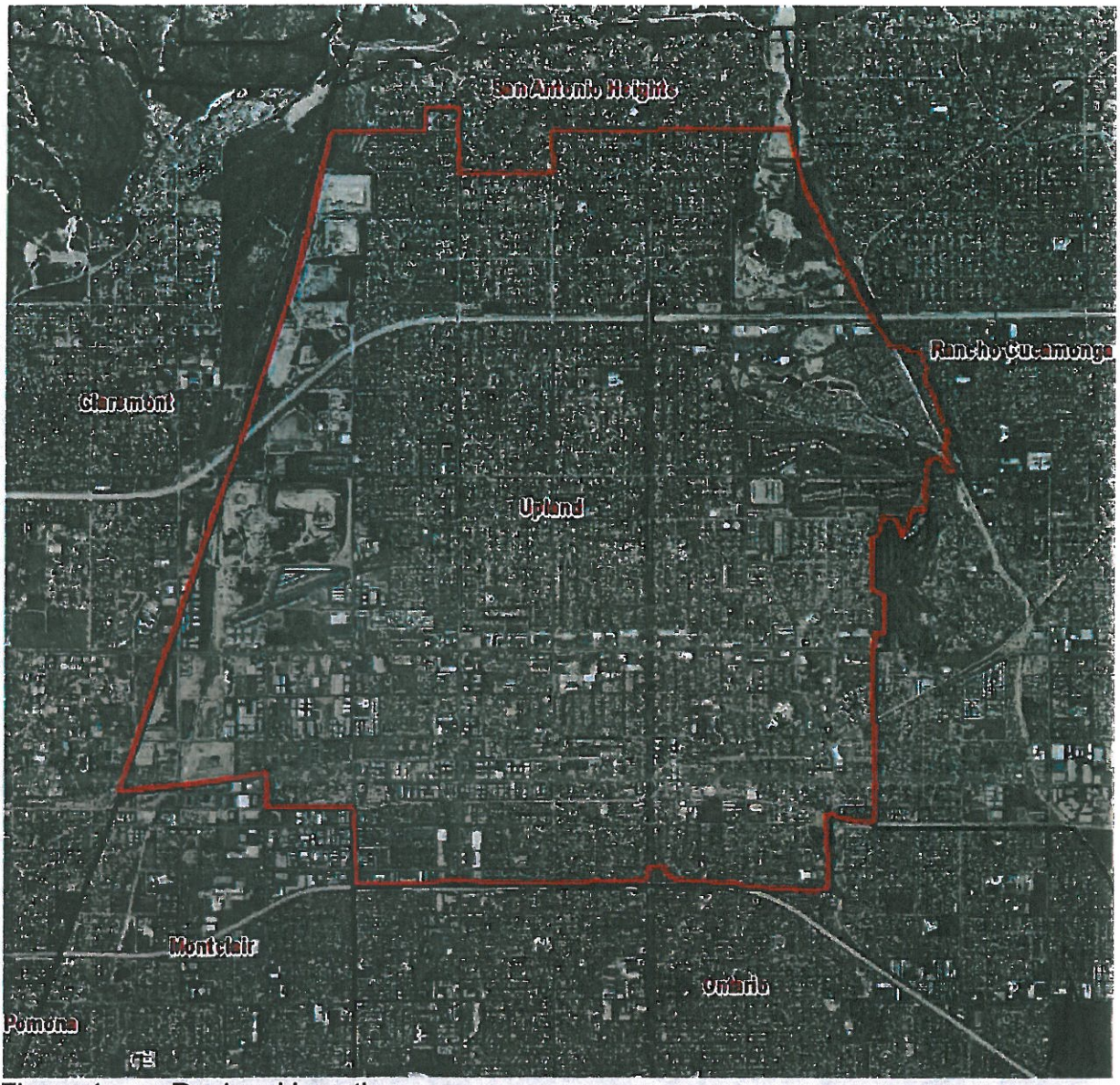


Figure 1 Regional Location

The approximately 12.1-acre project site has been identified as a possible additional basin that would be used as a water quality basin and retention/detention basin. Currently flows from 14th Street and Greenbelt Park are conveyed across the site to the southwest corner of the site at Benson Avenue where they are conveyed through a culvert to the Holliday Pit on the west side of Benson, immediately north of the Cable Airport.

The proposed project consists of the following elements: 1) a new storm drain on 14th Street between Mountain Avenue and the westerly terminus of 14th Street to convey stormwater and urban runoff from Mountain Avenue north of 14th Street; 2) a new storm drain along Benson Avenue between the project site and 13th Street to convey stormwater from the project site to

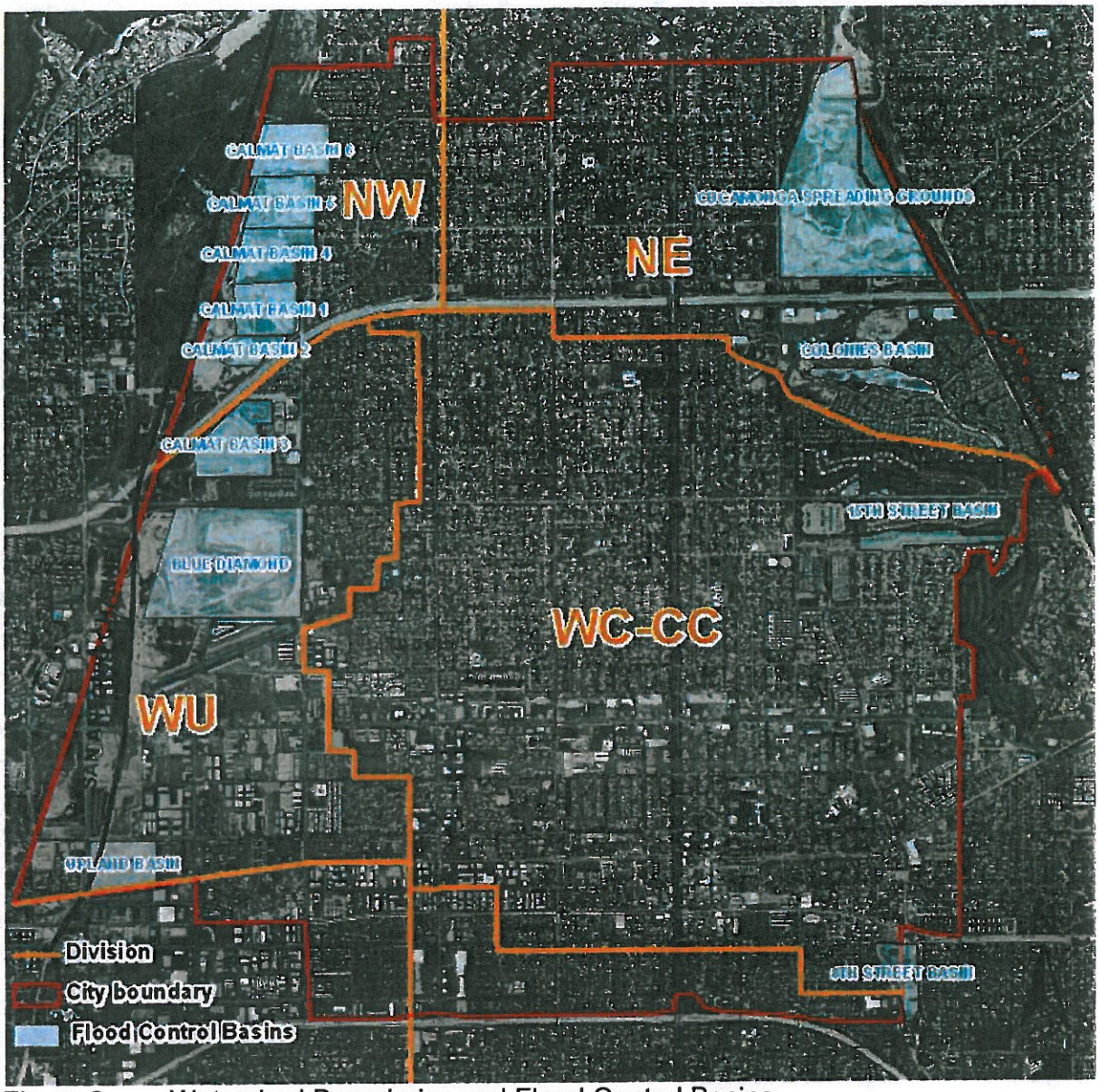


Figure 2 Watershed Boundaries and Flood Control Basins

the Upland Basin south of the project site; and 3) construction of the water quality/drainage regional facility consisting of a ~~forebay~~ basin at a depth of between 16 and 20 feet with side slopes at 4:! (horizontal:vertical). ~~, and a water quality vegetated bioswale approximately 3 to 6 feet deep. In addition, due to the proximity of the project site to Greenbelt Park, there is an opportunity to connect the new water quality/regional drainage facility to the existing park with a walking trail.~~ Uses of the site are limited due to its close proximity to the Cable Airport which is located directly west of the site across Benson Avenue. The site is beneath the approach to the airport and the westerly 1/3 of the site is located in the airports Clear Zone (extreme crash hazard), while the easterly 2/3 is located within the airports Safety Zone 1 (extreme crash hazard). The Clear Zone is now referred to as the Runway Protection Zone. Land uses are limited in both of these zones. See Chapter 2, Project Description, for a discussion of the issue.

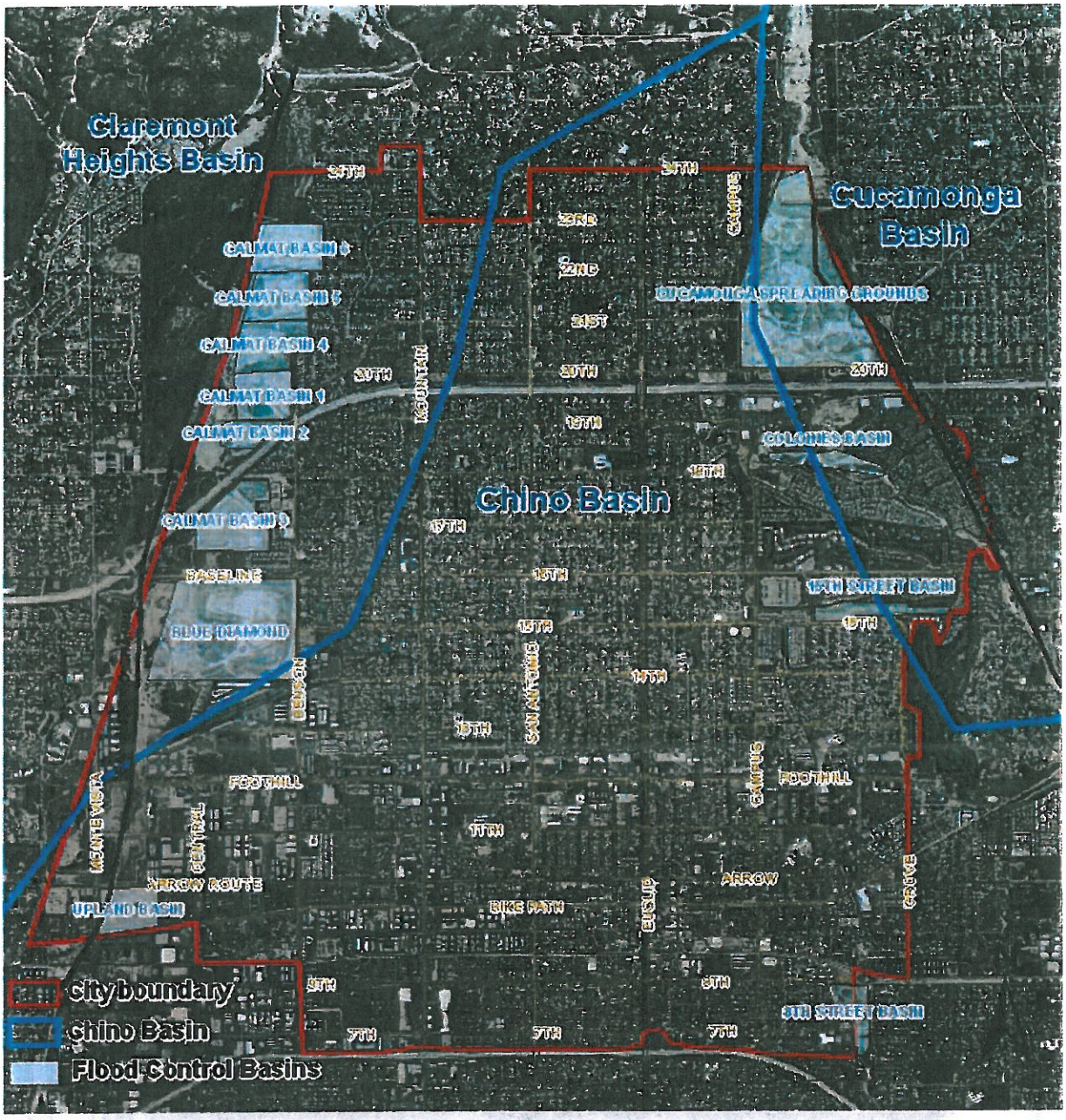


Figure 3 Underlying Groundwater Basins

Authority

The City of Upland is the lead agency for the proposed water quality/regional drainage facilities. This Initial Study (IS) has been prepared in accordance with the California Environmental Quality Act (CEQA) (Statute) and the State's Guidelines for Implementation of CEQA (Guidelines) (as amended, 2009); and the City of Upland's CEQA Guidelines for preparation of an IS. This IS, when combined with the Notice of Intent to Adopt a Mitigated Negative Declaration serves as the environmental document for the proposed project pursuant to the

Figure 4 Proposed Project Improvements

provisions of CEQA (Public Resources Code 21000 et seq.) and the CEQA Guidelines (California Code of Regulations Section 15000, et seq.).

Scope of the Environmental Assessment

The IS evaluates the proposed project's potential environmental effects on the following topics:

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

Note: 2009 revisions to Appendix G of the CEQA Guidelines created a new topic – Greenhouse Gas Emissions (GHG). Although previously, GHG had been evaluated in environmental documents usually in the context of air quality, the latest revisions to Appendix G identify GHG as its own distinct topic.

Impact Assessment Terminology

The Environmental Checklist identifies impacts using four levels of significance as follows:

- No Impact. A finding of no impact is made when it is clear from the analysis that the project would not affect the environment.
- Less than significant. A finding of less than significant is made when it is clear from the analysis that a project would cause no substantial adverse change in the environment and no mitigation is required.
- Less than significant with mitigation incorporated. A finding of less than significant with mitigation incorporated is made when it is clear from the analysis that a project would cause no substantial adverse change in the environment when mitigation measures are successfully implemented by the project proponent. In this case, the City of Upland is the project proponent and would be responsible for implementing measures identified in a Mitigation Monitoring Program.
- Potentially Significant. A finding of potentially significant is made when the analysis concludes that the proposed project could have a substantially adverse change in the environment for one or more of the topics listed in the previous section, *Scope of the Initial Study*.

Organization of the Initial Study

The content and format of the IS meet the requirements of CEQA. The IS contains the following sections:

- Chapter 1 Introduction. This chapter provides a brief summary of the proposed project, identifies the lead agency, summarizes the purpose and scope of the IS, and provides a discussion of the impact terminology used to assess potential environmental impacts of the proposed project.
- Chapter 2 Project Description. This chapter provides a project overview including a description of the regional location and project vicinity, including figures; summarizes the City's decision to move forward with the proposed project in the Purpose and Objectives section; and provides a description of the project elements, i.e. dimensions of the project, area of disturbance, schedule for completion, etc.
- Chapter 3 Environmental Checklist. This chapter provides a copy of the City's Environmental Checklist, revised to include the latest amendments to the CEQA Guidelines Appendix G, and responses to each question posed in the checklist. This chapter also provides a brief description of existing conditions for each topic and an analysis of potential environmental impacts. Mitigation measures are also identified where necessary.
- Chapter 4 References. This chapter lists all reports used, websites accessed, and persons consulted to prepare the IS.
- Chapter 5 List of Preparers. This chapter identifies City staff and other individuals who were responsible for the preparation of the IS and implementation of the project.

Documents Incorporated by Reference

As allowed by CEQA Guidelines Section 15150, a Negative Declaration may incorporate by reference all or portions of another document that is generally available to the public. The document used must be available for public review for interested parties to access during public review of the Initial Study and Notice of Intent to Adopt a Mitigated Negative Declaration for this proposed project. The City's General Plan and Background Reports for the General Plan Update program currently under way were used to support the findings of the Initial Study and are incorporated by reference. The City's Draft Updated Master Plan for Drainage was also utilized in the preparation of this IS. These documents are available for review at the City of Upland Community Development Department, 460 North Euclid Avenue.

Chapter 2 Project Description

Project Overview

The City of Upland has a unique opportunity at the project site to integrate the control of storm water and urban runoff with the recharge of the underlying groundwater basin. Because the City is urban and close to build out, opportunities for storm water retention/detention are limited by the lack of undeveloped land that could be used for retention/detention. The 12.1-acre project site, with its location in close proximity to existing groundwater recharge basins and development restrictions due to proximity to the Cable Airport, provides the City with the opportunity to create a dual function system. Figure 4 shows the project site and vicinity.

Photographs 1 through 10 show existing conditions on-site and in the vicinity of the project site. The project site is constrained from development similar to surrounding land uses (residential and light industrial) by being located within the Cable Airport Comprehensive Airport Land Use Plan (CACALUP) area. Although adjacent properties are also within the CACALUP area, they are outside the airport's Clear Zone and Safety Zones. As shown in Figures 3 and 5 of the CACALUP (see Appendix A), approximately 1/3 of the site is located within the airport's Clear Zone and the other approximately 2/3 are located in the airport's Safety Area 1. The project site is within the approach to the airport runway and therefore, development of most urban structures, like those that are adjacent to the project site, are prohibited. Note: the CACALUP was adopted in 1981 and is currently being updated. The Federal Aviation Administration Airport Planning Advisory Circular (AC150/5300-13) (1989), now refers to Clear Zones as Runway Protection Zones (RPZ). The updated Plan will use the most recent terminology.

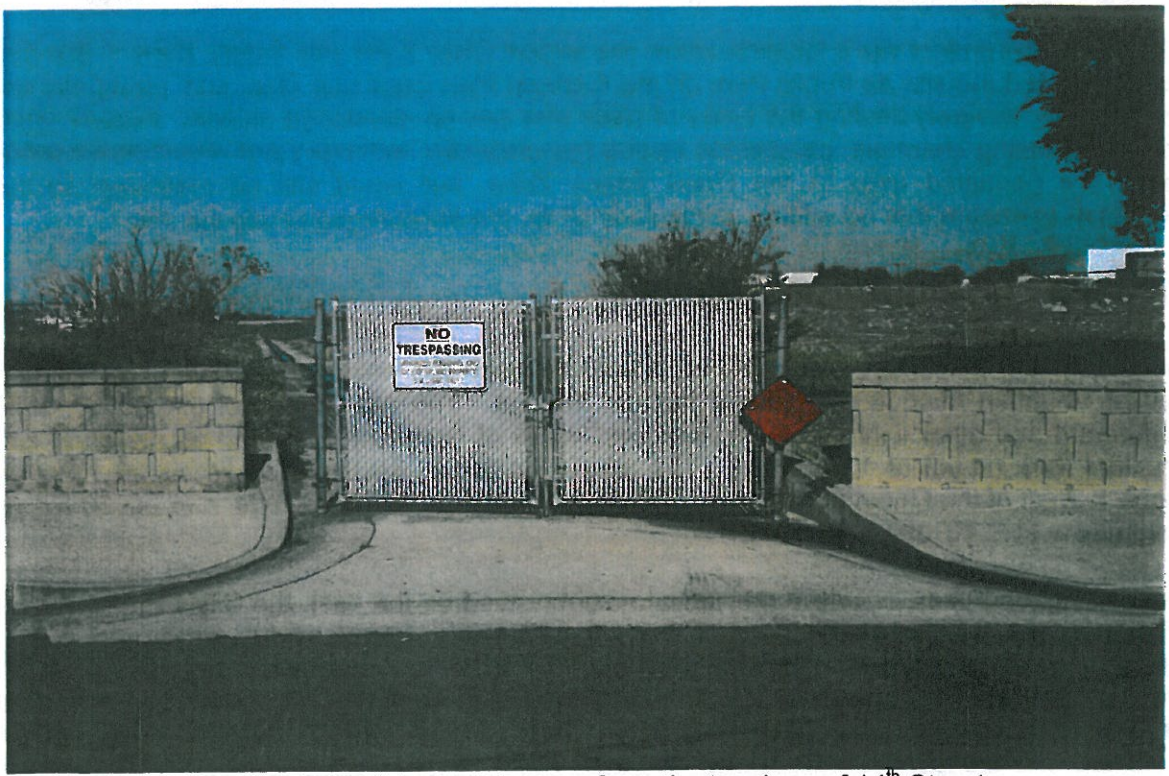
Because of the project site's location within the airport Clear Zone and Safety Zone 1, the City has designated the site as Public Park on the General Plan Land Use Map, and zoned the site Open Space, severely limiting the types of uses that can be developed on-site. Flood control facilities including channels, percolation basins (groundwater recharge) and retention/detention basins are permitted uses in the Open Space Zone, but would still be restricted by the CACALUP to ensure that no wildlife, particularly birds, are encouraged to use the site.

Project Location and Setting

The project site is located in the City of Upland between the westerly terminus of 14th street, west of Mountain Avenue and east of Benson Avenue. The site is north of the City's Public Works yard and other light industrial uses, and south of Greenbelt Park and an existing Light Industrial Park (south of 15th Street). The site is located in Section 2 of Township 1 South, Range 8 West of the Ontario California 1:24000 quad (1981), and at Latitude – 34°06' 50.87" N, Longitude – 117° 40' 39.65" W.

Surrounding land uses include a residential neighborhood on the east, the City's Public Works office and yard on the south, Benson Avenue and Cable Airport on the west, and a light industrial park and the City's Greenbelt Park on the north (between the project site and 15th Street). The west side of Benson Avenue includes a number of non-residential uses including the airport, Holliday Rock's Foothill Plant and Quarry (located between Foothill Boulevard and Baseline), and the San Antonio Creek Channel. The I-210 Freeway is located north of the project site with an interchange at Baseline Avenue west of Benson Avenue.

Photograph 1 14th Street, looking east from cul-de-sac toward Mountain Avenue.



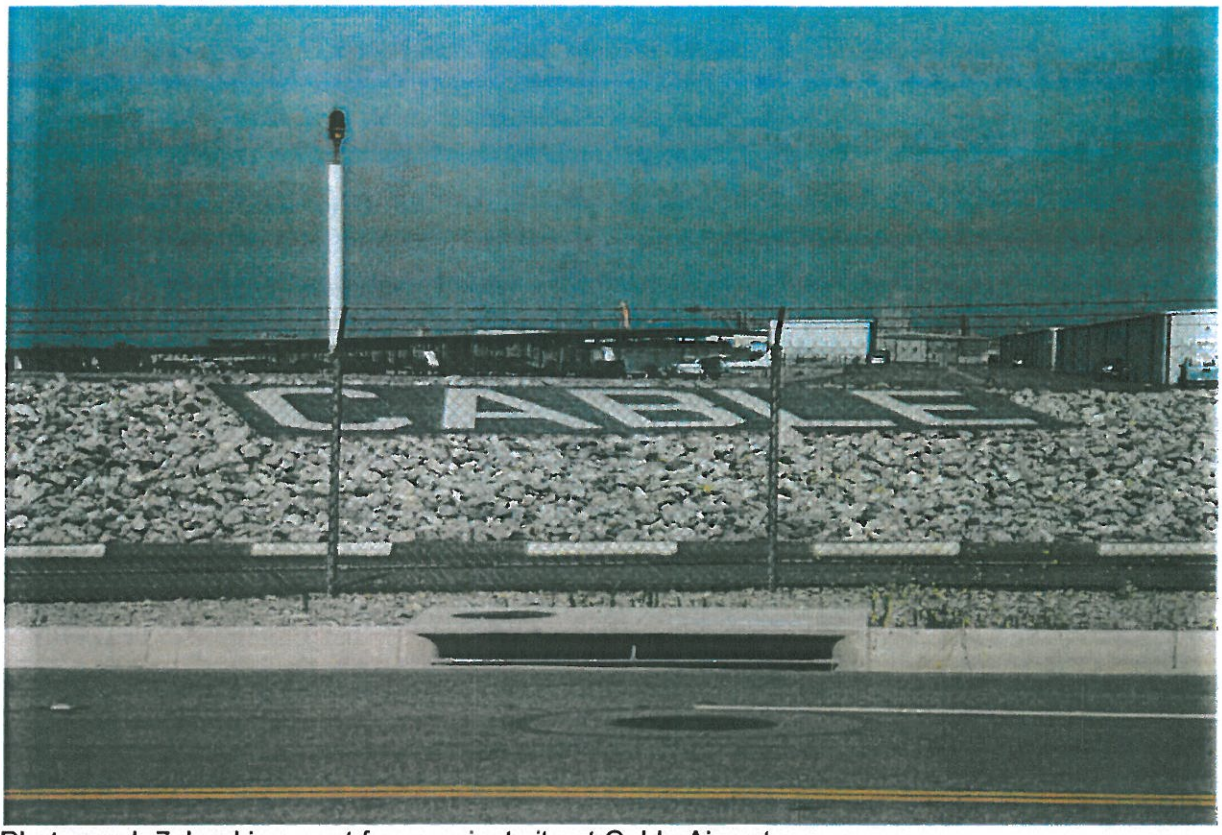
Photograph 2 Looking toward Benson Avenue from the terminus of 14th Street showing drainage onto project site.

Photograph 3 Concrete storm channel across the south side of the project site, looking toward Benson Avenue. Road on the right is the extension of Fairwood Road from Greenbelt Park.

Photograph 4 Looking east toward the 14th Street neighborhood from center of the site. City material stockpiles are shown on the left, drainage from Greenbelt Park is shown to the right.

Photograph 5 Light Industrial Park north of project site. Drainage from Greenbelt Park in foreground.

Photograph 6 Looking south from center of site toward City's Public Works yard.



Photograph 7 Looking west from project site at Cable Airport.

Photograph 8 Plane approaching Cable Airport over the project site.

Photograph 9 Outlet from the southwest corner of the project site into storm drain going to the Holliday Rock Pit west of Benson Avenue.

Photograph 10 Outlet Structure at the southwest corner of the project site.

Chapter 3 Environmental Evaluation

1. **Project Title:** 14th Street Stormwater Collection and Integration Basin Project

2. **Lead Agency Name and Address:**
   City of Upland
   Public Works/Utilities Division
   1370 North Benson Avenue
   Upland, CA 91786

3. **Contact Person and Phone Number:**
   Shaun J. Stone P.E., Principal Utilities Engineer
   (909) 291-2960

4. **Project Location:** The proposed project consists of two new storm drains and a new retention/detention and water quality basin. Storm Drain 1 will be constructed along 14th Street between Mountain Avenue and the new basin east of Benson Avenue. Storm Drain 2 will be constructed along Benson Avenue between 13th Street and the new basin. The basin will be developed on a 12.1-acre site north of the City's Public Works facilities on the east side of Benson Avenue south of 14th Street, and adjacent to the 10-acre Greenbelt Park. ~~The expansion of Greenbelt Park will be southerly of the existing park.~~ The site is located in Section 2 of Township 1 South, Range 8 West of the Ontario California 1:24000 quad (1981) and at Latitude – 34°06' 50.87" N, Longitude – 117° 40' 39.65" W.

5. **Project Sponsor's Name and Address:**
   City of Upland
   Public Works/Utilities Division
   1370 North Benson Avenue
   Upland, CA 91786

6. **General Plan Designation:** Public Park

7. **Zoning:** Open Space

8. **Description of Project** (Describe the whole action involved, including but not limited to, later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary):

   Development of the 14th Street Stormwater Collection and Integration Basin Project and related storm drains is designed to meet the City's *Master Plan for Drainage* requirements on approximately 12.1 acres of area within publicly owned property designated as Public Park and zoned Open Space. New storm drains in 14th Street between Mountain Avenue and the terminus of 14th Street and in Benson Avenue between 13th Street and the project site. See Chapter 2 for details.

9. **Surrounding Land Uses and Setting** (Briefly describe the project's surroundings):

   The project site is located within a site that is designated a Public Park. The land use along

14th Street between Mountain Avenue and Benson Avenue is single family residential. North and south of the project site between 15th Street and 13th Street adjacent land uses are designated as Light Industrial and zoned Light Industrial and developed with a variety of light industrial uses. West of the project site in the west side of Benson Avenue, land uses include the Cable Airport with a General Plan designation and zoning of Airport Industrial. North of the airport land is designated as Open Space and used as part of Holliday Rock's aggregate plant and quarry. South of the Cable Airport, land uses are designated Mixed Use.

10. **Other Public Agencies Who's Approval Is Required** (e.g., permits, financing approval, or participation agreement):

None Identified.

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," as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agricultural and Forest Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology / Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology / Water Quality
☐ Land Use / Planning	☐ Mineral Resources	☐ Noise
☐ Population / Housing	☐ Public Services	☐ Recreation
☐ Transportation / Traffic	☐ Utilities / Service Systems	☐ Mandatory Findings of Significance

ENVIRONMENTAL DETERMINATION

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 revisions in the project have been made by or agreed to by the project proponent. 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 "potentially significant unless mitigated" impact on the environment, but at least one effect 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.

Nancy M. Ferguson

Signature

July 21, 2010
Date

Nancy M Ferguson

Printed Name

Shaun J. Stone, P.E.
Principal Civil Engineer

For

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors, as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   - Earlier Analyses Used. Identify and state where they are available for review.

   - Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   - Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated. A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:

   - the significance criteria or threshold, if any, used to evaluate each question; and

   - the mitigation measure identified, if any, to reduce the impact to less than significant.

ENVIRONMENTAL CHECKLIST

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. **AESTHETICS**. Would the project:				
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				X

Source: City of Upland General Plan Scenic Highways Element (1993); City of Upland General Plan Update, Community Facilities Report; Site Visit June 24, 2010.

Setting

The project site is located in the City of Upland between the westerly terminus of 14th street, west of Mountain Avenue and Benson Avenue. The site is north of the City's Public Works Yard and south of Greenbelt Park and an existing Light Industrial Park (south of 15th Street). Additionally, the project site includes the linear alignments of the two proposed storm drains; 14th Street between Mountain Avenue and the terminus of 14th Street at the project site, and Benson Avenue between the southwest corner of the project site (existing storm drain outlet) and the intersection of 13th Street and Benson Avenue.

Surrounding land uses include a residential neighborhood on the east, the City's Public Works office and yard and other light industrial uses on the south, Benson Avenue and Cable Airport on the west, and a light industrial park and the City's Greenbelt Park on the north (between the project site and 15th Street. The west side of Benson Avenue includes a number of non-residential uses including the airport, Holliday Rock's Foothill Plant and Quarry (located between Foothill Boulevard and Baseline), and the San Antonio Creek Channel. The I-210 Freeway is located north of the project site with an interchange at Baseline Avenue west of Benson Avenue.

The City of Upland is an urban community that is close to built out, with a few vacant undeveloped parcels such as the project site that have special issues. For the project site, the location within the Cable Airport's Clear Zone and Safety Zone 1 limits the types of uses that can be developed at the site. See Section VIII, Hazards, for a discussion of land use restrictions in these zones. The project site is designated Public Park on the General Plan Land Use Map and is zoned as Open Space.

Discussion

a. **Less Than Significant Impact.** Implementation of the proposed project would change the appearance of the project site from a vacant undeveloped site surrounded by a mix of residential and light industrial uses. The site would be developed with a stormwater

basin to a depth of approximately 20 feet below grade, consisting of a ~~forebay~~ water quality/retention basin at depths of up to 20 feet with side slopes of 4:1 (horizontal to vertical) ~~on the eastern portion of the site near the terminus of 14th Street, and a vegetated bioswale (to a depth of 6 feet) on the western portion near Benson Avenue. In addition, enhancements to the project site in the form of walking trail connecting to Greenbelt Park would provide an extension of the existing park.~~ Proposed storm drains in 14th Street and Benson Avenue would be constructed underground so no adverse affect on a scenic vista would occur.

b. **Less Than Significant Impact.** The project site is not located along a scenic highway. There are no scenic resources located on the project site. The project site is vacant undeveloped land with no trees, rock outcroppings, or buildings. The southerly end of the project site is improved with a concrete lined storm channel that begins at the terminus of 14th Street and traverses the site in an east/west direction to an outfall near the southwest corner of the site at Benson Avenue. The center of the project site is used by the City Public Works Department to stockpile material for road improvements including soil, material for roadbase and asphalt. The nearest road to the project site having a "scenic" designation is Benson Avenue from the I-210 Freeway northward to the intersection of Mountain Avenue and 21st Street. The I-210 Freeway is approximately ½ mile north of the project site.

c. **Less Than Significant Impact.** Implementation of the proposed project would change the appearance of the project site from a vacant undeveloped site surrounded by a mix of residential and light industrial uses. The site would be developed with a stormwater basin to a depth of approximately 20 feet below grade, consisting of a ~~forebay~~ basin with a depth of up to 20 feet and 4:1 side slopes. ~~on the eastern portion of the site near the terminus of 14th Street, and a vegetated bioswale on the western portion near Benson Avenue. In addition, enhancements to the project site in the form of walking trail connecting to Greenbelt Park would provide an extension of the existing park.~~ Proposed storm drains in 14th Street and Benson Avenue would be constructed underground so no adverse affect on a scenic vista would occur.

d. **No Impact.** There is no permanent lighting associated with the proposed water quality/drainage improvements. ~~Likewise, improvements associated with walking trail do not include lighting.~~ The project site is minimally affected by ambient lighting from existing light industrial buildings on the north, Greenbelt Park's lighted parking lot adjacent to the project site, the residential neighborhood on the west, and City corporate yard on the south. The proposed water quality improvements would not add to existing lighting in the area.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FOREST RESOURCES. 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. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
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?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

Source: City of Upland General Plan Land Use Map (2005); California Department of Conservation Farmland Mapping and Monitoring Program (FMMP) accessed June 17, 2010; Natural Resources Conservation Service (NRCS) Web Soil Survey accessed June 17, 2010.

Setting

The California Department of Conservation's Farmland Mapping and Monitoring Program FMMP) was accessed to determine whether the project site was identified as prime or unique farmland, or farmland of statewide importance. The project site is located in the City of Upland which is shown on the State of California Department of Conservation Farmland Mapping and Monitoring Program Map, *San Bernardino County Important Farmland Map, 2008* as Urban and Built Up Land. There is no farmland identified within the City of Upland.

Discussion

a. **No Impact.** The project site is located in the City of Upland, identified on the FMMP's *San Bernardino County Important Farmland Map*, as being Urban and Built Up Land.

Therefore there would be no impact to farmland by developing the project site with water quality, groundwater recharge and storm drain improvements.

b. **No Impact**. The project site is designated on the City's General Plan Land Use Map a Public Park and zoned as Open Space. The site is not under a Williamson Act contract.

c. **No Impact**. The proposed project would not conflict with existing zoning for, or cause rezoning of forest land or timberland because the project site is not located in an area near forest or timber land. The project site is designated on the City's General Plan Land Use Map a Public Park and is located in an urban area.

d. **No Impact**. The proposed project would not result in the loss of forest land or conversion of forest land to non-forest use because the project site is located in an urban area.

e. **No Impact**. The proposed project does not involve any changes in the existing environment that could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use because the project site is located in an urban area.

Issues	*Potentially Significant Impact*	*Less Than Significant With Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?				X
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X	
c) 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)?			X	
d) Expose sensitive receptors to substantial pollutant concentrations?			X	
e) Create objectionable odors affecting a substantial number of people?			X	

Source: *SCAQMD CEQA Air Quality Handbook*, 1993; *SCAQMD, Roadway Construction Emissions Model, version 6.3.2*, 2009; *California Air Resources Board*, 2008.

Setting

The City of Upland is located within southern California at the westerly end of San Bernardino County at its boundary with the County of Los Angeles. The region is located in the South Coast Air Basin (SCAB) and falls under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

The City is located in the northeast portion of the SCAB that includes Orange County and portions of Los Angeles, Riverside and San Bernardino counties. The air basin encompasses an area of approximately 6,600 square miles bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino and San Jacinto Mountains to the north and east. The mountains, reaching heights of up to 11,000 feet above mean sea level, impede airflow and slow the transport of air pollutants out of the SCAB.

Climate

The climate in southern California is influenced by the strength and position of the subtropical high-pressure cell over the Pacific Ocean that works to maintain moderate temperatures and humidity, as well as to limit precipitation to storms to the period between November and April.

Temperatures in southern California are normally mild, except the summer months when daytime temperatures in the inland areas can exceed 100°F. . The annual average temperature in the region is approximately 62°F. Winds in the project area are typically driven by the dominant land/sea breeze circulation system. Regional wind patterns are dominated by daytime on-shore sea breezes and nighttime winds that generally slow and change direction to off-shore, moving from the mountains towards the sea.

Regulatory Setting

The air quality management agencies with purview over the SCAB are the U.S. Environmental Protection Agency (EPA), California Air Resources Board (CARB), and SCAQMD. EPA has established federal ambient air quality standards for which CARB and SCAQMD have primary implementation responsibility. CARB and SCAQMD are also responsible for ensuring that state ambient air quality standards are met. SCAQMD is responsible for implementing strategies for the improvement of air quality in the region and recommending mitigation measures for new projects to implement.

A region's air quality is affected primarily by the type and amount of contaminants emitted into the atmosphere, the size and topography of the basin, and meteorological and climatic conditions. State and federal criteria pollutant emission standards have been established for six pollutants: carbon monoxide (CO), ozone (O_3), particulate matter (PM_{10} [particulates 10 microns or less in diameter] and $PM_{2.5}$ [particulates 2.5 microns or less in diameter]), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead (Pb). Within the region, SCAQMD is responsible for ensuring that emission standards are not violated. SCAQMD develops and enforces air quality regulations for non-mobile sources, issues permits, participates in air quality planning, and operates a regional air quality monitoring network.

Federal and State Ambient Air Quality Standards

Existing air quality conditions in the project area can be characterized in terms of the ambient air quality standards that EPA and CARB have established for several different pollutants. For some pollutants, separate standards have been set for different measurement periods. Most standards have been set to protect public health and welfare with an adequate margin of safety. For some pollutants, standards are based on other values such as the avoidance of nuisance conditions. National ambient air quality standards (NAAQS) were first authorized by the federal Clean Air Act of 1970. Air quality is considered in "attainment" if pollutant levels are below or equal to the NAAQS continuously or exceed them no more than once each year. California ambient air quality standards (CAAQS) predate federal standards and were authorized by the state legislature in 1967. Pollution levels must be below the CAAQS before a basin can attain the state standard. California standards are generally more stringent than the national

Table 1
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	---	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 (137 µg/m^3)		0.075 ppm (147 µg/m^3)[8]		
Respirable Particulate Matter (PM_{10})	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation*	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		---		
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	No Separate State Standard		35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation*	15 µg/m^3		
Carbon monoxide (CO)	8 Hour	9 ppm (10mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10mg/m^3)	None	Non-Dispersive Infrared Photometry (NDIR)
	1 Hour	20 ppm (23 mg/m^3)		35 ppm (40 mg/m^3)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		---	---	---
Nitrogen dioxide (NO_2)	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemi-luminescence	---	Same as Primary Standard	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)		
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	---	Ultraviolet Fluorescence	0.030 ppm (80 µg/m^3)	---	Spectrophotometry (Pararosaniline Method)
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (365 µg/m^3)	---	
	3 Hour	---		---	0.5 ppm (1300 µg/m^3)	
	1 Hour	0.25 ppm (655 µg/m^3)		---	--	---
Lead[8]	30 Day Average	1.5 µg/m^3	Atomic Absorption	----	---	---
	Calendar Quarter	---		1.5 µg/m^3	Same as primary Standard	High Volume Sampler and Atomic Absorption
	Rolling 3-Month Ave.[9]	----		0.15 µg/m^3		
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per km – visibility of 10 miles or more due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape		**No Federal Standards**		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography*			
Hydrogen sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[8]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Source: CARB November 17, 2008

1. California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter—PM_{10}, $PM_{2.5}$, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24 hour

standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m3 is equal to or less than one. For $PM_{2.5}$, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.
8. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
9. National lead standard, rolling 3-month average: final rule signed October 15, 2008.

standards. The pollutants of greatest concern in the project area are O_3 and PM_{10}. Federal and state ambient air quality standards are presented in Table 1.

SCAQMD Significance Thresholds

Air quality impacts are usually divided into short-term and long-term. Short-term impacts are usually the result of construction or grading operations. Long-term impacts are associated with the build-out condition of a proposed development project (operational emissions). SCAQMD has established significance thresholds to assess the regional impact of project-related air pollutant emissions. Table 2 shows these significance thresholds. 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 air basin.

Table 2
SCAQMD Regional Pollutant Emission Thresholds of Significance

Pollutant Emissions (lbs/day)	CO	ROG	NOx	PM_{10}	$PM_{2.5}$
Construction	550	75	100	150	55
Operation	550	55	55	150	55

Source: SCAQMD CEQA Air Quality Handbook

Discussion

a. **No Impact.** A project is consistent with the SCAQMD Air Quality Management Plan (AQMP) if it is consistent with the population, housing, and employment assumptions that were used in the development of the AQMP. The proposed project consists of water quality and drainage improvements in the City of Upland to comply with regional stormwater requirements and to increase groundwater recharge in the area. The physical changes to the environment proposed by the project would not result in an increase in population or the number of new permanent residents or new employees in the City of Upland. Because the proposed project would not exceed the population or employment growth values developed by the Southern California Association of Governments (SCAG), pursuant to SCAQMD guidelines, the proposed project is considered consistent with the region's AQMP. The proposed project's related

emissions are accounted for in the AQMP, which was designed to bring the SCAB into attainment for all criteria pollutants.

b. **Less than Significant Impact**. The project site is located within the SCAB under the jurisdiction of the SCAQMD. State and federal air quality standards are often exceeded in many parts of the SCAB. The proposed project would contribute to regional air pollutant emissions during construction (short term) but would generate only incidental emissions during the long term when maintenance of the basin to remove incremental buildup of silt and debris carried on-site in stormwater or urban runoff. This is anticipated to occur approximately once a year. The project's construction activities were screened for criteria pollutants including: ROG, NO_x, CO, PM_{10} $PM_{2.5}$ and carbon dioxide (CO_2) a significant greenhouse gas contributor. Two of these, ROG and NO_x, are ozone precursors. Note: Greenhouse gas is discussed in a separate section of the IS (section VII).

Construction Phase

Construction of the proposed storm drain and basin improvements have the potential to create air quality impacts through the use of heavy-duty construction equipment and the daily commutes of construction workers traveling to and from the project site in their vehicles. Mobile-source emissions, primarily NO_x, would result from the use of construction equipment such as graders, scrapers, bulldozers, wheeled loaders, cranes, etc. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather conditions. The assessment of construction air quality impacts considers each of these potential sources.

Construction Emissions

Construction emissions were calculated based on the parameters set forth in Table 3 and were assumed for a 7-month duration; allowing for overlap of construction between storm drain construction and basin construction, as well as between the basin construction and trail construction. Table 3 describes the project for each phase of construction, the two storm drains and the water quality/drainage regional facility. Construction earthwork emissions are considered short-term, temporary emissions and are estimated in Table 4.

As shown in Table 4 construction emissions are anticipated to be less than significant. This is in part because all projects are required to comply with SCAQMD rules for reducing the generation of short-term air emissions during construction. These are as follows:

- **Fugitive Dust**. SCAQMD Rule 403 requires that fugitive dust be controlled with best available control measures so that dust generated on-site in the short term does not remain visible in the atmosphere beyond the property line. Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site as well. Applicable dust suppression techniques from Rule 403 are included here and their implementation would reduce the fugitive dust generation (and thus the PM_{10} component). Compliance with these rules would reduce impacts on nearby sensitive receptors.

Table 3
Construction by Project Phase

Phase	Location	Description	Duration
A	New storm drain between Mountain Avenue and the western terminus of 14th Street.	Pavement removal 6 feet wide and 2,200 feet in length. Excavation of a 2,200 linear foot trench and short term stockpile of soil. Placement of the new storm drain, and backfill of trench. Repave disturbed area.	3 months
B	New storm drain on Benson Avenue between the southwest corner of the project site and the intersection of 13th Street and Benson Avenue.	Pavement removal 6 feet wide and 1,000 feet in length. Excavation of a 1,000 linear foot trench and short term stockpile of soil. Placement of the new storm drain, and backfill of trench. Repave disturbed area.	1.5 months
C	New water quality/drainage basin on app. 12.1 acres, paving and trail construction, material hauling to Upland Sports Park.	Excavate approximately 150,000 cubic yards of soil from the project site. Construct a perimeter road around the basin and bio-swale,	8 months

Table 4
Construction Emissions for Proposed Improvements
(Pounds per Day)

Activities	**ROG**	**NO_x**	**CO**	**PM_{10}**	**$PM_{2.5}$**
Grubbing/Land Clearing	5.8	51.7	26.3	52.2	12.4
Grading/Excavation	11.3	49.7	128.3	52.3	12.5
Drainage/Utilities/Sub-Grade	4.0	31.5	17.1	51.7	11.9
Paving (repaving roads after backfilling trenches/paving perimeter road)	3.2	17.7	11.5	1.6	1.4
Maximum pounds per day	**11.3**	**51.7**	**128.3**	**52.3**	**12.5**
Regional Threshold	75	55	550	150	55
Significant	**No**	**No**	**No**	**No**	**No**

Source: SCAQMD Road Construction Emissions Model Version 6.3.2.

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Water active sites at least twice daily. (Locations where grading is to occur will be thoroughly watered prior to earthmoving).
- All haul trucks leaving the site to transport material to the Upland Sports Park are to be covered or should maintain at least two feet of freeboard in accordance with the requirements of California Vehicle Code (CVC) section 23114.
- Traffic speeds on-site shall be reduced to 15 mph or less.
- Revegetate disturbed areas as quickly as possible.
- Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph.
- Street sweeping along Benson Avenue, and 14th Street to be determined by the City's project engineer depending on time of year and condition of streets during construction.

- Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash trucks and any equipment leaving the site each trip.
- All on-site roads shall be paved as soon as feasible, watered periodically, or chemically stabilized.
- The area disturbed by clearing, grading, earthmoving, or excavation operations shall be minimized at all times.

- **Other Emissions**. Standard conditions for construction contractors also include the following:
  - The Construction Contractor shall select the construction equipment used on site based on low emission factors and high energy efficiency.
  - The Construction Contractor shall ensure that construction grading plans include a statement that all construction equipment will be tuned and maintained in accordance with the manufacturer's specifications.
  - The Construction Contractor shall utilize electric or diesel powered equipment in lieu of gasoline powered engines where feasible.
  - The Construction Contractor shall ensure that construction grading plans include a statement that work crews will shut off equipment when not in use.

Operation Emissions
SCAQMD has also established significance thresholds to evaluate potential impacts associated with long-term project operations. Long-term air pollutant emissions come from mobile sources, stationary sources, and area sources. Mobile-source emissions are associated with vehicular travel and are a function of the number of vehicle miles traveled (VMT). There is a direct relationship between mobile emissions and VMT; as VMT increases or decreases, so do related air pollutant emissions. However, for the proposed project, mobile sources would be minimal since operation emissions would be limited to maintenance of the facilities which would generally occur one (1) times a year and last approximately three (3) days. Typically a backhoe would be used to perform maintenance.

Examples of major stationary sources are electric power plants, phosphate processing plants, pulp and paper mills, and municipal waste combustors. Minor sources include most asphalt plants, concrete batch plants, and bulk gasoline plants. The proposed project would not generate these types of emissions. Area-source emissions are those air pollutants emitted from many individually small activities, such as gasoline service station operations, small paint shop operations, and consumer use of solvents. Area sources also include open burning associated with agriculture, forest management, and land-clearing activities. With respect to the proposed project, there would be no project-related stationary-source emissions or area-source emissions.

c. **Less than Significant Impact**. The approach for assessing cumulative impacts is based on the AQMP forecasts for attainment of ambient air quality standards in accordance with the requirements of the State and federal Clean Air Acts. As discussed earlier in the response to the question of consistency with the AQMP, the proposed project would be consistent with the AQMP. The Plan is intended to bring the Basin into attainment for all criteria pollutants. Also, as shown in Table 4 the emissions associated with the proposed project would be less than the applicable SCAQMD daily significance thresholds, which are designed to assist the region in attaining the applicable State and

federal ambient air quality standards. Therefore, cumulative impacts would be less than significant.

d. **Less than Significant Impact.** As shown in Table 4, emissions for all criteria pollutants would remain below their respective SCAQMD significance threshold during construction. For the long-term, emissions would be limited to periodic site maintenance of the basin and bio-swale to remove silt and debris transports in stormwater or urban runoff. Therefore, pollutant concentrations at the site would remain less than significant and would not adversely affect sensitive receptors.

e. **Less than Significant Impact.** According to the SCAQMD CEQA air quality handbook, typical land uses associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting sites, refineries, landfills, dairies, and fiberglass molding facilities. The proposed project does not fall into any of these categories. In the short-term during construction, potential sources that may emit odors include grading and asphalt repaving. However, SCAQMD Rule 1108 limits the amount of volatile organic compounds from asphalt paving; mandatory compliance with SCAQMD rules would ensure that no construction activities or materials would be proposed that would create a significant level of objectionable odors.

Issues	*Potentially Significant Impact*	*Less Than Significant With Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
IV. BIOLOGICAL RESOURCES. Would the project:				
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?		X		
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 U.S. Fish and Wildlife Service?			X	
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?				X
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?			X[SJS1]	

Issues	Potentially Significant Impact	Less Than Significant With 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?				X
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?				X

Source: City of Upland, General Plan Update, Natural Environment White Paper January 2010, City of Upland General Plan; site visit June 17, 2010.

Setting

Biological resources are protected by a number of State and federal regulations. Development of undeveloped land such as the project site, whether proposed by a private developer or a city or county agency, must consider such resources in the planning of a proposed project.

Federal Regulations

The Federal Endangered Species Act (FESA) provides a program for the conservation of threatened and endangered plants and animals and the habitats in which they are found. The U.S. Fish and Wildlife Service (USFWS) maintain a list of endangered and threatened species. These species include birds, insects, fish, reptiles, mammals, flowers, grasses and trees. Species with a potential of occurrence within the City of Upland are identified in Table 5. Due to the City of Upland being close to buildout with urban uses, remaining open space areas are limited to the areas adjacent to the San Antonio Creek and Cucamonga Creek drainages, where flood control, aggregate mining and groundwater recharge are the predominant land uses.

The United States Army Corps of Engineers (USACE) operates under Section 404 of the Federal Clean Water Act to regulate the discharge of dredge and fill material into waters of the U.S. This provides the basis for federal regulations of waters of the United States. USACE has established a series of nationwide permits that authorize certain activities in waters of the U.S., provided that a proposed activity can demonstrate compliance with standard conditions. Use of any nationwide permit is contingent on the activities having no impacts to endangered species. USACE has jurisdiction over the San Antonio Creek and Cucamonga Creek drainages because they drain into the Santa Ana River.

State of California

The State of California also provides a similar program under the California Endangered Species Act (CESA) (Fish and Game Code 2050 et seq.) that serves as the State's policy to conserve, protect, restore, and enhance threatened or endangered species and their habitats. Like USFWS, the California Department of Fish and Game (CDFG) also maintains a list of endangered and threatened species.

Table 5
Potential Sensitive Species in the City of Upland

Species	Status Fed/State/CNPS	Habitat	Likelihood of Occurrence in City	Likelihood of Occurrence on Site
Animal Life				
Pallid bat (*Antrozous pallidus*)	None/CSC/-	Roosts in crevices in cliffs, may also roost in buildings and bridges	Moderate, may be found in urbanized areas	Low due to lack of roosting opportunities on site
Burrowing owl (*Athene cunicularia*)	None/CSC/-	Grasslands, coastal sage scrub, open fields	Moderate within flood control facilities and vacant fields	Moderate on the vacant site
Northwestern San Diego pocket mouse (*Chaetodipus fallax*)	None/CSC/-	Grasslands and coastal sage scrub	Moderate within flood control facilities	Low due to lack of habitat on-site
Western mastiff bat (*Eumops perotis californicus*)	None/CSC/-	Roosts in crevices in cliffs, may also roost in buildings	Moderate, may be found in urbanized areas	Low due to lack of roosting opportunities on site
Coastal horned lizard (*Phrynosoma coronatum (blainvillii population)*)	None/CSC/-	Chaparral and coastal sage scrub	Moderate within flood control facilities	Low due to lack of habitat on site
Coastal California gnatcatcher (*Polioptila californica*)	FT/None/-	Coastal sage scrub	Moderate within coastal sage scrub within flood control facilities	Low due to lack of habitat on site
Delhi Sands flower-loving fly (*Rhaphiomidas terminates abdominalis*)	FE/None/-	Delhi sands dunes (wind deposited)	Low due to lack of suitable habitat. Found in areas of Ontario	No habitat for this species
San Diego desert wood rat (*Neotoma lepida intermedia*)	None/CSC/-	Chaparral and coastal sage scrub	Moderate within flood control facilities	Low due to lack of habitat on site
Plant Life				
Prostrate vernal pool navarretia (*Navarretia prostrata*)	None/None/1B.1	Edges of vernal pools, wetland riparian	Low due to lack of suitable habitat. May be extirpated from the area	Low due to lack of suitable habitat.
Lemon lily (Lilium parryi)	None/None/1B.2	Red fir forest, yellow pine forest, wetland-riparian	Low due to lack of suitable habitat	Low due to lack of suitable habitat.
Many-stemmed dudleya	None/None/1B.2	Chaparral and coastal sage	Low due to lack of	Low due to lack of

(*Dudleya multicaulis*)		scrub	suitable habitat	suitable habitat.
Parry's spineflower (*Chorizanthe parryi var. parryi*)	None/None/3.2	Open spaces within chaparral and coastal sage scrub	Moderate within flood control facilities	Low due to lack of suitable habitat.
Nevin's barberry (*Berberis nevinii*)	FE/SE/1B.1	Chaparral, foothill woodland, coastal sage scrub	Moderate within flood control facilities. Found above San Antonio Dam in 1997	Low due to lack of suitable habitat.
Slender mariposa lily (*Calochortus clavatus var. gracilis*)	None/None/ 1B.2	Chaparral	Low due to lack of suitable habitat	Low due to lack of suitable habitat.
Plummer's mariposa lily (*Calochortus plummerae*)	None/None/1B.2	Chaparral, foothill woodland, yellow pine forest, coastal sage scrub, valley grassland	Moderate within flood control facilities.	Low due to lack of suitable habitat.

Notes:

Federal

FE Federally listed, endangered
FT Federally listed, threatened
FPE Federally proposed endangered
FPT Federally proposed threatened
FC Candidate species. Sufficient data are on file to support the federal listing.
FSC Federal species of concern (former C2 and C3 species)

State (CDFG)

SE State listed, endangered
ST State listed, threatened
SCE State candidate endangered
SCT State candidate threatened
SFP State fully protected
SP State protected
CSC California species of special concern

List (CNPS)

List 1A: Plants presumed extinct in California
List 1B: Plants rare, threatened or endangered in California and elsewhere
List 2: Plants rare, threatened or endangered in California, but more common elsewhere
List 3: Plants about which we need more information- a review list
List 4: Plants of limited distribution – a watch list

Source: Federal (USFWS); California Native Plant Society (CNPS) List.

The State Fish and Game Code Section 1600 requires that all jurisdictions notify CDFG prior to any project which would divert, obstruct or change the natural flow or bed, channel or bank of any river, stream, or lake. Any proposed changes would require the approval of a Streambed Alteration Agreement between CDFG and the project proponent. CDFG uses a broad definition to determine whether Section 1600 applies to a proposed project. Areas such as earthen channels with limited vegetation may also be subject to a Streambed Alteration Agreement.

CDFG also administers Sections 2080 and 2081 of the State Fish and Game Code. Section 2080 states that no person shall take, possess, purchase, or sell within California, any species, or any part or product thereof, that the Fish and Game Commission determines to be an endangered or threatened species, or attempt any of those acts, except as otherwise provided in this chapter, the Native Plant Protection Act (see below), or the California Desert Native Plants Act (not applicable to the proposed project). Under Section 2081 CDFG may authorize individuals or public agencies to import, export, take, or possess, any State-listed endangered, threatened, or candidate species.

CDFG manages the Natural Community Conservation Planning (NCCP) Program, designed to conserve multiple species and their habitats, while also providing for the compatible use of private land. Through local planning, the NCCP process protects wildlife and habitat before the landscape becomes so fragmented or degraded by development that listings are required under the FESA. The County of San Bernardino has not adopted a Multi-species Habitat Conservation Plan for the Valley Region which includes the City of Upland. The City, being close to buildout with urban uses, also does not have an adopted habitat conservation plan. The majority of the land in the City zoned as open space is used for aggregate mining, flood control facilities, groundwater recharge, or a combination of these uses. Therefore, natural habitat is virtually nonexistent in the City of Upland.

The Native Plant Protection Act includes measures to preserve, protect, and enhance rare and endangered native plants. The definition of "rare and endangered" differs from those contained in CESA. However, the list of native plants afforded protection pursuant to this act includes those listed as rare and endangered under the CESA. The project site is routinely mowed as part of the City's weed abatement program. Photographs in Chapter 2 Project Description show existing conditions on the project site.

Finally, the Migratory Bird Treaty Act (MBTA) protects all common wild birds found in the U.S. except the nonnative house sparrow, starling, feral pigeon, and resident game birds such as pheasant, grouse, quail and wild turkey. The MBTA makes it unlawful for anyone to kill, capture, collect, possess, buy, sell, trade, ship, import or export any migratory bird including feathers, parts, nests or eggs. Additionally, it is unlawful to take, possess or needlessly destroy the nest or eggs of any bird that is protected under the MBTA. Furthermore, it is unlawful to disturb the nests of birds during nesting season. Impacts to nesting and migratory birds are analyzed in a site-specific manner in the process regulated by the California Environmental Quality Act (CEQA).

California Natural Diversity Database Results

The Natural Environment White Paper prepared for the City's General Plan Update includes a list of species found in CDFG's California Natural Diversity Database (CNDDB) within the vicinity of the City of Upland. These are listed in Table 5. Biological resources are protected by a number of State and federal regulations. Development of undeveloped land such as the project site, whether proposes by a private developer or a city or county agency, must consider such resources in the planning of a proposed project.

Existing Conditions
The project site is routinely mowed as part of the City's weed abatement program. The southerly portion of the site is traversed by a concrete storm channel with side slopes and adjacent land planted with landscaped vegetation. Urban runoff from Greenbelt Park runs through a natural channel across the project site and joins the concrete channel to outlet to the storm drain under Benson Avenue. The center of the site is used by the City Public Works Department to store stockpiles of roadbase, asphalt and other construction materials and is accessed by an unpaved access road that runs between the Public Works Yard to the south and the center of the project site. In addition, there is an asphalt access road that extends from the parking lot a Greenbelt Park to the north, through to the center of the project site.

Discussion

a. **Less than Significant Impact With Mitigation Incorporated**. The proposed project would not 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 CDFG or USFWS with the exception of the burrowing owl (*Athene cunicularia*). The species has no special status under FESA but is considered a California species of special concern (CSC).

   Grasslands, agricultural fields, and other open habitats associated with vacant land characterized by low or sparse vegetation are suitable habitat for the burrowing owl. The burrowing owl is a migratory bird species protected by the MBTA and is also protected by Section 3503 of California Fish and Game Code. There is suitable habitat on site for the species and as the species is highly mobile, focused surveys should be conducted prior to construction of the 14th Street Stormwater Collection and Integration Basin Project to determine presence or absence of this species.

   The following mitigation measures would reduce potential impacts to the burrowing owl, if they are found to occupy the project site, to a less than significant level:

   BIO-1 Focused surveys for the burrowing owl shall be conducted by a qualified biologist to determine presence/absence of this species on-site. The survey shall be conducted during the appropriate breeding season (February 1 to August 31) and/or within 30 days prior to the commencement of grading activities. If it is determined that the site is occupied, Mitigation Measure BIO-2 shall apply. Otherwise, Mitigation Measure BIO-2 would not be required.

   BIO-2 Any burrowing owls identified on-site shall be relocated by a qualified biologist prior to the commencement of grading activities. The relocation of any individuals shall be conducted per applicable CDFG and/or USFWS procedures. Relocation of on-site burrowing owls shall not be permitted during the nesting season for this species.

b. **Less Than Significant Impact**. The proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community. The project site includes two drainage features that will be incorporated into the new water quality/drainage facility and continue to outlet into the existing drain beneath Benson Street. The site is disturbed by a number of man-made features including the concrete channel that conveys storm water and urban runoff from 14th Street across the site to Benson Avenue, the access road across the site that begins at the Greenbelt Park

parking lot, the stockpiles of road maintenance materials and bins, and the road connecting the Public Works yard to the center of the site where the stockpiles are located. In addition, the routine mowing associated with the City's weed abatement program have virtually eliminated any opportunity for a sensitive natural community to be present on-site. This is typical of most urban infill sites where urban infrastructure must be connected and weed abatement must be routinely conducted to reduce the incidence of grass fires to occur.

c. **Less Than Significant Impact** Due to the disturbance of the project site, the proposed 14th Street Stormwater Collection and Integration Basin Project would not result in 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. This is because the existing man-made drainages on site would be incorporated into the proposed drainage facilities and flow onto and off the site would continue through the existing storm drain in Benson Street. Additional storm flow and urban runoff would occur with the storm drain connection to Mountain Avenue that would allow the facility to accept flows from Mountain Avenue north of 14th Street. However, these flows would be directed into the retention/detention basin where an opportunity will be created for groundwater recharge. The outflow from the basin, above the amount that can percolate into the groundwater basin would continue to flow out through the existing storm drain beneath Benson Avenue and flow to the existing basin in the Holliday Pit. The new storm drain between the project site and 13th Street (approximately one block) would flow to the existing Upland Basin south of Foothill Boulevard.

   The project site is not under the jurisdiction of the USACE and the basin where stormwater and urban runoff are currently directed (Holliday Pit) does not outlet to a USACE facility. The proposed storm drain in 14th Street between Mountain Avenue and the project site will take storm water and urban runoff from Mountain Avenue north of 14th Street and route it into the new basin for retention/detention and groundwater recharge. The existing basin would not require any modification in order to accept this additional flow. Likewise the proposed storm drain on Benson Avenue would also be used to route storm water and urban runoff into an existing storm drain system at the intersection of Benson Avenue and 13th Street, a length of approximately 1,000 linear feet. Runoff would be routed to the Upland Basin where it would be detained and used for groundwater recharge. The Upland Basin is an existing basin that would not require any modification in order to accept this additional flow. The proposed water quality/detention basin would include a set of gates to control storm water to allow water to be sent either to the Holliday Pit or the Upland Basin. When one basin has less capacity, storm water would be routed to the other, giving the City increased capacity to store storm water for groundwater recharge.

d. **Less Than Significant Impact**. Development of the project site with a regional detention/retention basin, and construction of the two new storm drains would not 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. This is because the City of Upland is close to urban buildout and there are no significant wildlife corridors within the City with the exception of the San Antonio Creek and Cucamonga Creek drainages. See response "a" above for a discussion of the burrowing owl and proposed mitigation.

e. **No Impact.** The City of Upland does not have any local policies or ordinances protecting biological resources, such as such as a tree preservation policy or ordinance. Therefore, implementation of the proposed project would have no adverse impact.

f. **No Impact.** The proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan because neither the City of Upland nor the County of San Bernardino have adopted a Habitat Conservation Plan.

Issues	*Potentially Significant Impact*	*Less Than Significant With Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
V. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?				X
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	
d) Disturb any human remains, including those interred outside of formal cemeteries?			X	

Source: City of Upland General Plan (1993).

Setting

The City of Upland was founded in 1882 and incorporated in 1906. The City grew outward from its core along Euclid Avenue over time but development on the west side of the City was slow to occur, and was mainly focused on the Foothill Boulevard corridor area. The Cable family began construction of the airport in the 1940's and aggregate mining in along the San Antonio drainage started a short time later. The project site has not been previously developed due to its location within the airport's Clear Zone and Safety Area 1 (see Section VIII Hazards for a discussion of the airport and the site's proximity to the runway. There are no historic resources on site, and because of its location atop recent alluvium, it is unlikely that archaeological or paleontological resources would be found on-site.

Discussion

a. **No Impact.** The proposed project would not cause a substantial adverse change in the significance of a historical resource because the project site does not contain any historic resources. The site has not been previously developed. The 14th Street alignment for the proposed storm drain has been previously developed as a residential street, including the development of underground utilities. Likewise, the alignment for the Benson Street storm drain is located in a developed area where no historic resources are located.

b. **No Impact.** The proposed project would not cause a substantial adverse change in the significance of an archaeological resources. The site is highly disturbed by mowing as part of the City's weed abatement program, and is traversed by existing storm drains, access roads and material stockpiles. The 14th Street alignment for the proposed storm

drain has been previously developed as a residential street, including the development of underground utilities. Likewise, the alignment for the Benson Street storm drain is located in a developed area where no historic resources are located.

c. **No Impact**. The project area is located within an area of recent surficial alluvium that is unlikely to contain any paleontological specimens. No fossil deposits are known to exist in the project area based on over 50 years of aggregate mining immediately west of Benson Avenue at the Holliday Rock Plant and Quarry site.

d. **Less than Significant Impact**. There is no evidence in the record that the project site has been used for religious or sacred purposes, and no evidence that would suggest that the project site has been used for human burials. Section 7050.5 of the California Health and Safety Code states that if human remains are discovered on the site, no further disturbance shall occur until the County Coroner has made a determination of origin and disposition. As adherence to State regulations is required for all development, no mitigation measures are required in the unlikely event that human remains are discovered on the project site. Impacts associated with the disturbance of human remains are considered less than significant.

Issues	*Potentially Significant Impact*	*Less Than Significant With Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
VI. GEOLOGY AND SOILS. Would the project:				
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? Refer to Division of Mines and Geology Special Publication 42.				X
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?			X	
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?				X
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?				X

Issues	Potentially Significant Impact	Less Than Significant With 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 waste water?				X

Source: City of Upland General Plan Seismic Safety – Safety Element (1993); Natural Resources Conservation Service, Custom Soil Resource Report for san Bernardino County Southwestern Part, 14th Street Water Quality Basin, June 2010; Upland Crossing Draft EIR Geology and Soils Section, 2006.

Setting

The City of Upland is located in the seismically active southern California region with the San Jose, Cucamonga/Sierra Madre, Chino, and San Andreas faults being the nearest active faults in the region. The San Jose fault is the closest in proximity; it is a northeast/southwest trending fault that enters the City from the southwest and bisects the Holliday Rock Plant and Quarry site directly west of the project site. The Cucamonga/Sierra Madre fault is approximately 1.0 mile to the northwest of the project site; the Chino fault is approximately 10 miles to the south, and San Andreas fault is approximately 16 miles northeast. The most likely hazard to persons and property would result from ground shaking during a seismic event.

The project site is made up of alluvial material that is classified as Soboba Stony Loamy Sand (SpC) and Soboba Gravelly Loamy Sand (SoC). These soils are excessively drained and open space areas in the vicinity of the project site are used for both flood control and groundwater recharge because of these soil characteristics.

Discussion

a.i **No Impact**. The proposed project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map. The project site is not located in an earthquake fault zone as defined by the California Geological Survey.

a.ii **Less than Significant Impact**. The project site would be exposed to strong seismic ground shaking. However, because there are no habitable structures proposed as part of the project, impacts to people and habitable structures would not occur. Strong shaking may effect, the structure of the basin ~~forebay~~, however, this is expected to be a less than significant effect because the basin will be constructed by excavating the native soil and would not be lined with any material that could crack or otherwise fail during a seismic event. The basin's side slopes would be developed at 4:1.

a.iii **Less than Significant Impact**. Liquifaction is not an issue at the site or local vicinity because the soils are alluvial and excessively drained.

a.iv **No Impact**. The project site does not have hills or other topographic features that would slide in the event of an seismic event. Sideslopes in the ~~forebay and bio-swale~~ basin would be 4:1~~either 2:1 or 3:1~~, and any sliding of the sideslopes would be internal to the basin.

b. **Less Than Significant Impact.** The proposed project would not result in substantial soil erosion as the City would construct the basin and related infrastructure in compliance with the Stormwater Pollution Prevention Plan (SWPPP) prepared for the project that would identify typical best management practices for the control of erosion and sediment transport from the site. Any project involving grading of an area greater than one acre is required to apply for an NPDES permit from the Regional Water Quality Control Board (RWQCB). This permit requires the implementation of a SWPPP. A Best Management Practices (BMP) Program, as required by the RWQCB, would be prepared as part of the SWPPP.

Loss of topsoil is part of the proposed project as the basin is intended to be constructed to a depth of approximately 20 feet ~~and the vegetated bio-swale to a depth of approximately 6 feet~~. Excavated soil will be transports approximately one mile north to the Upland Sports Park Site on 16th Street (Baseline).

c. **No Impact.** The project site is not located on a geologic unit or soil unit that is unstable, or that would become unstable as a result of the project. The project site is made up of alluvial material that is classified as Soboba Stony Loamy Sand (SpC) and Soboba Gravelly Loamy Sand (SoC). These soils are excessively drained and open space areas in the vicinity of the project site are used for both flood control and groundwater recharge because of these soil characteristics. No habitable structures are proposed as part of the project, so no significant impacts would occur.

d. **No Impact.** The project site is underlain with alluvial material that is not considered an expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994).

e. **No Impact.** There are no septic tanks or alternative waste water disposal systems proposed as a part of the project.

Issues	*Potentially Significant Impact*	*Less Than Significant With Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
VII. GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Source: . SCAQMD, Roadway Construction Emissions Model, version 6.3.2, 2009

Setting

Global climate change is caused by an accumulation of greenhouse gases in the atmosphere. The California State Legislature adopted AB 32, the California Global Warming Solutions Act of 2006, which focuses on reducing greenhouse gas emissions in California. Greenhouse gases, as defined under AB 32, include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. AB 32 requires CARB to adopt rules and regulations that would achieve greenhouse gas emissions equivalent to statewide levels in 1990 by 2020.

Discussion

a. **Less Than Significant Impact.** As shown in Table 4 (see Section III, Air Quality) construction emissions associated with the proposed storm drain and basin improvements are anticipated to be less than significant. Table 6 shows the greenhouse gases contribution from carbon dioxide (CO_2) a significant greenhouse gas contributor. As shown, construction of the improvements would be less than significant.

Table 6
Construction Emissions for Greenhouse Gases

	CO_2
Basin and Storm Drain Construction	4,890
Maximum Total (lbs/day)	4,890
Total (lbs/year)[1]	**NA**
Total MTCO2e[2] /year (or duration of project)	300.5
Threshold	**10,000**[3]
Significant	No

Source: SCAQMD Roadway Construction Emissions Model, version 6.3.2
[1] 7 month duration, 21 days per month
[2] California Climate Action Registry General Reporting Protocol, 2009
[3] Interim SCAQMD thresholds of 10,000 $MTCO_2E$/year

b. **Less Than Significant Impact**. The proposed project does not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases since the project would result in improvements the City's storm water and urban runoff control system and increase the opportunity for groundwater recharge in the City.

Issues	*Potentially Significant Impact*	*Less Than Significant With Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
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?				X
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X

Issues	Potentially Significant Impact	Less Than Significant With 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?				X
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?			X	
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?			X	
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
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?				X

Source: State Department of Toxic Substance Control (DTSC), Hazardous Waste and Substance Site List, accessed June 21, 2010. Cable Airport Comprehensive Airport Land Use Plan (CACALUP), 1981, Federal Aviation Administration, Circular 15/5300-13, Airport Design, 1989.

Setting

The project site is an undeveloped 12.1-acre site located on the east side of Benson Avenue directly east of the Cable Airport. The airport is a private general aviation airport that is used by light planes and helicopters, as well as small jets and emergency rescue services that utilize the helipads on the approach end (Runway 24). The main runway is positioned northeast to southwest and the approach to the runway is over the project site. Therefore, potential uses of the project site are very restricted. Along 14th Street, the proposed alignment of the storm drain from Mountain Avenue to the project site is currently a residential neighborhood. Along Benson Street, the proposed alignment is within the existing road right-of-way.

The project site is disturbed with a number of manmade features including the concrete storm channel that begins at the terminus of 14th Street and crosses the south side of the site to an outlet structure at Benson Avenue. There is also an access road that runs southerly from Greenbelt Park to the north, then parallels the concrete storm channel until about the center of the site where it ends at an area that the City Public Works Department uses for storage of road material including asphalt, sand and gravel. There is also an unpaved road that leads from the Public Works yard northerly to the center of the site to access the stockpiles.

Discussion

a. **No Impact.** The proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials because the project is limited to the construction, operation and maintenance of a water quality and regional drainage system. Transport of material would consist of hauling excavated soil to the Upland Sports Park site approximately one mile north of the project site; materials for the construction of the basin and bio-swale, and materials for the construction of the two storm drains. During the lifetime of the project, no hazardous materials are likely to be required during operation and maintenance. Transport would generally be limited to the removal of any soils that have been transported into the basin which would be hauled to another site for disposal.

b. **No Impact.** The proposed project would not 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. No hazardous materials are associated with the operation and maintenance of the proposed project.

c. **No Impact.** The proposed project is a water quality/regional drainage facility that would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste.

d. **No Impact.** The project site does not appear on the Department of Substance Control (DTSC) Hazardous Waste and Substance Site List (database accessed June 21, 2010 www.envirostor.dtsc.ca.gov).

e. **Less Than Significant Impact** The project site is located on the east side of Benson Avenue across the street from the Cable Airport, a privately owned general aviation airport. The airport has an adopted airport land use plan. The westerly 1/3 of the project site is located within the airport's Clear Zone (extreme crash hazard) and the easterly 2/3 is located within the airport's Safety Zone 1 Area (significant crash hazard). Land uses are limited in both of these zones. In the Clear Zone, uses are limited to open space and agricultural uses as long as they do not generate smoke or attract birds. In the Safety Zone 1 Area, land uses are limited to structures of less than 75 feet that do not attract large concentrations of people, do not emit electronic interference or produce glare or smoke that could endanger aircraft. The project consists of storm drains and water quality facilities~~and a pedestrian trail around the site that would be connected to Greenbelt Park.~~ The project does not include any uses that would generate smoke, create glare, or create an opportunity for a large concentration of people. There is a potential for the detention basin ~~and bio-swale~~ to attract birds, however, the City will take special precautions in the design of the facilities to ensure that birds are not attracted to the site. Percolation tests conducted for the proposed project showed that on-site soil was capable of percolating at five inches per hour, assuming sod was planted at the bottom of the basin, so a 72-hour drain period during/after a storm event can be easily achieved. Likewise, urban runoff would percolate at the same rate so that there would be no standing water in the basin outside storm events. No trees or other attractive vegetation will be planted that would attract birds to nest on-site.

f. **No Impact** Cable Airport is a private airport. There is no private airstrip located in the vicinity of the project site.

g. **Less Than Significant Impact.** The proposed project would not result in a measureable increase in traffic in the vicinity, nor would additional access points be required that could interfere with emergency responses. Access to the project site would be limited to existing access points. Upon completion of construction, vehicle access would be limited to maintenance vehicles. Residents ~~using the walking trail~~ would continue to access the site from the existing parking lot at Greenbelt Park or enter from the 14th Street neighborhood; as they currently do. Signs will be posted warning people that the site is in the airport's Safety Zone.

h. **No Impact.** The project site is a vacant undeveloped site that is surrounded by residential and light industrial uses, and Greenbelt Park to the north. To the west across Benson Avenue are the Cable Airport and Holliday Rock Foothill plant and quarry site. No wildland fires are likely to occur in the vicinity due to an absence of fuels such as trees, scrub and grasses. Once the project site has been developed, grasses currently kept in check through a weed abatement program would be replaced by the basin and landscaping associated with the vegetated bioswale and landscaping associated with the walking trail.

Issues	*Potentially Significant Impact*	*Less Than Significant With Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
IX. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements?			X	
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)?				X
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 a substantial erosion or siltation on- or off-site.			X	
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?			X	
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?			X	
f) Otherwise substantially degrade water quality?				X

Issues	Potentially Significant Impact	Less Than Significant With 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?				X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
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?				X
j) Inundation by seiche, tsunami, or mudflow?				X

Source: City of Upland General Plan, 1993, City of Upland Draft Master Plan for Drainage, 2010; WDRs for the County San Bernardino and the Incorporated Cities… Order No. R8-2010-0036; National Oceanic and Atmospheric Administration Local Climate Data website accessed June 21, 2010 (www.srcc.dri.edu).

Setting

Drainage

The Project site is located on a broad, coalescing alluvial fan associated with the San Antonio Creek drainage system on the west and the Cucamonga Creek drainage system on the east that emanate from the San Gabriel Mountains to the north. The southern California region is characterized by hot dry summers and cool wet winters with an average rainfall in the City of Upland of 11 inches, mostly falling between November and April, but with an occasional thunderstorm during summer months.

According to the *Draft Master Plan for Drainage*, the City of Upland slopes at an average of 3 percent in the northern half of the City and at average of 2.5 percent in the southern half. The City is approaching buildout with only the drainages that form the City's east and west boundaries and a handful of small infill properties still undeveloped. The drainages are used for aggregate mining, flood control and groundwater recharge. The major north-south streets act as the main flow paths for storm flows especially where there are no underground storm drains.

The drainage divide between San Antonio Creek and Cucamonga Creek runs from the northern foothills of the San Gabriel Mountains to the southern City boundary. The construction of the I-210 Freeway significantly altered the historic drainage patterns in the City resulting in the need for the City to revisit its system of storm drains and retention/detention basins. The drainage divide is now as follows: along the eastside of Mountain Avenue from the northern foothills south to the I-210 Freeway then shifting to an irregular alignment approximately 500 to 700 feet west of Mountain Avenue from the I-210 Freeway southerly to the I-10 Freeway.

The local drainage patterns and tributary areas are divided into three drainage tributary areas: 1) North Upland, north of the I-210 Freeway and the northern 1/3 of the City; 2) West Upland, south of the I-210 Freeway and west of Mountain Avenue; and 3) West Cucamonga, south of the I-210 Freeway and east of Mountain Avenue to the City boundary easterly to Cucamonga Creek. These tributary areas are further divided into sub-areas. North Upland is divided into Northwest Upland and Northeast Upland. Northwest Upland and West Upland are associated

with the San Antonio Watershed while Northeast Upland and West Cucamonga Channel are associated with the Cucamonga Creek Watershed. Figure 2 shows the watershed boundaries and flood control basins in the City.

The project site is located in the West Upland tributary sub-area which is further divided into two sub-areas with basin outfalls; these are subareas 3 and 4. Sub-area 3 (approximately 240 acres, is located south of the I-210 Freeway and north of 14th Street and drains into the Holliday Pit, an active aggregate mine site also referred to as the Blue Diamond Pit. Blue Diamond was the original owner of the aggregate mine site. Sub-area 4 (approximately 405 acres) is located south of 14th Street and includes several drainage systems along Benson Avenue, 11th Street, Arrow Highway and Dewey Boulevard that drain to the Upland Basin. Because of the location of the project site, south of 14th Street east of Benson Avenue the proposed water quality and drainage facilities could drain to either the Holliday Pit or the Upland Basin.

Water Quality
The City of Upland Public Works Department is currently updating the *Master Plan for Drainage, Stormwater Water Collection and Conservation System* in order to comply with the recently adopted Waste Discharge Requirements (WDRs) for the County of San Bernardino and the incorporated cities within the County that are located within the Santa Ana Regional Water Quality Control Board's jurisdiction (Order No. R8-2010-0036, NPDES No. CAS618036). The WDRs are also referred to as the Area-wide Urban Storm Water Runoff Management Program, San Bernardino County MS4 Permit.

Groundwater
The City of Upland is in a unique situation with two drainages flanking the east and west boundaries of the City. Both the San Antonio Creek drainage area and the Cucamonga Creek drainage area are used for aggregate mining that creates deep quarry areas that can be used for flood control and groundwater recharge. In the San Antonio drainage area, there are a series of percolation basins (Six Basins) that are shown in Figure 2. An additional basin identified on the graphic as the Blue Diamond pit but now referred to as the Holliday Pit (the current owner of the quarry). Farther south near Arrow Highway is the Upland Basin used for flood control and groundwater recharge.

Discussion

a. **No Impact** The proposed project would not violate any water quality standards or waste discharge requirements. The City of Upland has prepared a Draft Master Plan for Drainage -as the implementation plan to satisfy the WDRs for the City as a co-permiittee along with the County of San Bernardino and the other incorporated cities in the County that are within the Regional Water Quality Control Board Santa Ana Region.

b. **No Impact.** The proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge. The project is being designed to capture storm flows and urban runoff into a basin that would allow the water to percolate into the groundwater basin below. Any additional runoff would be routed to the existing storm drain system in Benson Avenue and routed to either the Holliday Pit or Upland Basin. The project will increase the amount of storm water recharged to the ground water basins.

c. **Less Than Significant Impact.** The proposed project would not substantially alter the existing drainage pattern of the site or area. The project is being designed to capture existing flows from 14th Street and Greenbelt Park as they currently cross the

project site. In addition, the new storm drain in 14th Street has been designed to divert storm flows and urban runoff from Mountain Avenue north of 14th Street and convey them into the new basin. The combined flows would be detained/retained on site to percolate into the groundwater basin through a water quality system to ensure that urban pollutants do not enter the groundwater. The water quality/detention basin system will be connected to the existing storm drain system on Benson Avenue that outlets to the Holliday Pit west of Benson Avenue. A new storm drain will also be constructed in Benson Avenue to connect to the existing storm drain south of 13th Street to route flows south to the Upland Basin for recharge. Erosion of the site would be prevented through the design of the facilities. Siltation that may occur as storm flows and urban runoff enter the basin would be captured and routinely removed from the site.

d. **Less Than Significant Impact**. The proposed project would not substantially alter the existing drainage pattern of the site or area, which would result in an increased rate or amount of surface runoff in a manner which would result in flooding on- or off-site. See response "c" above. The project reduces the impact of flood waters on downstream areas

e. **Less Than Significant Impact**. See response :"c" above.

f. **No Impact**. The proposed project is designed to improve both water quality and groundwater recharge.

g. **No Impact**. The proposed project does not include a housing component. In addition, the City of Upland is located outside the 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map.

h. **No Impact**. The proposed project does not include a housing component. In addition, the City of Upland is located outside the 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map.

i. **No Impact**. The proposed project is a combined flood control and groundwater recharge project. Therefore, implementation would not 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.

j. **No Impact**. The project site is surrounded by properties developed with urban uses (residential, light industrial, neighborhood park, airport). The site is not located in an area near a body of water that would be effected by a seismic event.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
X. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?				X
b) 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?			[SJS2]	X
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?			[SJS3]	X

Source: City of Upland General Plan Land Use Map (2005), Zoning Map (2007); Cable Airport CALUP, 1981.

Setting

The project site is located on the west side of the City of Upland between Mountain Avenue and Benson Avenue. From Mountain Avenue west to the terminus of 14th Street into the project site, the area is residential. One of the two proposed storm drains will be constructed in the 14th Street right-of-way to convey stormwater from Mountain Avenue north of 14th Street. The area along Benson Avenue between the southwest corner of the project site and the intersection of 13th Street is characterized by light industrial uses along Howard Access Road. Cable Airport is located on the west side of Benson Avenue and the project site is part of the approach to the airport's main runway. To the north of the project site is a light industrial area and Greenbelt Park. Access to the project site on the east is at the cul-de-sac on 14th Street, Fairwood Way on the north provides access to the site through Greenbelt Park from 15th Street, on the south access is from the City's Public Works yard, and on the west by a driveway on Benson Avenue.

Discussion

a. **No Impact**. The project site is a vacant undeveloped site surrounded by Greenbelt Park and light industrial uses on the north, a residential neighborhood to the east along 14th Street, and light industrial land uses on the south, including the City's Public Works yard. Across Benson Avenue are the Cable Airport and Holliday Rock's Foothill Plant and Quarry. The development of the two storm drains and the water quality/drainage facility ~~and the walking trail to connect the site to Greenbelt Park~~ would not result in the physical division of a community.

b. **No Impact**. The project site is designated on the General Plan Land Use Map as Public Park and is zoned as Open Space. The 14th Street Stormwater Collection and Integration Basin Project is a permitted use in an Open Space zone. The proposed project is consistent with the Cable Airport CALUP because it does not include any habitable structures that would allow people to congregate in large numbers. With regard to the possibility of attracting birds to the facility, the City will design the project so that no trees or other vegetation will be planted that would allow birds to be attracted to the site to nest. ~~Likewise, vegetation of the bio-swale will be limited and will be designed to minimize the attraction of birds~~.

c. **No Impact**. The proposed project would not conflict with any applicable habitat conservation plan or natural community conservation plan. The project site is highly disturbed and does not contain habitat for any threatened or endangered species. There is suitable habitat on on-site for the burrowing owl, a California species of concern. The City will adhere to the CDFG requirements to survey the site prior to any grading or other site disturbance and to relocate any individuals that may be found on site (see Section IV Biological Resources for these mitigation measures.

Issues	*Potentially Significant Impact*	*Less Than Significant With Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XI. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?			X	
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?			X	

Source: City of Upland General Plan Open Space and Conservation Element (1993), California Geological Survey, Update of Mineral Land Classification for Portland Cement Concrete – Graded Aggregate in the Claremont-Upland Production –Consumption Region, Los Angeles and San Bernardino Counties, California (2007); Custom Soil Resource Report for San Bernardino County Southwestern Part, California ,14th Street Water Quality Basin (2010).

Setting

The City of Upland is in a unique situation located atop an alluvial fan created by deposition of material from the two drainages flanking the east and west boundaries of the City; the San Antonio Creek drainage area and the Cucamonga Creek drainage area. The area north of Foothill Boulevard is within a Mineral Resources Zone-2 (MRZ-2); areas where geologic data indicate that significant Portland Cement Concrete (PCC) grade aggregate resources are present. The area west of Benson Avenue is further located in Sector B-1, designated by the State Mining and Geology Board as containing regionally significant PCC-grade aggregate resources. East of Benson in the vicinity of the project site is not a part of the sector. Although soils on the project site exhibit the similar characteristics as the west side of Benson Avenue.

Discussion

a. **Less Than Significant Impact**. Implementation of the proposed project would not result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state. The proposed project is the development of a water quality/regional drainage facility on a 12.1-acre site surrounded by urban development. However, the proposed improvements would not preclude mining the aggregate resource at a future date. Although, given the size of the project site and surrounding land uses, it is highly unlikely that the site would be mined. Adequate supplies of aggregate material still exist in the City of Upland both west of Benson Avenue and on the east side of the City in the Cucamonga Creek drainage area.

b. **Less Than Significant Impact**. See discussion in Item a above.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. NOISE. Would the project result in:				
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?			X	
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
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?				X
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?				X

Source: City of Upland General Plan Noise Element (1993); City of Upland Municipal Code, Chapter 9, Public Peace and Welfare.

Setting

The project site is an undeveloped 12.1-acre site located on the east side of Benson Avenue directly east of the Cable Airport, storm drain improvements on West 14th Street and Benson Avenue. The airport is a private general aviation airport that is used by light planes and helicopters. The main runway is positioned northeast to southwest and the approach to the runway is over the project site. The project site is surrounded by urban development including a residential neighborhood to the east, light industrial uses and Greenbelt Park to the north, and light industrial uses, including the City's Public Works yard, to the south. The ambient noise environment during the site visit was typical of a vacant lot adjacent to a residential neighborhood.

Title 9 Public Peace and Welfare, of the Upland Municipal Code includes the City's Noise Ordinance (Chapter 9.4). The Noise Ordinance establishes base ambient noise levels in decibels within the respective times and zones as shown in Table 7.

Table 7
Base Ambient Noise Levels for the City of Upland

Decibels	Time	Zone Use
45 dB(A)	10 pm to 7 am	Residential
55 dB(A)	7 am to 10 pm	Residential
65 dB(A)	Anytime	Uses not Specified
75 dB(A)	Anytime	Industrial and Commercial

Source: Section 9.40.040 Base Ambient Noise Levels

Maximum noise levels are then measured on the exterior of residential property and no noise level should be exceeded for the duration periods specified in Table 8.

Table 8
Maximum Permissible Exterior Noise Levels

Noise Level Exceeded	Maximum Duration Period
Base ambient noise level (BANL)	30 minutes in any hour
5 dB(A) above BANL	15 minutes in any hour
10 dB(A) above BANL	5 minutes in any hour
15 dB(A) above BANL	1 minutes in any hour
20 dB(A) above BANL	Not permitted

Source: Section 9.40.070 Maximum Residential Noise Levels

Table 9 provided a list of typical construction equipment and the A-weighted sound level (dBA) at 50 feet from the source.

Table 9
Typical Construction Equipment and
A-weighted Sound Level (dBA) 50 Feet from the Source

Equipment	Sound Level at 50 feet (approximate)
Front Loader	75 – 85
Backhoe	75 - 95
Tractor	75 – 95
Grader	75 – 95
Paver	85 – 95
Truck	70 – 95
Concrete Mixer	75 – 90
Generator	70 – 85
Jackhammer	75 - 100

Source: Handbook of Noise Control, 1979

Discussion

a. **Less-than-Significant Impact.** During site grading and construction of the basin ~~and bio-swale,~~ and construction of the new storms drains in 14th Street and Benson Avenue, there would be short-term periodic increases in noise levels in excess of standards established in the City's Noise Ordinance (Chapter 9.4 Unnecessary Noise). For the Benson Avenue storm drain, short-term construction noise would be generated intermittently throughout the work day for approximately 6 weeks while equipment is used to break up the asphalt, dig the trench, install the storm drain and backfill and

repave the street. Along Benson Avenue between the project site and 13th Street, there are no residential uses and fronts of the buildings along Benson Avenue are located between 70 and 100 feet east of the edge of pavement, including the City's Public Works Department building and yard. At the end of construction, no noise would be associated with the operation or maintenance of the Benson Avenue storm drain. Intermittent noise from construction may be a nuisance for short intervals during the work day, but would not result in the exposure for extended Periods. Therefore, this short-term impact would be less than significant.

The land use along 14th Street between Mountain Avenue and the terminus of 14th Street at the project site is residential. During construction of the 14th Street storm drain short-term construction noise would be generated intermittently throughout the work day for approximately 12 weeks while equipment is used to break up the asphalt, dig the trench, install the storm drain and backfill and repave the street. Because the storm drain is a linear project, noise generated during construction would be perceived in varying degrees depending on the receptors proximity to the equipment. Hours of construction would be limited to normal working hours as set forth in the conditions of approval for the project.

The 12.1-acre site where the detention/retention basin and bio-swale will be developed is located between the western terminus of 14th Street (cul-de-sac) and Benson Avenue. The east side of the site is within 50 feet of residences on 14th Street. The remaining adjacent properties are either vacant, or developed with light industrial uses. Benson Avenue forms the site's western boundary. On the north side of the project site, buildings are separated from the property boundary by a drive isle and parking. Greenbelt Park is also separated from the project site by the existing buildings and a parking lot. The south side of the site consists of vacant land and the City's Public works yard. Construction of the basin and swale will take 5 months (rough grading approximately 4 months and precise grading approximately 1 month). Landscaping and ~~trail system~~ perimeter road around the facility would take approximately 2 months to complete. Development of the ~~trail system~~ perimeter road can be done concurrently during the latter months of basin construction so it is likely that combined, the length of construction of the basin and trail would be 6 months. Upon completion of construction, there is no increase in noise associated with operation and maintenance of the project except for those times when the basin is cleaned out (removal of silts, sand and other material that is brought on-site by storm water and urban runoff. This would likely to be limited once a year and likely be done by a backhoe. Therefore, impacts associated with the generation of temporary noise would be less than significant.

b. **Less-than-Significant Impact.** See discussion in Item a above.

c. **Less-than-Significant Impact**. The proposed project would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project because once construction is complete, generation of noise would be limited to those times when the basin is undergoing maintenance to remove accumulated material transported by storm water and urban runoff.

d. **Less-than-Significant with Mitigation Incorporated.** See discussion under Items a and c above.

e. **No Impact**. The project site is located within the Cable Airport Comprehensive Airport Land Use Plan, however, there are no residences or other habitable structures proposed to be developed on the project site. Therefore, there would be no impact to future residents or working people.

f. **No Impact.** See discussion under Item e above.

Issues	*Potentially Significant Impact*	*Less Than Significant With Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XIII. POPULATION AND HOUSING. Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

Source: State of California Department of Finance, Table 2: E-4 Populations Estimates., May 2009.

Setting

The project site is located in the City of Upland, whose 2009 population estimate was approximately 75,000 people, and is close to buildout. The remaining undeveloped land is generally associated with the San Antonio Creek and Cucamonga Creek drainages that define the east and west boundaries of the City. The western 1/3 of the project site is located within the runway approach (Clear Zone) of the Cable Airport where land uses are severely restricted. No habitable structures are permitted within the Clear Zone. The eastern 2/3 of the project site is located within Safety Zone 1 where land uses are restricted to those that would not generate large numbers of people to live and work.

Discussion

a. **No Impact.** The project site is surrounded by urban development including residential to the west, light industrial uses to the north and south, and the Cable Airport on the west. Development of the project site with flood control and groundwater recharge facilities would not induce any population growth in the City.

b. **No Impact.** The project site is currently vacant undeveloped land.

c. **No Impact.** The project site is currently vacant undeveloped land.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for 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:				
a) Fire protection?				X
b) Police protection?				X
c) Schools?				X
d) Parks?				X
e) Other public facilities?				X

Source: None.

Setting

The project site is a vacant undeveloped property, surrounded by urban development including residential to the east, light industrial uses to the north and south, and the Cable Airport on the west. Greenbelt Park is also located on the north side of the project site. The 14th Street storm drain alignment is through an existing residential neighborhood and the Benson Avenue alignment is along that street between the project site and 13th Street. Currently the project site does not have an impact on public services.

Discussion

a-e. **No Impact**. Development of the project site with flood control and groundwater recharge facilities would not require additional public services beyond existing services provided in the vicinity, because no new residential or commercial uses that normally require such services are associated with the proposed project.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. RECREATION.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
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?				X

Source: None.

Setting

The project site is located adjacent to Greenbelt Park a neighborhood park that provides three lighted ball fields, barbeques and picnic tables. Access to Greenbelt Park on Fairwood Way

also provides access to the project site. The project site is used by residents for walking and walking their pets.

Discussion

a. **No Impact.** The proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities because there are no habitable structures proposed for the site that would generate additional residents or others to the area. ~~The proposed project includes an element that would maintain the connection between the site and Greenbelt Park with a walking trail around the perimeter of the basins~~.

b. **No Impact.** See discussion under Item a above.

Issues	*Potentially Significant Impact*	*Less Than Significant With Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XVI. TRANSPORTATION/TRAFFIC. Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?				X
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?				X
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?			X	
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
e) Result in inadequate emergency access?				X
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				X

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Result in inadequate parking capacity? (OPTIONAL: Removed from 2010 CEQA Guidelines.)				X

Source: Site visits June 16 and June 24, 2010.

Setting

The project site is accessible from 14th Street via a locked gate over the concrete channel that drains the street. From the north, access is from Fairwood Way that extends from 15th Street southerly across the site then easterly parallel to the concrete channel to approximately the center of the site. From the south the site is accessed directly from the City's Public Works yard. From the west, along Benson Avenue there is a driveway curb cut approximately 250 feet north of the southwest corner of the site.

Discussion

a-b. **No Impact**. Once construction is complete, no additional traffic is associated with the proposed project. When maintenance of the basins is required, access would be through the Public Works yard as is currently done. Therefore, the proposed project would not conflict with an applicable traffic plans or programs.

c. **Less Than Significant Impact**. The proposed project would not 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. This is because no structures of significant height are proposed for the project site. The two storm drains will be underground. The basin will be at grade and up to 20 feet deep. Safety fencing of the basins is unlikely to be higher than 4.5 feet. The basins will be designed to minimize attraction of birds to the site.

d. **No Impact**. The proposed project would not substantially increase hazards due to a design feature because no new external roads are associated with the flood control/groundwater recharge project.

e. **No Impact**. The proposed project would not result in inadequate emergency access, existing access points will not change and no new access points are proposed.

f. **No Impact**. The proposed project would not conflict with adopted policies, plans, or programs regarding alternative modes of transportation because there are no land uses proposed that would generate any new residents or workers to the site.

g. **No Impact**. The proposed project would not result in inadequate parking capacity. No parking is proposed as part of the project. Access to the site for maintenance would continue to be through the Public Works yard where adequate parking exists behind the building. Residents wishing to use the walking trail can access it through Greenbelt Park where adequate parking currently exists. Residents can also walk to the site as they do currently.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. UTILITIES AND SERVICE SYSTEMS. Would the project.				
a) Exceed waste water treatment requirements of the applicable Regional Water Quality Control Board?			X	
b) Require or result in the construction of new water or waste water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
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?			X	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed?				X
e) Result in a determination by the waste water 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?				X
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				X
g) Comply with federal, state, and local statutes and regulations related to solid waste?				X

Source: City of Upland, Draft Master Plan for Drainage, 2010; Waste Discharge Requirements for the San Bernardino County Flood Control District..., January 2010.

Setting

The Project site is located on a broad, coalescing alluvial fan associated with the San Antonio Creek drainage system on the west and the Cucamonga Creek drainage system on the east that emanate from the San Gabriel Mountains to the north. The southern California region is characterized by hot dry summers and cool wet winters with an average rainfall in the City of Upland of 11 inches, mostly falling between November and April, but with an occasional thunderstorm during summer months.

According to the *Draft Master Plan for Drainage*, the City of Upland slopes at an average of 3 percent in the northern half of the City and at average of 2.5 percent in the southern half. The City is approaching buildout with only the drainages that form the City's east and west boundaries and a handful of small infill properties still undeveloped. The drainages are used for aggregate mining, flood control and groundwater recharge. The major north-south streets act as the main flow paths for storm flows especially where there are no underground storm drains.

The drainage divide between San Antonio Creek and Cucamonga Creek runs from the northern foothills of the San Gabriel Mountains to the southern City boundary. The construction of the I-210 Freeway significantly altered the historic drainage patterns in the City resulting in the need for the City to revisit its system of storm drains and retention/detention basins. The drainage divide is now as follows: along the east side of Mountain Avenue from the northern foothills south to the I-210 Freeway then shifting to an irregular alignment approximately 500 to 700 feet west of Mountain Avenue from the I-210 Freeway southerly to the I-10 Freeway.

The local drainage patterns and tributary areas are divided into three drainage tributary areas: 1) North Upland, north of the I-210 Freeway and the northern 1/3 of the City; 2) West Upland, south of the I-210 Freeway and west of Mountain Avenue; and 3) West Cucamonga, south of the I-210 Freeway and east of Mountain Avenue to the City boundary easterly to Cucamonga Creek. These tributary areas are further divided into sub-areas. North Upland is divided into Northwest Upland and Northeast Upland. Northwest Upland and West Upland are associated with the San Antonio Watershed while Northeast Upland and West Cucamonga Channel are associated with the Cucamonga Creek Watershed. Figure 2 shows the watershed boundaries and flood control basins in the City.

The project site is located in the West Upland tributary sub-area which is further divided into two sub-areas with basin outfalls; these are subareas 3 and 4. Sub-area 3 (approximately 240 acres, is located south of the I-210 Freeway and north of 14th Street and drains into the Holliday Pit, an active aggregate mine site also referred to as the Blue Diamond Pit. Blue Diamond was the original owner of the aggregate mine site. Sub-area 4 (approximately 405 acres) is located south of 14th Street and includes several drainage systems along Benson Avenue, 11th Street, Arrow Highway and Dewey Boulevard that drain to the Upland Basin. Because of the location of the project site, south of 14th Street east of Benson Avenue the proposed water quality and drainage facilities could drain to either the Holliday Pit or the Upland Basin.

Water Quality
The City of Upland Public Works Department is currently updating the Master Plan for Drainage, in order to comply with the recently adopted Waste Discharge Requirements (WDRs) for the County of San Bernardino and the incorporated cities within the County that are located within the Santa Ana Regional Water Quality Control Board's jurisdiction (Order No. R8-2010-0036, NPDES No. CAS618036). The WDRs are also referred to as the *Area-wide Urban Storm Water Runoff Management Program, San Bernardino County MS4 Permit*.

Groundwater
The City of Upland is in a unique situation with two drainages flanking the east and west boundaries of the City. Both the San Antonio Creek drainage area and the Cucamonga Creek drainage area are used for aggregate mining that creates deep quarry areas that can be used for flood control and groundwater recharge. In the San Antonio drainage area, there are a series of percolation basins (Six Basins) that are shown in Figure 2. An additional basin identified on the graphic as the Blue Diamond pit but now referred to as the Holliday Pit (the current owner of the quarry). Farther south near Arrow Highway is the Upland Basin used for flood control and groundwater recharge.

Discussion

a and b. **No Impact.** The proposed project would not result in an exceedance of waste water treatement requirements or require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, because there is no development project that would create the need for water supply or

wastewater treatment associated with the project.

c. The City is in the process of completing a Master Plan of Drainage. Generally the focus of a drainage master plan is limited to strategies for providing flood protection. However, the City has seized on an opportunity to develop a plan that will provide strategies for an integrated storm water system that combines the need to provide flood protection for residents and property with the need to recharge the underlying groundwater basins while ensuring and enhancing water quality storm water runoff and urban drainage flow (irrigation overflow). The 14th Street Stormwater Collection and Integration Basin Project is part of the City's strategy. Because the City is urban and close to build out, opportunities for storm water retention/detention are limited by the lack of undeveloped land that could be used for retention/detention. The project site, with its location in close proximity to existing groundwater recharge basins, provides the City with the opportunity to create a dual function system.

The City's goal is to capture as much rain storm runoff as possible and convey it to retention/detention basins where it will infiltrate into the aquifer basins for future use. Therefore, the City's approach to compliance with the WDRs is two-fold, that is, to capture and convey stormwater into integrated stormwater capture and retention facilities to control flooding and to maximize water recharge to local groundwater basins. The approximately 12.1-acre project site has been identified as a possible additional basin that would be used as a Water Quality Basin and Retention/Detention Basin. Currently flows from 14th Street and Greenbelt Park are conveyed across the site to the southwest corner of the site at Benson Avenue where they are conveyed through a culvert to the Holliday Pit on the west side of Benson, immediately north of the Cable Airport.

d. **Less Than Significant Impact**. During construction, water trucks would be used for fugitive dust control. The source would be the City's water supply and would be a short term use. During operation stormwater and urban runoff would be directed to the basins through storm drains and percolate into the groundwater basin. The site would not be landscaped except for the bio-swale which would be fed by the stormwater and urban runoff. The trail system will be developed with a xeriscape plant palette as a demonstration to the community, what such a landscape would look like. Therefore impacts to the water supply would be less than significant.

e. **No Impact**. The proposed project would not require any wastewater treatment because no habitable structures are proposed as part of the project.

f and g **No Impact**. The proposed project will not generate any significant amount of solid waste that would adversely impact landfill capacity because there are no habitable structures associated with the project.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.				
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?		X		
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.)			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

Discussion

a. **Less Than Significant Impact With Mitigation Incorporated.** The project does not 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. The project site does contain habitat for the burrowing owl (*Athene cunicularia*). The species has no special status under FESA but is considered a California species of special concern (CSC). Grasslands, agricultural fields, and other open habitats associated with vacant land characterized by low or sparse vegetation are suitable habitat for the burrowing owl. The burrowing owl is a migratory bird species protected by the MBTA and is also protected by Section 3503 of California Fish and Game Code. There is suitable habitat on site for the species and as the species is highly mobile, focused surveys should be conducted prior to construction of the 14th Street Stormwater Collection and Integration Basin Project to determine presence or absence of this species.

Mitigation measures identified in the Biological Resources section of this Initial Study would reduce impacts to the burrowing owl to less than significant levels, if they are found to occupy the project site.

The proposed project would not cause a substantial adverse change in the significance of any historical or archaeological resources. The site contains no

habitable structures. The site is also highly disturbed by mowing as part of the City's weed abatement program, and is traversed by existing storm drains, access roads and material stockpiles. The 14th Street alignment for the proposed storm drain has been previously developed as a residential street, including the development of underground utilities. Likewise, the alignment for the Benson Street storm drain is located in a developed area where no historic resources are located.

b. **Less Than Significant Impact.** The proposed 14th Street Water Quality/Drainage Facility project would not generate impacts that are individually limited, but cumulatively considerable. This is because the proposed project consists of improvements to a 12.1-acre undeveloped site within an urban setting that will result in additional flood control and groundwater recharge opportunities for the City of Upland.

c. **Less Than Significant Impact.** The proposed 14th Street Stormwater Collection and Integration Basin Project would not result in environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. This is because the proposed project will provide a dual beneficial use of flood control and groundwater recharge. ~~with the added benefit of a more formalized walking trail around the site. Currently residents use the site for walking and exercising their pets~~.

Chapter 4 References

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