

Appendices

Appendix H Water Quality Management Plan

Appendices

This page intentionally left blank.

Project Specific Conceptual Water Quality Management Plan

For: **Rancho San Gorgonio**

Generally between Westward, Sunset, Smith Creek and San Gorgonio Avenue,
in Banning, CA

DEVELOPMENT NO. RANCHO SAN GORGONIO – N/A
DESIGN REVIEW NO. DESIGN REVIEW NO. N/A

Prepared for:

Rancho San Gorgonio, LLC
10621 Civic Center Drive
Rancho Cucamonga, CA 91730
Telephone: 909-481-1150

Prepared by:

Madole & Associates, Inc.

9302 Pittsburgh Avenue Suite 230
Rancho Cucamonga, CA 91730



Aaron Skeers, P.E.

Encompass Associates, Inc.

5699 Cousins Place
Rancho Cucamonga, CA 91737
Telephone: 909-684-0093



WQMP Preparation/Revision Date: January 26, 2015

OWNER'S CERTIFICATION

This project-specific Conceptual Water Quality Management Plan (WQMP) has been prepared for:

Rancho San Gorgonio, LLC
by Madole & Associates, Inc., and Encompass Associates, Inc.

for the project known as Rancho San Gorgonio at Generally between Westward, Sunset, Smith Creek and San Gorgonio Avenue, in Banning, CA.

This WQMP is intended to comply with the requirements of the City of Banning, CA for Rancho San Gorgonio, LLC, which includes the requirement for the preparation and implementation of a project-specific WQMP.

The undersigned, while owning the property/project described in the preceding paragraph, shall be responsible for the implementation of this WQMP and will ensure that this WQMP is amended as appropriate to reflect up-to-date conditions on the site. This WQMP will be reviewed with the facility operator, facility supervisors, employees, tenants, maintenance and service contractors, or any other party (or parties) having responsibility for implementing portions of this WQMP. At least one copy of this WQMP will be maintained at the project site or project office in perpetuity.

The undersigned is authorized to certify and to approve implementation of this WQMP. The undersigned is aware that implementation of this WQMP is enforceable under City of Banning, CA Water Quality Ordinance (Municipal Code Section 13.24).

If the undersigned transfers its interest in the subject property/project, the undersigned shall notify the successor in interest of its responsibility to implement this WQMP.

"I, the undersigned, certify under penalty of law that I am the owner of the property that is the subject of this WQMP, and that the provisions of this WQMP have been reviewed and accepted and that the WQMP will be transferred to future successors in interest."

ATTEST

Owner's Signature

Owner's Printed Name

Owner's Title/Position

Date
Rancho San Gorgonio, LLC
10621 Civic Center Drive
Rancho Cucamonga, CA 91730
909-481-1150

Notary Signature

Printed Name

Title/Position

Date

January 26, 2015

THIS FORM SHALL BE NOTARIZED BEFORE ACCEPTANCE OF THE
FINAL PROJECT SPECIFIC WQMP

Contents

<u>SECTION</u>	<u>PAGE</u>
Contents	i
I. Project Description	1
II. Site Characterization	5
III. Pollutants of Concern	6
IV. Hydrologic Conditions of Concern	7
V. Best Management Practices.....	8
V.1 SITE DESIGN AND TREATMENT CONTROL BMPs	8
V.1.A SITE DESIGN BMPs.....	10
V.1.B TREATMENT CONTROL BMPs	15
V.1.C MEASUREABLE GOAL SUMMARY	17
V.2 SOURCE CONTROL BMPs	18
V.3 EQUIVALENT TREATMENT CONTROL ALTERNATIVES.....	20
V.4 REGIONALLY-BASED TREATMENT CONTROL BMPs.....	20
VI. Operation and Maintenance Responsibility for BMPs	21
VII. Funding	24

TABLES

TABLE 1. POLLUTANT OF CONCERN SUMMARY	6
TABLE 2. BMP SELECTION MATRIX BASED UPON POLLUTANT REMOVAL EFFICIENCY ⁽¹⁾	9
TABLE 3. IMPLEMENTATION OF SITE DESIGN CONCEPTS	11
TABLE 4. SITE DESIGN BMPs MEETING THE MEASUREABLE GOAL IN WQMP SECTION 3.5.1.1	14
TABLE 5: TREATMENT CONTROL BMP SUMMARY	16
TABLE 6: MEASUREABLE GOAL SUMMARY	17
TABLE 7. SOURCE CONTROL BMPs	18

APPENDICES

A. CONDITIONS OF APPROVAL	
B. VICINITY MAP, WQMP SITE PLAN, AND RECEIVING WATERS MAP	
C. SUPPORTING DETAIL RELATED TO HYDRAULIC CONDITIONS OF CONCERN (IF APPLICABLE)	
D. EDUCATIONAL MATERIALS	
E. SOILS REPORT (IF APPLICABLE)	
F. SITE DESIGN AND TREATMENT CONTROL BMP SIZING CALCULATIONS AND DESIGN DETAILS	
G. AGREEMENTS – CC&Rs, COVENANT AND AGREEMENTS AND/OR OTHER MECHANISMS FOR ENSURING ONGOING OPERATION, MAINTENANCE, FUNDING AND TRANSFER OF REQUIREMENTS FOR THIS PROJECT-SPECIFIC WQMP	
H. PHASE 1 ENVIRONMENTAL SITE ASSESSMENT – SUMMARY OF SITE REMEDIATION CONDUCTED AND USE RESTRICTIONS	

I. PROJECT-SPECIFIC WQMP SUMMARY DATA FORM

I. Project Description

Project Owner: Rancho San Gorgonio, LLC
10621 Civic Center Drive
Rancho Cucamonga, CA 91730
Telephone: 909-481-1150

WQMP Preparer: Aaron Skeers, P.E.
5699 Cousins Place
Rancho Cucamonga, CA 91737
Telephone: 909-684-0093

Project Site Address: Generally between Westward, Sunset, Smith Creek and San Gorgonio Avenue, in Banning, CA.

Planning Area/
Community Name/
Development Name: Rancho San Gorgonio

APN Number(s):

537-150-005	537-190-003	537-190-022	537-200-037	543-040-001
537-150-005	537-190-004	537-200-031	537-200-038	543-040-002
537-150-007	537-190-005	537-200-032	543-020-021	543-050-001
537-170-002	537-190-018	537-200-033	543-021-001	543-050-002
537-170-003	537-190-019	537-200-034	543-021-002	543-050-003
537-190-001	537-190-020	537-200-035	543-021-023	537-190-016
537-190-002	537-190-021	537-200-036	543-030-004	

Thomas Bros. Map: p721 G4 (2006)
Project Watershed: Whitewater River
Sub-watershed: 719.31 Smith Creek

Project Site Size: 831 acres

Standard Industrial Classification (SIC) Code: 6512-Commercial/Retail
6513-Multi-family Residential
6514-Single-family Residential

Formation of Home Owners' Association (HOA)
or Property Owners Association (POA): Y ☒ N ☐

Additional Permits/Approvals required for the Project:

AGENCY	Permit required
State Department of Fish and Wildlife, 1601 Streambed Alteration Agreement	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
State Water Resources Control Board, Clean Water Act (CWA) Section 401 Water Quality Certification	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
US Army Corps of Engineers, CWA Section 404 permit	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
US Fish and Wildlife, Endangered Species Act Section 7 biological opinion	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
Other <i>(please list in the space below as required)</i>	

Rancho San Gorgonio is a master planned community proposed in the city of Banning, California, comprising approximately 831 acres. The site is south of Interstate 10, generally situated between Sunset Avenue and San Gorgonio Avenue, south of Westward Avenue. A portion of the property is in unincorporated Riverside County, and will be annexed into the city limits as part of the development process.

A mix of residential properties is proposed, in a variety of lot sizes, and including multi-family residences. Numerous parks are planned throughout, with amenities anticipated to include community buildings, picnic areas, and athletic fields.

On-going activities at the site are expected to include typical residential uses, including residential parks, play fields, and equestrian facilities, with typical activities including exterior landscape and hardscape maintenance. There are no anticipated hazardous waste-generating activities anticipated, nor any other detrimental tasks such as commercial car wash, food preparation or outdoor work areas.

Provisions proposed to enhance storm water runoff quality start with the various creeks being maintained in their natural state. Montgomery Creek will be collected and conveyed via a storm drain system through the project, but will discharge into a large detention/infiltration basin prior to confluencing with Smith Creek. Secondly, an extensive network of parks and greenways are proposed which will receive runoff from lot and street areas. Thirdly, pervious pavement will be used to the extent feasible in common area parking areas. Finally, prior to site runoff discharging to the existing natural creeks, runoff will be routed through infiltration basins that will be designed to promote percolation of runoff into the regional groundwater basin. Per the project soils report, the historic water table is between 375 and 475 feet below the surface, and was not encountered in site borings which extended to 50 feet. Therefore, the ground water table will not impact the performance of the detention/infiltration basin.

NOTE: Throughout this conceptual WQMP, “SEE FINAL” is used to indicate information or detail that is not readily available at this preliminary stage of development, or requires a final, planning-area specific site plan in order to properly respond or elaborate. For each distinct phase of construction or planning area development, a specific Final WQMP will be prepared for those particular improvements.

Appendix A of this project-specific WQMP includes a complete copy of the final Conditions of Approval. Appendix B of this project-specific WQMP includes:

- a. A Vicinity Map identifying the project site and surrounding planning areas in sufficient detail to allow the project site to be plotted on Permittee base mapping; and
- b. A Site Plan for the project. The Site Plan included as part of Appendix B depicts the following project features:
 - Location and identification of all structural BMPs, including Treatment Control BMPs.
 - Landscaped areas.
 - Paved areas and intended uses (i.e., parking, outdoor work area, outdoor material storage area, sidewalks, patios, tennis courts, etc.).
 - Number and type of structures and intended uses (i.e., buildings, tenant spaces, dwelling units, community facilities, recreation facilities, tot lots, etc.).
 - Infrastructure (i.e., streets, storm drains, etc.) that will revert to public agency ownership and operation.

- Location of existing and proposed public and private storm drainage facilities (i.e., storm drains, channels, basins, etc.), including catch basins and other inlets/outlet structures. Existing and proposed drainage facilities should be clearly differentiated.
- Location(s) of Receiving Waters to which the project directly or indirectly discharges.
- Location of points where onsite (or tributary offsite) flows exit the property/project site.
- Proposed drainage area boundaries, including tributary offsite areas, for each location where flows exit the property/project site. Each tributary area should be clearly denoted.
- Pre- and post-project topography.

Appendix I to the SWMP is a one page form that summarizes pertinent information relative to this project-specific WQMP.

II. Site Characterization

Land Use Designation or Zoning: Residential (Various Densities)

Current Property Use: Vacant (rangeland)

Proposed Property Use: Residential (Various Densities)

Availability of Soils Report: Y ☒ N ☐ *Note: A soils report is required if infiltration BMPs are utilized. Attach report in Appendix E.*

Phase 1 Site Assessment: Y ☒ N ☐ *Note: If prepared, attached remediation summary and use restrictions in Appendix H.*

Receiving Waters for Urban Runoff from Site

Receiving Waters	303(d) List Impairments	Designated Beneficial Uses	Proximity to RARE Beneficial Use
Smith Creek	None	N/A	N/A
San Geronio River	None	MUN, AGR, GWR, REC I, REC II, COLD, WILD	N/A (4 Miles)
Whitewater River	None	MUN, AGR, GWR, REC I, REC II, WARM, COLD, WILD, POW	N/A (11 Miles)
Coachella Valley Storm Water Channel	Pathogens, Toxaphene	FRSH, REC I, REC II, WARM, WILD, RARE	37 Miles

III. Pollutants of Concern

Table 1. Pollutant of Concern Summary

Pollutant Category	Potential for Project	Causing Receiving Water Impairment
Bacteria/Virus	✓	Coachella Valley SWC
Heavy Metals	✓	
Nutrients	✓	
Pesticides	✓	Coachella Valley SWC
Organic Compounds	✓	
Sediments	✓	
Trash & Debris	✓	
Oxygen Demanding Substances	✓	
Oil & Grease	✓	
Other (specify pollutant):		
Other (specify pollutant):		

IV. Hydrologic Conditions of Concern

Local Jurisdiction Requires On-Site Retention of Urban Runoff:

- Yes ☒ The project will be required to retain urban runoff onsite in conformance with local ordinance (See Table 6, Permittees Requiring Onsite Retention of Stormwater, of the Whitewater River Region WQMP). This section does not need to be completed.
- No ☐ This section must be completed.

This Project meets the following condition:

- ☐ **Condition A:** Runoff from the Project is discharged directly to a publicly-owned, operated and maintained MS4; the discharge is in full compliance with Permittee requirements for connections and discharges to the MS4 (including both quality and quantity requirements); the discharge would not significantly impact stream habitat in proximate Receiving Waters; and the discharge is authorized by the Permittee.
- ☐ **Condition B:** The project disturbs less than 1 acre and is not part of a larger common plan of development that exceeds 1 acre of disturbance. The disturbed area calculation must include all disturbances associated with larger plans of development.
- ☒ **Condition C:** The project's runoff flow rate, volume, velocity and duration for the post-development condition do not exceed the pre-development condition for the 2-year, 24-hour and 10-year 24-hour rainfall events. This condition can be achieved by minimizing impervious area on a site and incorporating other site-design concepts that mimic pre-development conditions. This condition must be substantiated by hydrologic modeling methods acceptable to the Permittee.
- ☐ **None**
Refer to Section 3.4 of the Whitewater River Region WQMP for additional requirements.

Supporting engineering studies, calculations, and reports are included in the project Master Plan of Drainage. The project will be retaining the 100-year 3-hour storm, in excess of the WQ storm event.

	2 year – 24 hour		10 year – 24 hour	
	Precondition	Post-condition	Precondition	Post-condition
Discharge (cfs)				
Velocity (fps)	<i>This table to be completed with final Planning Area- and Phase-specific WQMPs</i>			
Volume (cubic feet)				
Duration (minutes)				

Note: Project to utilize a combination infiltration basin for Water Quality and detention basin to mitigate 100-year runoff, therefore the conditions above are addressed (see project Drainage Study for 100-year analysis). Groundwater table is deeper than 50 feet (per soils report).

V. Best Management Practices

This project implements Best Management Practices (BMPs) to address the Pollutants of Concern that may potentially be generated from the use of the project site. These BMPs have been selected and implemented to comply with the Section 3.5 of the WQMP and consist of Site Design, Source Control and, if/where necessary, Treatment Control BMPs as described herein.

V.1 SITE DESIGN AND TREATMENT CONTROL BMPs

Local Jurisdiction Requires On-Site Retention of Urban Runoff:

Yes ☒ The project will be required to retain urban runoff onsite in conformance with local ordinance (See Table 6, Permittees Requiring Onsite Retention of Stormwater, of the Whitewater River Region WQMP). Section V.1 does not need to be completed.

No ☐ Section V.1 must be completed.

This section of the Project-Specific WQMP documents the Site Design BMPs and, if/where necessary the Treatment Control BMPs that will be implemented on the Project to meet the requirements within Section 3.5.1 of the WQMP. Section 3.5.1, includes requirements to implement Site Design Concepts and BMPs, and includes requirements to address the project's Pollutants of Concern with BMPs. Further sub-section 3.5.1.1 specifically requires that the projects Pollutants of Concern be addressed with Site Design BMPs to the extent feasible.

This project incorporates Site Design BMPs to fully address the Pollutants of Concern where and to the extent feasible. If and where it has been acceptably demonstrated to the Permittee that it is infeasible to fully meet this requirement with Site Design BMPs, this section includes a description of the conventional Treatment Control BMPs that will be substituted to meet the same requirements.

In addressing pollutants of concern, BMPs are selected using Table 2 below.

Table 2. BMP Selection Matrix Based Upon Pollutant Removal Efficiency ⁽¹⁾

(Excerpted, with minor revision, from the Orange County Water Quality Management Plan dated September 26, 2003
and the San Bernardino Water Quality Management Plan dated April 14, 2004)

Pollutant of Concern	Biofilters ⁽²⁾	Detention Basins ⁽³⁾	Infiltration BMPs ⁽⁴⁾	Wet Ponds or Wetlands ⁽⁵⁾	Filtration Systems ⁽⁶⁾	Water Quality Inlets	Hydrodynamic Separator Systems ⁽⁷⁾	Manufactured or Proprietary Devices ⁽⁸⁾
Sediment/Turbidity	H/M	M	H/M	H/M	H/M	L	H/M (L for Turbidity)	U
Nutrients	L	M	H/M	H/M	L/M	L	L	U
Organic Compounds	U	U	U	U	H/M	L	L	U
Trash & Debris	L	M	U	U	H/M	M	H/M	U
Oxygen Demanding Substances	L	M	H/M	H/M	H/M	L	L	U
Bacteria & Viruses	U	U	H/M	U	H/M	L	L	U
Oil & Grease	H/M	M	U	U	H/M	M	L/M	U
Pesticides (non-soil bound)	U	U	U	U	U	L	L	U
Metals	H/M	M	H	H	H	L	L	U

Abbreviations:

L: Low removal efficiency H/M: High or medium removal efficiency U: Unknown removal efficiency

Notes:

- (1) Periodic performance assessment and updating of the guidance provided by this table may be necessary.
- (2) Includes grass swales, grass strips, wetland vegetation swales, and bioretention.
- (3) Includes extended/dry detention basins with grass lining and extended/dry detention basins with impervious lining. Effectiveness based upon minimum 36-48-hour drawdown time.
- (4) Includes infiltration basins, infiltration trenches, and porous pavements.
- (5) Includes permanent pool wet ponds and constructed wetlands.
- (6) Includes sand filters and media filters.
- (7) Also known as hydrodynamic devices, baffle boxes, swirl concentrators, or cyclone separators.
- (8) Includes proprietary stormwater treatment devices as listed in the CASQA Stormwater Best Management Practices Handbooks, other stormwater treatment BMPs not specifically listed in the WQMP, or newly developed/emerging stormwater treatment technologies.

V.1.A SITE DESIGN BMPs

This section documents the Site Design BMPs that will be implemented on this project to comply with the requirements in Section 3.5.1 of the WQMP.

- Table 3 herein documents the implementation of the Site Design Concepts described in sub-sections 3.5.1.3 and 3.5.1.4.
- Table 4 herein documents the extent to which this project has implemented the goals described in sub-section 3.5.1.1.

Table 3. Implementation of Site Design Concepts

Design Concept	Technique	Specific BMP	Included			Brief Reason for BMPs Indicated as No or N/A
			Yes	No	N/A	
Site Design Concept 1	Minimize Urban Runoff, Minimize Impervious Footprint, and Conserve Natural Areas (See WQMP Section 3.5.1.3)	Conserve natural areas by concentrating or cluster development on the least environmentally sensitive portions of a site while leaving the remaining land in a natural, undisturbed condition.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Conserve natural areas by incorporating the goals of the Multi-Species Habitat Conservation Plan or other natural resource plans.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Preserve natural drainage features and natural depressional storage areas on the site.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Maximize canopy interception and water conservation by preserving existing native trees and shrubs, and planting additional native or drought tolerant trees and large shrubs.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	New native and drought-tolerant species will be specified.
		Use natural drainage systems.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A natural-bottom retention/infiltration basin will be used, in addition to maintaining Smith, Pershing and Gilman Home Creeks
		Increase the building floor area ratio (i.e., number of stories above or below ground).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Construct streets, sidewalks and parking lot aisles to minimum widths necessary, provided that public safety and a walkable environment for pedestrians is not compromised.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streets, sidewalks, drives, parking at minimums.
		Reduce widths of streets where off-street parking is available.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streets at city-required minimums.
		Design driveways with shared access, flared (single lane at street), or wheel strips (paving only under the tires).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	See other BMPs included herein
		Minimize the use of impervious surfaces, such as decorative concrete, in the landscape design.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Impervious surfaces are minimized
		Other comparable and equally effective Site Design BMP (or BMPs) as approved by the Permittee (Note: Additional narrative required to describe BMP and how it addresses site design concept).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Table 3. Site Design BMPs (continued)

Design Concept	Technique	Specific BMP	Included			Brief Reason for Each BMP Indicated as No or N/A
			Yes	No	N/A	
Site Design Concept 2	Minimize Directly Connected Impervious Area (See WQMP Section 3.5.1.4)	Residential and commercial sites must be designed to contain and infiltrate roof runoff, or direct roof runoff to vegetative swales or buffer areas.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Roof runoff will be directed to landscaped areas
		Drain impervious sidewalks, walkways, trails, and patios into adjacent landscaping.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All hardscape will ultimately drain to landscaping and infiltration basins.
		Incorporate landscaped buffer areas between sidewalks and streets.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A landscaped parkway will exist between sidewalk and street
		Uncovered temporary or guest parking on residential lots paved with a permeable surface, or designed to drain into landscaping.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Rural swale system: street sheet flows to vegetated swale or gravel shoulder, curbs used at street corners, and culverts used under driveways and street crossings.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	This concept may be used as feasible in limited locations
		Urban curb/swale system: street slopes to curb; periodic swale inlets drain to vegetated swale or biofilter.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Dual drainage system: first flush captured in street catch basins and discharged to adjacent vegetated swale or gravel shoulder; high flows connect directly to MS4s.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Maximize the permeable area by constructing walkways, trails, patios, overflow parking, alleys, driveways, low-traffic streets, and other low-traffic areas with open-jointed paving materials or permeable surfaces such as pervious concrete, porous asphalt, unit pavers, and granular materials.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Use vegetated drainage swales in lieu of underground piping or imperviously lined swales.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Swales will be utilized where feasible
		Incorporate parking area landscaping into the drainage design.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Where soil conditions are suitable, use perforated pipe or gravel filtration pits for low flow infiltration.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	All hardscape will drain to landscaping and infiltration basins
		Construct onsite infiltration BMPs such as dry wells, infiltration trenches, and infiltration basins consistent with vector control objectives.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Detention basin will act as infiltration basin
		Construct onsite ponding areas or detention facilities to increase opportunities for infiltration consistent with vector control objectives.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Detention basin proposed

Table 3. Site Design BMPs (continued)

**Whitewater River Region WQMP
Rancho San Gorgonio**

Design Concept	Technique	Specific BMP	Included			Brief Reason for Each BMP Indicated as No or N/A
			Yes	No	N/A	
Site Design Concept 2 (cont'd)	Minimize Directly Connected Impervious Area (See WQMP Section 3.5.1.4)	Direct roof runoff into cisterns or rain barrels for reuse.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	All hardscape will drain to infiltration basins
		Incorporate tree well filters, flow-through planters, and/or bioretention areas into landscaping and drainage plans.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	infiltration basin proposed
		Other comparable and equally effective Site Design BMP (or BMPs) as approved by the Permittee (Note: Additional narrative required describing BMP and how it addresses site design concept).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Table 4. Site Design BMPs Meeting the Measureable Goal in WQMP Section 3.5.1.1

(1) DRAINAGE SUBAREA ID OR NO.	(2) SITE DESIGN BMP TYPE *	(3) POLLUTANTS WITHIN SUBAREA CAUSING RECEIVING WATER IMPAIRMENTS	(4) RELATIVE EFFECTIVENESS OF BMP (COLUMN 2) AT ADDRESSING IDENTIFIED POLLUTANTS (COLUMN 3)	(5) BMP MEETS WHICH DESIGN CRITERIA?	(6) BMP TRIBUTARY AREA
	(See Table 2)	(refer to Table 1)	(U, L, M, H/M, H; see Table 2)	(identify as V _{BMP} OR Q _{BMP})	(nearest 0.1 acre)
SEE FINAL					
TOTAL AREA TREATED WITH SITE DESIGN BMPS (NEAREST 0.1 ACRE)**					0

* Site Design BMPs included in this table are those that completely address the Treatment Requirements for their tributary area.

Justification of infeasibility for sub-areas not addressed with effective Site Design BMPs in Table 4:

N/A

V.1.B TREATMENT CONTROL BMPs

Conventional Treatment Control BMPs shall be implemented to address the project's Pollutants of Concern as required in WQMP Section 3.5.1 where, and to the extent that, Section V.1.A has demonstrated that it is infeasible to meet these requirements through implementation of Site Design BMPs.

- ☐ The Site Design BMPs described in Section V.1.A of this project-specific WQMP completely address the Pollutants of Concern for the entire project site as required in Section 3.5.1.1 of the WQMP. Supporting documentation for the sizing of these Site Design BMPs is included in Appendix F. *Section V.1.B **need not** be completed.
 - ☒ The Site Design BMPs described in Section V.1.A of this project-specific WQMP do **NOT** completely address the Pollutants of Concern for the entire project site as required in Section 3.5.1.1 of the WQMP. *Section V.1.B **must** be completed.
-

The Treatment Control BMPs identified in this section are selected, sized and implemented to address the Pollutants of Concern for all project sub-areas where these pollutants were not fully addressed with Site Design BMPs. Supporting documentation for the sizing of these Treatment Control BMPs is included in Appendix F.

The proposed treatment control BMPs are infiltration basins. These basins will be located throughout the project, in common areas and parks. In most cases, these infiltration basins will also serve as project 100-year 3-hour runoff mitigation facilities.

Table 5: Treatment Control BMP Summary

(1) DRAINAGE SUBAREA ID OR NO.	(2) TREATMENT CONTROL BMP TYPE (SEE TABLE 2)	(3) POLLUTANTS POTENTIALLY GENERATED WITHIN SUBAREA CAUSING RECEIVING WATER IMPAIRMENTS* (REFER TO TABLE 1)	(4) RELATIVE EFFECTIVENESS OF BMP (COLUMN 2) AT ADDRESSING IDENTIFIED POLLUTANTS (COLUMN 3) (U, L, M, H/M, H; SEE TABLE 2)	(5) BMP MEETS WHICH DESIGN CRITERIA? (IDENTIFY AS V_{BMP} OR Q_{BMP})	(6) BMP TRIBUTARY AREA (NEAREST 0.1 ACRE)
SEE FINAL	INFILTRATION BASIN	PATHOGENS	H/M	V_{BMP}	SEE FINAL
TOTAL AREA TREATED WITH TREATMENT CONTROL BMPS (NEAREST 0.1 ACRE)**					SEE FINAL

V.1.C MEASUREABLE GOAL SUMMARY

This section documents the extent to which this project meets the measureable goal described in WQMP Section 3.5.1.1 of addressing all of the projects Treatment Requirements with Site Design BMPs.

Table 6: Measureable Goal Summary

(1) Total Area Treated with <u>Site Design</u> BMPs	(2) Total Area Treated with <u>Treatment Control</u> BMPs	(3) % of Treatment Requirement addressed with Site Design BMPs
SEE FINAL	SEE FINAL	SEE FINAL

V.2 SOURCE CONTROL BMPs

This section identifies and describes the Source Control BMPs applicable and implemented on this project.

Table 7. Source Control BMPs

BMP Name	Check One		If not applicable, state brief reason
	Included	Not Applicable	
Non-Structural Source Control BMPs			
Education for Property Owners, Operators, Tenants, Occupants, or Employees	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Activity Restrictions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SEE FINAL
Irrigation System and Landscape Maintenance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Common Area Litter Control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Street Sweeping Private Streets and Parking Lots	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Drainage Facility Inspection and Maintenance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Structural Source Control BMPs			
MS4 Stenciling and Signage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Landscape and Irrigation System Design	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Protect Slopes and Channels	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Provide Community Car Wash Racks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	SEE FINAL
Properly Design*:			
Fueling Areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not a part
Air/Water Supply Area Drainage	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not a part
Trash Storage Areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Loading Docks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not a part
Maintenance Bays	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not a part
Vehicle and Equipment Wash Areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not a part
Outdoor Material Storage Areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not a part
Outdoor Work Areas or Processing Areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not a part
Provide Wash Water Controls for Food Preparation Areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not a part

*Details demonstrating proper design must be included in Appendix F.

BMP	IMPLEMENTATION
Education Materials	Each employee will initially be provided with a copy of the included handouts.
Stenciling	The catch basins will be stenciled (prior to acceptance by city) with "NO DUMPING: DRAINS TO RIVER)
Landscape and irrigation design	Initial landscape design will include drought-tolerant species

Whitewater River Region WQMP
Rancho San Geronio

	requiring limited irrigation. Irrigation systems will be designated as water-conservation type.
Common Area Litter Control	Standard on-going maintenance will control litter
Street Sweeping Private Streets and Parking Lots	Quarterly drive and parking lot sweeping will be implemented as needed (public areas by city, private areas by HOA)
Drainage Facility Inspection and Maintenance	The drainage facilities will be inspected and maintained as part of standard landscaping maintenance
Protect Slopes and Channels	All erodible slopes and channels will be treated or planted to reduce potential erosion.

Appendix D includes copies of the educational materials that will be used in implementing this project-specific WQMP.

V.3 EQUIVALENT TREATMENT CONTROL ALTERNATIVES

Not applicable

V.4 REGIONALLY-BASED TREATMENT CONTROL BMPs

Not Applicable

VI. Operation and Maintenance Responsibility for BMPs

Appendix G of this project-specific WQMP includes copies of CC&Rs, Covenant and Agreements, and/or other mechanisms used to ensure the ongoing operation, maintenance, funding, transfer and implementation of the project-specific WQMP requirements.

Operation and Maintenance:

Site Design BMPs	Action	Startup Date	Frequency
Conserve natural areas by concentrating or cluster development on the least environmentally sensitive portions of a site while leaving the remaining land in a natural, undisturbed condition.	Routine landscape maintenance, including trash and debris removal, mowing (keep grass +/-6" high), and repair of irrigation system as needed	Upon installation of landscaping	Monthly
Maximize canopy interception and water conservation by preserving existing native trees and shrubs, and planting additional native or drought tolerant trees and large shrubs.	Routine landscape maintenance, including trash and debris removal, mowing (keep grass +/-6" high), and repair of irrigation system as needed	Upon installation of landscaping	Monthly
Use natural drainage systems.	Routine landscape maintenance, including trash and debris removal, mowing (keep grass +/-6" high), and repair of irrigation system as needed	Upon installation of landscaping	Monthly
Construct streets, sidewalks and parking lot aisles to minimum widths necessary, provided that public safety and a walkable environment for pedestrians is not compromised.	Routine landscape maintenance, including trash and debris removal	Upon installation of pavement and hardscape	Monthly
Minimize the use of impervious surfaces, such as decorative concrete, in the landscape design.	Routine landscape maintenance, including trash and debris removal	Upon installation of pavement and	Monthly

Whitewater River Region WQMP
Rancho San Gorgonio

		hardscape	
Residential and commercial sites must be designed to contain and infiltrate roof runoff, or direct roof runoff to vegetative swales or buffer areas.	Inspect drainage around buildings and redirect as necessary to landscaped areas and vegetative swales.	Upon installation of landscaping	Monthly
Drain impervious sidewalks, walkways, trails, and patios into adjacent landscaping.	Inspect drainage around hardscape and redirect as necessary to landscaped areas and vegetative swales.	Upon installation of landscaping	Monthly
Incorporate landscaped buffer areas between sidewalks and streets.	Routine landscape maintenance, including trash and debris removal, mowing (keep grass +/-6" high), and repair of irrigation system as needed	Upon installation of landscaping	Monthly
Construct onsite ponding areas or detention facilities to increase opportunities for infiltration consistent with vector control objectives.	Routine landscape maintenance, including trash and debris removal, mowing (keep grass +/-6" high), and repair of irrigation system as needed	Upon installation of landscaping	Monthly
Incorporate tree well filters, flow-through planters, and/or bioretention areas into landscaping and drainage plans.	Routine landscape maintenance, including trash and debris removal, mowing (keep grass +/-6" high), and repair of irrigation system as needed	Upon installation of landscaping	Monthly
Source Control BMPs	Action		Frequency
Education of property owners/staff	Provide educational materials (see copies herein)	Upon site opening	Initial hire
Landscaping & protection of slopes and channels.	Standard landscaping maintenance activities, including trash removal, proper replacement of landscaping as needed, and regular trimming (see handouts in Attachment E)	Upon installation of landscaping	Monthly
Efficient irrigation	Standard maintenance activities (ensure no over-watering, minimize watering on hardscape)	Upon installation of landscaping	Monthly

Litter control and street sweeping	Standard landscape maintenance	Upon installation of pavement and hardscape	Weekly*
Trash storage areas	Standard landscape maintenance	Upon installation of trash area	Weekly*
Drainage Facility Inspection and Maintenance	Standard landscape maintenance	Upon installation of drain system	Quarterly*
Storm Drain Stenciling	Inspect all catch basins and inlets to ensure stenciling is legible.	Upon installation of drain system	Annually*
Treatment Control BMPs			
Detention/Infiltration Basin	Routine landscape maintenance, including trash and debris removal, mowing (keep grass +/-6" high), and repair of irrigation system as needed	Upon installation of landscaping	Monthly

*By city in public areas, by HOA in private areas

VII. Funding

Funding for the on-going operation and maintenance of the project WQ BMPs will be incorporated into standard site landscaping maintenance paid by owners of private areas, and by the City in common areas.

Appendix A

Conditions of Approval

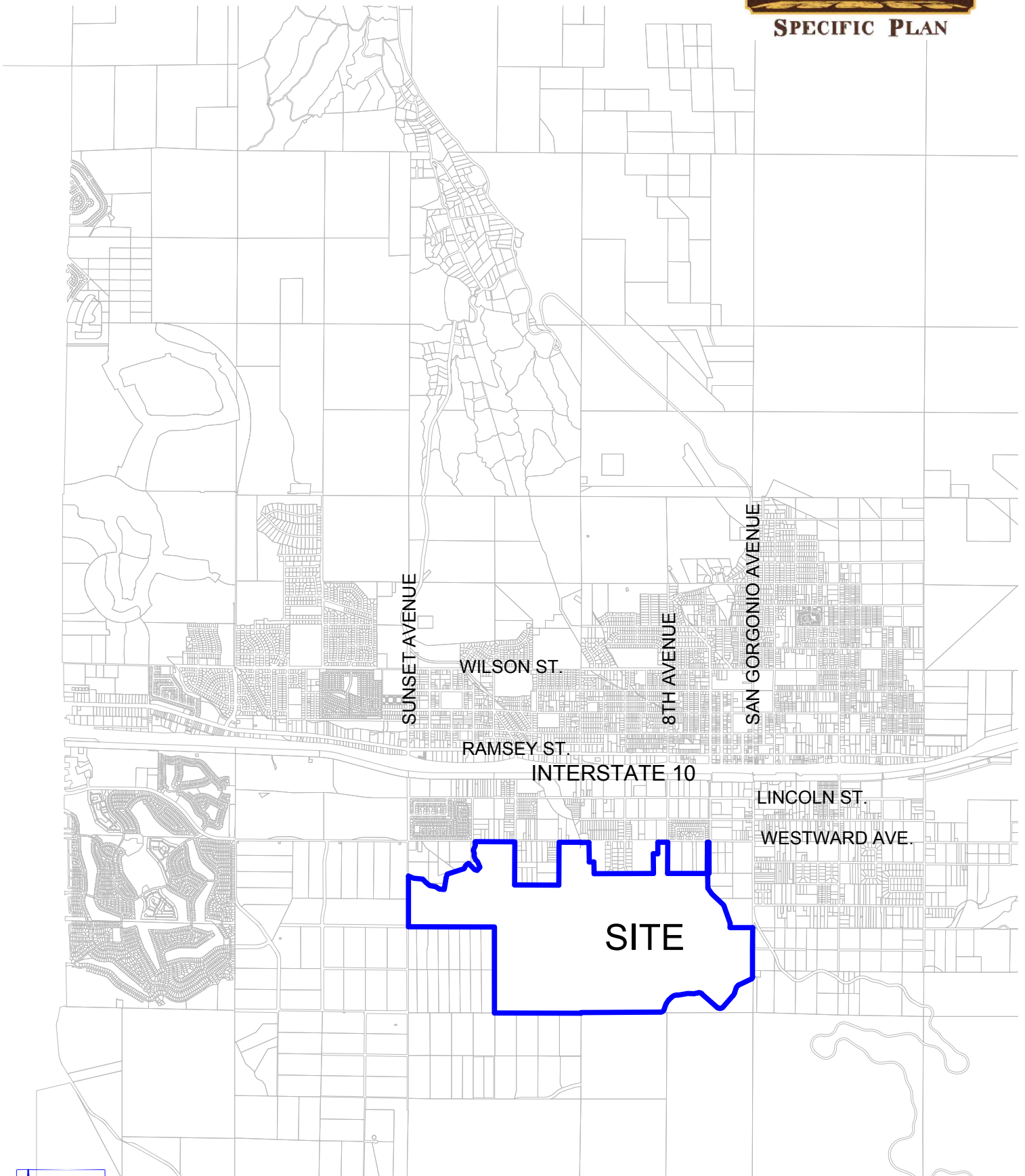
Planning Commission Resolution _____







Dated _____

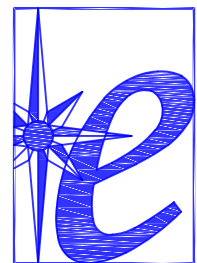
TO BE INCLUDED IN FINAL WQMPs

Appendix B

Vicinity Map, WQMP Site Plan, and Receiving Waters Map



- LEGEND**
-  STREET MEDIAN BIOSWALE
 -  PASEO/CREEK SETBACK BIORETENTION
 -  INFILTRATION BASIN (PART OF 100-YEAR MITIGATION BASIN)
 -  RAINWATER HARVESTING
 -  COMMON AREA PARKING LOT
 -  PERVIOUS PAVEMENT



0' 800' 1600'

Encompass Associates, Inc.

H-33

Conceptual Storm Water Quality Management Plan

EXHIBIT 2.8-1

J:\102-212\Storm\zRSG-WQMP.dwg, 1/23/2015 8:08:54 AM

Appendix C

Supporting Detail Related to Hydraulic Conditions of Concern

SEE FINAL

Appendix D

Educational Materials

SEE FINAL

Appendix E

Soils Report

Percolation Test Report

SEE FINAL

Appendix F

Site Design and Treatment Control BMP Sizing Calculations and Design Details

Whitewater Watershed		Legend:	Required Entries
BMP Design Volume, V_{BMP} (Rev. 03-2012)			Calculated Cells
Company Name	Encompass Associates, Inc.	Date	2/14/2013
Designed by	Aaron Skeers	County/City Case No	
Company Project Number/Name	Rancho San Gorgonio - 102-212		
Drainage Area Number/Name	Overall (developed areas only)		
Enter the Area Tributary to this Feature		$A_T =$	727 acres
Determine the Effective Impervious Fraction			
Type of post-development surface cover (use pull down menu)	Mixed Surface Types		
Effective Impervious Fraction	$I_f =$	0.44	
Calculate the composite Runoff Coefficient, C for the BMP Tributary Area			
Use the following equation based on the WEF/ASCE Method			
$C = 0.858I_f^3 - 0.78I_f^2 + 0.774I_f + 0.04$		$C =$	0.30
Determine Design Storage Volume, V_{BMP}			
Calculate V_U , the 85% Unit Storage Volume $V_U = 0.40 \times C$		$V_u =$	0.12 (in*ac)/ac
Calculate the design storage volume of the BMP, V_{BMP} .			
$V_{BMP} (ft^3) = \frac{V_U (in\text{-}ac/ac) \times A_T (ac) \times 43,560 (ft^2/ac)}{12 (in/ft)}$		$V_{BMP} =$	316,681 ft^3
Notes:			

Infiltration Basin - Design Procedure (Rev. 03-2012)		BMP ID	Legend:	Required Entries
				Calculated Cells
Company Name:	Encompass Associates, Inc.			Date: 2/14/2013
Designed by:	Aaron Skeers			County/City Case No.:
Design Volume				
a) Tributary area (BMP subarea)	Tributary area may not exceed 50 acres		$A_T =$	727 acres
b) Enter V_{BMP} determined from Section 2.1 of this Handbook			$V_{BMP} =$	316,681 ft ³
Maximum Depth				
a) Infiltration rate			$I =$	1 in/hr
b) Factor of Safety (See Table 1, Appendix A: "Infiltration Testing" from this BMP Handbook)			$FS =$	3
c) Calculate D_1	$D_1 = \frac{I \text{ (in/hr)} \times 72 \text{ hrs}}{12 \text{ (in/ft)} \times FS}$		$D_1 =$	2.0 ft
d) Enter the depth of freeboard (at least 1 ft)				1 ft
e) Enter depth to historic high ground water (measured from top of basin)				50 ft
f) Enter depth to top of bedrock or impermeable layer (measured from top of basin)				50 ft
g) D_2 is the smaller of:				
Depth to groundwater - (10 ft + freeboard) and			$D_2 =$	39.0 ft
Depth to impermeable layer - (5 ft + freeboard)				
h) D_{MAX} is the smaller value of D_1 and D_2 but shall not exceed 5 feet			$D_{MAX} =$	2.0 ft
Basin Geometry				
a) Basin side slopes (no steeper than 4:1)			$z =$	4 :1
b) Proposed basin depth (excluding freeboard)			$d_B =$	2.0 ft
c) Minimum bottom surface area of basin ($A_S = V_{BMP}/d_B$)			$A_S =$	158341 ft ²
d) Proposed Design Surface Area			$A_D =$	158341 ft ²
Forebay				
a) Forebay volume (minimum 0.5% V_{BMP})			Volume =	1583 ft ³
b) Forebay depth (height of berm/splashwall. 1 foot min.)			Depth =	1 ft
c) Forebay surface area (minimum)			Area =	1583 ft ²
d) Full height notch-type weir			Width (W) =	36.0 in
Notes: This sheet is provided to show the procedure.				
159924				

PA	Subbasin	Area (AC)	F	Ap	100-year 3-hr Flood Volume ac-ft	Footprint ac	WQ Vbmp (cf)	Minimum footprint SA (sf)
1	S4.1	23.45146	0.21	0.65	2.86	36,705	8513	6401
8C	P3.3	11.50548	0.09	0.20	1.74	21,583	10024	7537
5B	P3.3b	4.563699	0.18	0.50	0.59	6,440	2253	1694
8B	P3.2	13.93709	0.09	0.20	2.11	26,546	12142	9129
5A	P3.2b	5.188012	0.18	0.50	0.67	7,463	2561	1926
ST1	P3.4	5.116496	0.07	0.39	0.80	9,137	3120	2346
SB1	P3	9.109586	0.37	1.00	0.77	8,755	529	398
ST2	P3.7	7.164962	0.07	0.41	1.13	13,414	4161	3129
8A	P3.9	22.99625	0.09	0.20	3.48	45,271	20034	15063
9	P3.8	9.115675	0.06	0.10	1.45	17,657	9662	7265
ST3	P3.10	3.655156	0.09	0.54	0.56	6,037	1645	1237
ST4	P3.11	3.597979	0.08	0.51	0.55	5,993	1724	1296
SB1	P3.13	6.250073	0.28	1.00	0.66	7,288	363	273
10	P3.12	29.17809	0.31	0.85	2.85	36,571	5931	4459
1	P3.16	26.72702	0.23	0.65	3.14	40,573	9702	7295
2A	P3.17	15.83892	0.23	0.65	1.85	23,070	5750	4323
SB1	P3.18	5.404385	0.38	1.00	0.45	4,648	314	236
ST1	P3.20	2.781263	0.06	0.39	0.45	4,635	1696	1275
6A	P3.14	16.18571	0.18	0.50	2.09	26,270	7991	6008
SB1	P3.21	5.950159	0.26	1.00	0.65	7,248	346	260
4A	P3.19	21.99191	0.18	0.50	2.84	36,465	10857	8163
2B	P3.23	17.16476	0.23	0.65	2.02	25,277	6231	4685
7A	P3.26	36.64554	0.12	0.30	5.31	70,585	26073	19604
SB1	P3.24	6.01846	0.37	1.00	0.51	5,433	350	263
ST4	P3.27	7.169251	0.08	0.51	1.11	13,187	3435	2583
3A	P3.29	19.9987	0.20	0.55	2.49	31,631	9002	6768
2C	P3.30	16.33263	0.23	0.65	1.92	23,958	5929	4458
4C	P3.31	18.36488	0.18	0.50	2.37	30,084	9066	6817
SB1	P3.32	7.691236	0.34	1.00	0.70	7,832	447	336
5D	S7.1	21.63025	0.18	0.50	2.79	35,828	10678	8029
6C	S7.2	12.21997	0.18	0.50	1.58	19,382	6033	4536
SB1	S7.3	3.990745	0.32	1.00	0.38	3,871	232	174
7A	M3.1	58.66051	0.11	0.30	8.65	117,224	41736	31380
ST1	M3.2	2.554673	0.06	0.39	0.41	4,190	1558	1171
12	M3.10	10.86626	0.34	0.90	0.99	11,651	1736	1305
13	M3.7	1.078862	0.38	1.00	0.09	546	63	47
ST1	M3.8	7.067739	0.07	0.39	1.11	13,115	4310	3241
7B	M3.6	30.69789	0.12	0.30	4.42	58,182	21841	16422
ST5	M3.9	4.891396	0.09	0.59	0.74	8,369	2060	1549
4D	M3.11	12.29542	0.18	0.50	1.59	19,513	6070	4564
5C	M3.12	12.598	0.18	0.50	1.64	20,179	6219	4676
6B	M3.13	18.74794	0.17	0.50	2.47	31,376	9255	6959
4B	M3.15	23.20162	0.18	0.50	3.00	38,602	11454	8612
3B	M3.16	23.80695	0.19	0.55	3.02	38,880	10716	8057
ST4	M3.17	8.156227	0.08	0.51	1.26	15,205	3908	2938
3C	M3.18	10.62081	0.20	0.55	1.32	15,945	4781	3595
11	M3.19	10.19401	0.36	0.95	0.89	10,278	1184	890
SB1	M3.20	2.215048	0.37	1.00	0.19	1,587	129	97
6D	G3.2	24.13539	0.18	0.50	3.12	40,253	11915	8959
16A	G3.4	2.284511	0.02	0.10	0.39	3,911	2421	1820
ST1	G3.5	4.855531	0.07	0.39	0.76	8,611	2961	2226
5E	G3.7	10.46289	0.18	0.50	1.35	16,359	5165	3883
ST2	G3.9	7.024698	0.07	0.41	1.11	13,123	4080	3068
5F	G3.8	5.327838	0.18	0.50	0.69	7,694	2630	1977
SB1	G3.10	4.894473	0.33	1.00	0.45	4,758	284	214

Appendix G

AGREEMENTS – CC&Rs, COVENANT AND AGREEMENTS AND/OR
OTHER MECHANISMS FOR ENSURING ONGOING
OPERATION, MAINTENANCE, FUNDING AND TRANSFER
OF REQUIREMENTS FOR THIS PROJECT-SPECIFIC
WQMP

SEE FINAL

Appendix H

PHASE 1 ENVIRONMENTAL SITE ASSESSMENT – SUMMARY OF SITE REMEDATION CONDUCTED AND USE RESTRICTIONS

NOT APPLICABLE

Appendix I

PROJECT-SPECIFIC WQMP SUMMARY DATA FORM

Project-Specific WQMP Summary Data Form

Applicant Information																	
Name and Title	Pete Pitassi, Partner																
Company	Rancho San Gorgonio, LLC																
Phone	909-481-1150																
Email	pjpaia@pitassiarchitects.com																
Project Information																	
Project Name <small>(as shown on project application/project-specific WQMP)</small>	Rancho San Gorgonio																
Street Address	Generally between Westward, Sunset, Smith Creek and San Gorgonio Avenue, in Banning, CA																
Nearest Cross Streets	Generally between Westward, Sunset, Smith Creek and San Gorgonio Avenue, in Banning, CA																
Municipality <small>(City or Unincorporated County)</small>	City of Banning, CA																
Zip Code	92220																
Tract Number(s) and/or Assessor Parcel Number(s)	537-150-005 et al																
Other <small>(other information to help identify location of project)</small>																	
Watershed	Whitewater River																
Indicate type of project.	Priority Development Projects (Use an "X" in cell preceding project type): <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 5%;"></td><td>SF hillside residence; impervious area \geq 10,000 sq. ft.; Slope \geq 25%</td></tr> <tr><td></td><td>SF hillside residence; impervious area \geq 10,000 sq. ft.; Slope \geq 10% & erosive soils</td></tr> <tr><td></td><td>Commercial or Industrial \geq 100,000 sq. ft.</td></tr> <tr><td></td><td>Automotive repair shop</td></tr> <tr><td></td><td>Retail Gasoline Outlet disturbing > 5,000 sq. ft.</td></tr> <tr><td></td><td>Restaurant disturbing > 5,000 sq. ft.</td></tr> <tr><td></td><td>Home subdivision \geq 10 housing units</td></tr> <tr><td style="text-align: center;">✓</td><td>Parking lot \geq 5,000 sq. ft. or \geq 25 parking spaces</td></tr> </table>		SF hillside residence; impervious area \geq 10,000 sq. ft.; Slope \geq 25%		SF hillside residence; impervious area \geq 10,000 sq. ft.; Slope \geq 10% & erosive soils		Commercial or Industrial \geq 100,000 sq. ft.		Automotive repair shop		Retail Gasoline Outlet disturbing > 5,000 sq. ft.		Restaurant disturbing > 5,000 sq. ft.		Home subdivision \geq 10 housing units	✓	Parking lot \geq 5,000 sq. ft. or \geq 25 parking spaces
	SF hillside residence; impervious area \geq 10,000 sq. ft.; Slope \geq 25%																
	SF hillside residence; impervious area \geq 10,000 sq. ft.; Slope \geq 10% & erosive soils																
	Commercial or Industrial \geq 100,000 sq. ft.																
	Automotive repair shop																
	Retail Gasoline Outlet disturbing > 5,000 sq. ft.																
	Restaurant disturbing > 5,000 sq. ft.																
	Home subdivision \geq 10 housing units																
✓	Parking lot \geq 5,000 sq. ft. or \geq 25 parking spaces																
Date Project-Specific WQMP Submitted	January 26, 2015																
Size of Project Area <small>(nearest 0.1 acre)</small>	831 acres																
Project Area managed with Site Design or Low Impact Development (LID) BMPs <small>(nearest 0.1 acre)</small>	SEE FINAL																
Is the project subject to onsite retention by ordinance or policy?	No																
Are Treatment Control BMPs required?	No																
Name of the entity will implement, operate, and maintain the post-construction BMPs	Rancho San Gorgonio, LLC																
Contact Name	Pete Pitassi																
Street or Mailing Address	10621 Civic Center Drive																
City / Zip Code	Rancho Cucamonga, CA 91730																
Phone	909-481-1150																
Space Below for Use by City/County Staff Only																	
Preceding Information Verified by <small>(consistent with information in project-specific WQMP)</small>	Name: Date:																
Date Project-Specific WQMP Approved:																	
Data Entered by	Name: Date:																
Other Comments																	

Appendix J

303(D) LISTING

2006 CWA SECTION 303(d) LIST OF WATER QUALITY LIMITED SEGMENTS

COLORADO RIVER BASIN REGIONAL WATER QUALITY CONTROL BOARD

USEPA APPROVAL DATE: JUNE 28, 2007

REGION TYPE	NAME	CALWATER WATERSHED	POLLUTANT/STRESSOR	POTENTIAL SOURCES	ESTIMATED SIZE AFFECTED	PROPOSED TMDL COMPLETION
7 R	Alamo River	72310000	Chlorpyrifos		57 Miles	2019
			DDT	Source Unknown	57 Miles	2019
			Dieldrin	Source Unknown	57 Miles	2019
			PCBs (Polychlorinated biphenyls)	Source Unknown	57 Miles	2019
			Selenium	Source Unknown	57 Miles	2003
			<i>Selenium originates from Upper Basin Portion of Colorado River. Elevated fish tissue levels. For 2006, selenium was moved by USEPA from the being addressed list back to the 303(d) list pending completion and USEPA approval of a TMDL.</i>			
			Toxaphene	Agricultural Return Flows	57 Miles	2019
				Source Unknown		
7 R	Coachella Valley Storm Water Channel	71947000	Pathogens		24 Miles	2006
			<i>This listing for pathogens only applies to a 17 mile area of the Coachella Valley Storm Water Channel from Dillion Road to the Salton Sea.</i>			
			Toxaphene	Source Unknown	24 Miles	2019
			<i>This listing for toxaphene only applies to a 2 mile area of the Coachella Valley Storm Water Channel from Lincoln Street to the Salton Sea.</i>			
				Source Unknown		
7 R	Colorado River (Imperial Reservoir to California-Mexico Border)	72700000	Selenium		11 Miles	2019
				Source Unknown		

2006 CWA SECTION 303(d) LIST OF WATER QUALITY LIMITED SEGMENTS

COLORADO RIVER BASIN REGIONAL WATER QUALITY CONTROL BOARD

USEPA APPROVAL DATE: JUNE 28, 2007

REGION TYPE	NAME	CALWATER WATERSHED	POLLUTANT/STRESSOR	POTENTIAL SOURCES	ESTIMATED SIZE AFFECTED	PROPOSED TMDL COMPLETION
7	R	Imperial Valley Drains	DDT		1225 Miles	2019
			<i>The listing for DDT only applies to the Barbara Worth Drain, Peach Drain, and Rice Drain areas of the Imperial Valley drains.</i>			
			Dieldrin	Source Unknown	1225 Miles	2019
			<i>The listing for dieldrin only applies to the Barbara Worth Drain and Fig Drain areas of the Imperial Valley drains.</i>			
			Endosulfan	Source Unknown	1225 Miles	2019
			<i>The listing for endosulfan only applies to the Peach Drain area of the Imperial Valley drains.</i>			
			PCBs (Polychlorinated biphenyls)	Source Unknown	1225 Miles	2019
			<i>The listing for PCBs only applies to the Central Drain area of the Imperial Valley drains, from Meloland Road to the outlet into the Atamo River.</i>			
			Selenium	Source Unknown	1225 Miles	2019
			<i>Selenium originates from Upper Basin Portion of Colorado River. Elevated fish tissue levels.</i>			
			Toxaphene	Agricultural Return Flows	1225 Miles	2019
			<i>This listing for toxaphene only applies to the Barbara Worth Drain, Peach Drain, and Rice Drain of the Imperial Valley drains.</i>			
				Source Unknown		
7	R	New River (Imperial County)	1,2,4-Trimethylbenzene		66 Miles	2006
				Industrial Point Sources		
				Out-of-state source	66 Miles	2019
			Chlordane			
				Source Unknown	66 Miles	2006
			Chloroform			
				Industrial Point Sources		
				Out-of-state source	66 Miles	2019
			Chlorpyrifos			
				Source Unknown		

2006 CWA SECTION 303(d) LIST OF WATER QUALITY LIMITED SEGMENTS

COLORADO RIVER BASIN REGIONAL WATER QUALITY CONTROL BOARD

USEPA APPROVAL DATE: JUNE 28, 2007

REGION TYPE	NAME	CALWATER WATERSHED	POLLUTANT/STRESSOR	POTENTIAL SOURCES	ESTIMATED SIZE AFFECTED	PROPOSED TMDL COMPLETION
	Copper				66 Miles	2019
	This listing was made by USEPA for 2006.					
	DDT			Source Unknown	66 Miles	2019
	Diazinon			Source Unknown	66 Miles	2019
	Dieldrin			Source Unknown	66 Miles	2019
	Mercury			Source Unknown	66 Miles	2019
	meta-para xylenes			Source Unknown	66 Miles	2006
	Nutrients			Industrial Point Sources Out-of-state source	66 Miles	2006
	Regional Board proposes to establish TMDL in cooperation with U.S. EPA and Mexico.					
				Major Municipal Point Source-dry and/or wet weather discharge		
				Agricultural Return Flows		
				Out-of-state source		
	Organic Enrichment/Low Dissolved Oxygen				66 Miles	2006
				Wastewater		
				Inappropriate Waste Disposal/Wildcat Dumping		
				Out-of-state source		
				Unknown point source		
	o-Xylenes				66 Miles	2006
				Industrial Point Sources		
				Out-of-state source		

2006 CWA SECTION 303(d) LIST OF WATER QUALITY LIMITED SEGMENTS

COLORADO RIVER BASIN REGIONAL WATER QUALITY CONTROL BOARD

USEPA APPROVAL DATE: JUNE 28, 2007

REGION TYPE	NAME	CALWATER WATERSHED	POLLUTANT/STRESSOR	POTENTIAL SOURCES	ESTIMATED SIZE/AFFECTED	PROPOSED TMDL COMPLETION
			PCBs (Polychlorinated biphenyls)		66 Miles	2019
			p-Cymene	Source Unknown	66 Miles	2006
			p-Dichlorobenzene/DCB	Industrial Point Sources Out-of-state source	66 Miles	2006
			Pesticides	Industrial Point Sources Out-of-state source	66 Miles	2019
			Selenium	Agricultural Return Flows Out-of-state source	66 Miles	2019
			Toluene	Source Unknown	66 Miles	2006
			Toxaphene	Industrial Point Sources Out-of-state source	66 Miles	2019
			Toxicity	Source Unknown	66 Miles	2019
			Trash	Source Unknown	66 Miles	2006
				Out-of-state source		
7	R	Palo Verde Outfall Drain and Lagoon	DDT		19 Miles	2019

2006 CWA SECTION 303(d) LIST OF WATER QUALITY LIMITED SEGMENTS

COLORADO RIVER BASIN REGIONAL WATER QUALITY CONTROL BOARD

USEPA APPROVAL DATE: JUNE 28, 2007

REGION TYPE	NAME	CALWATER WATERSHED	POLLUTANT/STRESSOR	POTENTIAL SOURCES	ESTIMATED SIZE AFFECTED	PROPOSED TMDL COMPLETION
Pathogens						
This listing was made by USEPA for 2006.						
Source Unknown						
7	S	Salton Sea	Nutrients		233340 Acres	2006
Major Industrial Point Source						
Agricultural Return Flows						
Out-of-state source						
			Salinity		233340 Acres	2019
TMDL development will not be effective in addressing this problem, which will require an engineering solution with federal, local, and state cooperation.						
Agricultural Return Flows						
Out-of-state source						
Point Source						
			Selenium		233340 Acres	2019
Agricultural Return Flows						