# **Water Quality Management Plan**

For:

## **Bed and Breakfast in Oak Glen**

PROJ-2019-00063, DRNSTY-2020-00019, APN 0324-101-35

**Prepared for:** 

**Kirsten Royston** 

38433 potato canyon Rd

oak glen, Ca, 92399

909 662 5124

Prepared by:

**Kirsten Royston** 

38433 Potato Canyon Rd

Oak Glen, CA, 92399



#### **Project Owner's Certification**

This Water Quality Management Plan (WQMP) has been prepared for Kirsten Royston by Kirsten Royston. The WQMP is intended to comply with the requirements of the San Bernardino County and the NPDES Areawide Stormwater Program requiring the preparation of a WQMP. The undersigned, while it owns the subject property, is responsible for the implementation of the provisions of this plan and will ensure that this plan is amended as appropriate to reflect up-to-date conditions on the site consistent with San Bernardino County's Municipal Storm Water Management Program and the intent of the NPDES Permit for San Bernardino County and the incorporated cities of San Bernardino County within the Santa Ana Region. Once the undersigned transfers its interest in the property, its successors in interest and the city/county shall be notified of the transfer. The new owner will be informed of its responsibility under this WQMP. A copy of the approved WQMP shall be available on the subject site in perpetuity.

"I certify under a penalty of law that the provisions (implementation, operation, maintenance, and funding) of the WQMP have been accepted and that the plan will be transferred to future successors."

Project Data						
Permit/Application Number(s):		PROJ-2019-00063 Grading Permit Number(s):		NA		
Tract/Parcel Ma Number(s):	ıp	APN 0324-101-35	Building Permit Number(s):	NA		
CUP, SUP, and/o	or APN (Sp	ecify Lot Numbers if Porti	ons of Tract):	PROJ-2019-00063		
Owner's Signature						
Owner Name: Kirsten Royston						
Title	Project Owner					
Company	Stone Oak Manor					
Address	38433 P	38433 Potato Canyon Rd, Oak Glen,CA, 92399				
Email	StoneOakManor@gmail.com					
Telephone #	(909)662-5124					
Signature	Date 8/27/2020					

#### **Preparer's Certification**



"The selection, sizing and design of stormwater treatment and other stormwater quality and quantity control measures in this plan were prepared under my oversight and meet the requirements of Regional Water Quality Control Board Order No. R8-2010-0036."

Engineer: NA	PE Stamp Below
Title	
Company	
Address	
Email	
Telephone #	
Signature	
Date	

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# Section 1 Discretionary Permit(s)

Form 1-1 Project Information								
Project Name		Bed and Breakfast in Oak Glen PROJ-2019-00063						
Project Ow	vner Contact Name:	Kirsten Roys	ton					
Mailing Address:	38433 Potato Canyon Rd 92399	, Oak Glen, Ca,	E-mail Address:	StoneOakManor@gmail.co m	Telephone:	909 662 5124		
Permit/Ap	plication Number(s):	PROJ-2019-00063		Tract/Parcel Map Number(s):	APN 0324-101-35			
Additional Information/ Comments:		the proposed changes to the site do not meet the priorities that would require a traditional Water Quality Management Plan (WQMP). However, due to the scale of the proposed development, the County will still require that a <b>non-category WQMP</b> be submitted. As discussed, the report will document the project site features and best practices to protect water quality. The report does not require numerical sizing for LID BMP or calculations for DCV and HCOC volumes (i.e. skip sections 4.2 through 4.3.6). Additionally, the report is not required to be prepared and certified by a licensed civil engineer.						
Description of Project:		Bed and Breakfast in Oak Glen California, with additional approval for a limited number of events in keeping with the local Oak Glen agritourism area and surrounding local businesses. No proposed buildings or development aside from providing necessary parking, ADA accessible pathways, and remodeling one existing outbuilding to provide bathrooms for the events. To minimize the addition of pervious surfaces the parking lot and ADA paths have been designed with permeable pavers.						
Provide summary of Conceptual WQMP conditions (if previously submitted and approved). Attach complete copy.				Quantify area of c Specify area quar landscaping, xx ft ft2 pervious pave	disturbance ntities (i.e. 2, paveme ment, etc.)	e. xx ft2 ent, xx		

## Section 2 Project Description 2.1 Project Information

This section of the WQMP should provide the information listed below. The information provided for Conceptual/ Preliminary WQMP should give sufficient detail to identify the major proposed site design and LID BMPs and other anticipated water quality features that impact site planning. Final Project WQMP must specifically identify all BMP incorporated into the final site design and provide other detailed information as described herein.

The purpose of this information is to help determine the applicable development category, pollutants of concern, watershed description, and long term maintenance responsibilities for the project, and any applicable water quality credits. This information will be used in conjunction with the information in Section 3, Site Description, to establish the performance criteria and to select the LID BMP or other BMP for the project or other alternative programs that the project will participate in, which are described in Section 4.

Form 2.1-1 Description of Proposed Project								
<sup>1</sup> Development Catego	ry (Select	all that a	pply):					
Significant re-development involving the addition or replacement of 5,000 ft <sup>2</sup> or more of impervious surface on an already developed site		New development involving the creation of 10,000 ft <sup>2</sup> or more of impervious surface collectively over entire site		Automotive repair shops with standard industrial classification (SIC) codes 5013, 5014, 5541, 7532- 7534, 7536-7539		Restaurants (with SIC code 5812) where the land area of development is 5,000 ft <sup>2</sup> or more		
Hillside developme 5,000 ft <sup>2</sup> or more which located on areas with k erosive soil conditions of where the natural slope 25 percent or more	ents of n are known or e is	nts of Developments of 2,500 ft are of impervious surface or more adjacent to (within 200 ft) or discharging directly into is environmentally sensitive area or waterbodies listed on the CWA Section 303(d) list of			Parking lots of 5,000 ft <sup>2</sup> or more exposed to storm water			Retail gasoline outlets are either 5,000 ft <sup>2</sup> or e, or have a projected age daily traffic of 100 ore vehicles per day
Non-Priority / Non jurisdiction on specific req	-Category	/ Project	May require source control	LID BMP	Ps and other LIP red	quirement	ts. Plea	se consult with local
<b>2</b> Project Area (ft2):	651292		<sup>3</sup> Number of Dwelling U	Inits:	2	<sup>4</sup> SIC C	ode:	7011
<b>5</b> Is Project going to be phased? Yes No X If yes, ensure that the WQMP evaluates each phase as a distinct DA, requiring LID BMPs to address runoff at time of completion.								
<b>6</b> Does Project include Appendix A of TGD for WC	roads? Ye Q <i>MP)</i>	es 🗌 No	🛛 If yes, ensure that appli	cable red	quirements for tra	nsportatio	on proje	ects are addressed (see

## 2.2 Property Ownership/Management

Describe the ownership/management of all portions of the project and site. State whether any infrastructure will transfer to public agencies (City, County, Caltrans, etc.) after project completion. State if a homeowners or property owners association will be formed and be responsible for the long-term maintenance of project stormwater facilities. Describe any lot-level stormwater features that will be the responsibility of individual property owners.



## 2.3 Potential Stormwater Pollutants

Determine and describe expected stormwater pollutants of concern based on land uses and site activities (refer to Table 3-3 in the TGD for WQMP).

Form 2.3-1 Pollutants of Concern						
Pollutant	Please check: E=Expected, N=Not Expected		Additional Information and Comments			
Pathogens (Bacterial / Virus)	Е 🔀	N 🗌	Common runoff pollutant from pavement and landscape areas, including wild birds and animals together with garbage.			
Nutrients - Phosphorous	Е 🔀	N 🗌	Common runoff pollutant from overuse of fertilizer and loose sediment.			
Nutrients - Nitrogen	E 🔀	N 🗌	Common runoff pollutant from overuse of fertilizer and loose sediment.			
Noxious Aquatic Plants	Е 🔀	N 🗌	Common runoff pollutant from landscaping.			
Sediment	Е 🔀	N 🗌	Common runoff pollutant from pavement, landscaping and rooftops.			
Metals	E 🔀	N 🗌	Common runoff pollutant from vehicular emissions such as brake pads and tire treads associated with driving.			
Oil and Grease	Е 🔀	N 🗌	Common runoff pollutant from vehicular emissions such as leaking vehicles.			
Trash/Debris	Е 🔀	N 🗌	Common runoff pollutant from poorly maintained trash containers and/or trash enclosures.			
Pesticides / Herbicides	Е 🔀	N 🗌	Common runoff pollutant from landscaping.			
Organic Compounds	Е 🔀	N 🗌	Common runoff pollutant from overuse of fertilizer.			
Other:	E 🗌	N 🗌				
Other:	E 🗌	N 🗌				
Other:	E 🗌	N 🗌				
Other:	E 🗌	N 🗌				
Other:	E 🗌	N 🗌				

Credits are only to be used to meet Water Quality Manager DCV requirements after infeasibility has been proven. Non-category WQMP does not have DCV

#### 2.4 Water Q requirements.

A water quality credit program is applicable for certain types of development projects if it is not feasible to meet the requirements for on-site LID. Proponents for eligible projects, as described below, can apply for water quality credits that would reduce project obligations for selecting and sizing other treatment BMP or per Remove n other alternative compliance programs. Refer to Section 6.2 in the TGD for WQMP to ater quality credits are applicable for the project.

5

	Form 2.4-1 Wat	er Quality Credits				
<sup>1</sup> Project Types that Qualify for Wat	er Quality Credits: Select all th	nat apply				
Redevelopment projects that reduce the overall impervious footprint of the project site. [Credit = % impervious reduced]	Higher density development projects Vertical density [20%] 7 units/ acre [5%]	Mixed use development, (combination of residential, commercial, industrial, office, institutional, or other land uses which incorporate design principles that demonstrate environmental benefits not realized through single use projects) [20%]	Brownfield redevelopment (redevelop real property complicated by presence or potential of hazardous contaminants) [25%]			
Redevelopment projects in established historic district, historic preservation area, or similar significant core city center areas [10%]	Transit-oriented developments (mixed use residential or commercial area designed access to publi transportation) [20%]	In-fill projects (conversion of empty lots & other underused spaces < 5 acres, substantially surrounded by urban land uses, into more beneficially used spaces, such as residential or commercial areas) [10%]	Live-Work developments (variety of developments designed to support residential and vocational needs) [20%]			
<sup>2</sup> Total Credit % 36 Total all credit percentages up to a maximum allowable credit of 50 percent)						
Description of Water Quality Credit Eligibility (if applicable)	The site at time of develope use of the project will inclu breakfast), and surrounding	ement will be a registered Historic Point de a residential structure, a commericial g land used for agritourism	of Interest in California, The use structure (Bed and			

# Section 3 Site and Watershed Description

Describe the project site conditions that will facilitate the selection of BMP through an analysis of the physical conditions and limitations of the site and its receiving waters. Identify distinct drainage areas (DA) that collect flow from a portion of the site and describe how runoff from each DA (and sub-watershed DMAs) is conveyed to the site outlet(s). Refer to Section 3.2 in the TGD for WQMP. The form below is provided as an example.

Then complete Forms 3.2 and 3.3 for each DA on the project site. *If the project has more than one drainage area for stormwater management, then complete additional versions of these forms for each DA / outlet.* 



Form 3-2 Existing Hydro	ologic Chara	acteristics fo	or Drainage	Area 1
For Drainage Area 1's sub-watershed DMA, provide the following characteristics	DA 1 DMA A	DA 2 DMA B		
<sup>1</sup> DMA drainage area (ft²)	380,108	271,184		
<b>2</b> Existing site impervious area (ft <sup>2</sup> )	2,306	0		
<sup>3</sup> Antecedent moisture condition For desert areas, use <u>http://www.sbcounty.gov/dpw/floodcontrol/pdf/2</u> 0100412_map.pdf	AMC II	AMC II	A	
<b>4</b> Hydrologic soil group <i>Refer to Watershed</i> <i>Mapping Tool –</i> <u>http://permitrack.sbcounty.qov/wap/</u>	В	<u>k</u>		
<sup>5</sup> Longest flowpath length (ft)	545	425		
6 Longest flowpath slope (ft/ft)	0.080	0.156		
<b>7</b> Current land cover type(s) <i>Select from Fig C-3</i> of Hydrology Manual	Grass, Annual or Perennial	Woodland		
8 Pre-developed pervious area condition: Based on the extent of wet season vegetated cover good >75%; Fair 50-75%; Poor <50% Attach photos of site to support rating	FAIR: 50-75%	FAIR: 50-75%		

Form 3-2 Existing Hydro	ologic Char	acteristics fo	or Drainage	Area 1
(use only as need	aed for add	itional DMA	w/in DA 1	+
For Drainage Area 1's sub-watershed DMA, provide the following characteristics	DMA E	DMA F	DMA G	DMA H
<sup>1</sup> DMA drainage area (ft <sup>2</sup> )				
<b>2</b> Existing site impervious area (ft <sup>2</sup> )				
<sup>3</sup> Antecedent moisture condition For desert areas, use <u>http://www.sbcounty.gov/dpw/floodcontrol/pdf/2</u> 0100412_map.pdf				
<sup>4</sup> Hydrologic soil group <i>Refer to Watershed</i> <i>Mapping Tool –</i> <u>http://permitrack.sbcounty.qov/wap/</u>				
<sup>5</sup> Longest flowpath length (ft)				
6 Longest flowpath slope (ft/ft)				
<b>7</b> Current land cover type(s) <i>Select from Fig C-3 of Hydrology Manual</i>				
8 Pre-developed pervious area condition: Based on the extent of wet season vegetated cover good >75%; Fair 50-75%; Poor <50% Attach photos of site to support rating				

## Form 3-3 Watershed Description for Drainage Area

Receiving waters Refer to Watershed Mapping Tool - <u>http://permitrack.sbcounty.gov/wap/</u> See 'Drainage Facilities'' link at this website	Oak Glen Creek Wilson Creek San Timoteo Creek, Reach 3 San Timoteo Creek, Reach 2 San Timoteo Creek, Reach 1B San Timoteo Creek, Reach 1A Santa Ana River, Reach 1A Santa Ana River, Reach 5 Santa Ana River, Reach 4 Santa Ana River, Reach 3 Prado Dam Santa Ana River, Reach 2 Santa Ana River, Reach 1 Pacific Ocean
Applicable TMDLs Refer to Local Implementation Plan	San Timoteo Creek, Reach 3: Indicator Bacteria San Timoteo Creek, Reach 2: Indicator Bacteria San Timoteo Creek, Reach 1A: Indicator Bacteria Santa Ana River, Reach 4: Indicator Bacteria Santa Ana River, Reach 3: Lead, Copper Prado Dam: pH
303(d) listed impairments Refer to Local Implementation Plan and Watershed Mapping Tool – <u>http://permitrack.sbcounty.gov/wap/</u> and State Water Resources Control Board website – <u>http://www.waterboards.ca.gov/santaana/water_iss</u> <u>ues/programs/tmdl/index.shtml</u>	San Timoteo Creek, Reach 2: Indicator Bacteria San Timoteo Creek, Reach 2: Indicator Bacteria San Timote Southwestern Willow Santa Ana Flycatcher Bacteria Prado Dam: pH
Environmentally Sensitive Areas (ESA) Refer to Watershed Mapping Tool – <u>http://permitrack.sbcounty.gov/wap/</u>	- No Environmentally Sensitive Areas within 200 feet of the Site.
Unlined Downstream Water Bodies Refer to Watershed Mapping Tool – <u>http://permitrack.sbcounty.gov/wap/</u>	Wildwood Creek, Live Oak Creek, San Timoteo Creek (Reach 2+3) and San Timoteo Creek (Reach 1B).
Hydrologic Conditions of Concern	Yes Complete Hydrologic Conditions of Concern (HCOC) Assessment. Include Forms 4.2-2 through Form 4.2-5 and Hydromodification BMP Form 4.3-10 in submittal *HCOC ASSESSMENT NOT REQUIRED FOR THIS PROJECT*
Watershed–based BMP included in a RWQCB approved WAP	<ul> <li>Yes Attach verification of regional BMP evaluation criteria in WAP</li> <li>More Effective than On-site LID</li> <li>Remaining Capacity for Project DCV</li> <li>Upstream of any Water of the US</li> <li>Operational at Project Completion</li> <li>Long-Term Maintenance Plan</li> <li>No</li> </ul>

# Section 4 Best Management Practices (BMP)

## 4.1 Source Control BMP

#### 4.1.1 Pollution Prevention

Non-structural and structural source control BMP are required to be incorporated into all new development and significant redevelopment projects. Form 4.1-1 and 4.1-2 are used to describe specific source control BMPs used in the WQMP or to explain why a certain BMP is not applicable. Table 7-3 of the TGD for WQMP provides a list of applicable source control BMP for projects with specific types of potential pollutant sources or activities. The source control BMP in this table must be implemented for projects with these specific types of potential pollutant sources or activities.

The preparers of this WQMP have reviewed the source control BMP requirements for new development and significant redevelopment projects. The preparers have also reviewed the specific BMP required for project as specified in Forms 4.1-1 and 4.1-2. All applicable non-structural and structural source control BMP shall be implemented in the project.

Form 4.1-1 Non-Structural Source Control BMPs						
			ck One	Describe BMP Implementation OR,		
ldentifier	Name	Included	Not Applicable	if not applicable, state reason		
N1	Education of Property Owners, Tenants and Occupants on Stormwater BMPs			The owner will implement an education p maintenance. Material will be provided by own protection of storm water quality. The provided to, approved "County of San Bernardino Stormwater Pollution Prevention" education materials for residential sites and applicable maintenance specifications for proposed BMPs. BMP education material found in, but not limited to, Section 6.4 of this report and accessible for contractors and maintenance crews of the property. The property owner will maintain, enforce and revise the BMP education program as necessary.		
N2	Activity Restrictions			Owner will be prohibited from any discharges into the landscaping and paved areas. Other prohibited discharges listed in the City and County Ordinances will be restricted. Prohibition of these discharges will prevent pollutarts contaminating the existing drainage system.		
N3	Landscape Management BMPs			-Landscaped areas adjacent to curbs and sidewalks will be installed at a minimum of 1- inch below the finished surface. Landscape will be maintained in accordance with County of San Bernardino "Stormwater Pollution Prevention: Landscape Maintenance", located in Section 6.4.C of this report.		
N4	BMP Maintenance			BMPs will be maintained per Form 5-1 of this report.		
N5	Title 22 CCR Compliance (How development will comply)			No hazardous materials will be stored or generated on-site.		
N6	Local Water Quality Ordinances			Owner will comply will all County of San Bernardino and City of Yucaipa Water Ouality Ordinances.		
N7	Spill Contingency Plan			of this WQMP.		
N8	Underground Storage Tank Compliance			Not required for this development.		

At a minimum, a spill kit with absorbent material should be kept on site for potential of vehicle oils leaks.

Form 4.1-1 Non-Structural Source Control BMPs							
		Check One		Describe BMP Implementation OR,			
Identifier	Name	Included	Not Applicable	if not applicable, state reason			
N9	Hazardous Materials Disclosure Compliance		$\boxtimes$	No hazardous materials will be stored or generated on-site	2.		
N10	Uniform Fire Code Implementation			No hazardous materials will be stored or generated on-sit	When and how ofte		
N11	Litter/Debris Control Program			Litter and debris will be deposited in appropriate covered receptacles enclosures. Any accumulated trash or debris on-site will be removed a properly.	occur?		
N12	Employee Training			Property owner will be provided a copy of this WQMP to train any hired contractors on post-construction storm water treatment management.			
N13	Housekeeping of Loading Docks			No loading docks are proposed.			
N14	Catch Basin Inspection Program		$\boxtimes$	No catch basins are proposed.			
N15	Vacuum Sweeping of Private Streets and Parking Lots	$\boxtimes$		The parking lots will be swept monthly. Driveway entrance will be swept annually before the rainy season and periodically as necessary to remove accumulated sediment and debris.			
N16	Other Non-structural Measures for Public Agency Projects			Not a public agency project.			
N17	Comply with all other applicable NPDES permits			The project is less than 1-acre. No WDID # will be obtained	i.		

	Form 4.1-2 Structural Source Control BMPs							
		Check One		Describe BMP Implementation OR.				
ldentifier	Name	Included	Not Applicable	If not applicable, state reason				
S1	Provide storm drain system stencilling and signage (CASQA New Development BMP Handbook SD-13)		$\boxtimes$	No storm drain proposed for this development.				
S2	Design and construct outdoor material storage areas to reduce pollution introduction (CASQA New Development BMP Handbook SD-34)			No outdoor material storage areas proposed.				
S3	Design and construct trash and waste storage areas to reduce pollution introduction (CASQA New Development BMP Handbook SD-32)	$\boxtimes$		Trash enclosures are designed with impervious bottoms (portland cement concrete) to prevent infiltration into pervious surfaces. Awnings will be provided and prevent direct precipitation onto trash enclosure areas. Screen walls will be built around trash enclosure to prevent off-site transport of trash. Drainage for trash enclosure will prevent run-on from adjoining areas.				
S4	Use efficient irrigation systems & landscape design, water conservation, smart controllers, and source control (Statewide Model Landscape Ordinance; CASQA New Development BMP Handbook SD-12)			Landscape shall include weather-based controllers, rain shutoff devices and drip irrigation heads that will prevent over irrigation in landscaped areas. A landscaped barrier will be designed to around property lines and right-of-way lines to act as a pollutant filter for the site.				
S5	Finish grade of landscaped areas at a minimum of 1-2 inches below top of curb, sidewalk, or pavement	$\boxtimes$		Landscaped areas adjacent to curbs and sidewalks will be sumped at a minimum of 1-inch below the finished surface. Inspection will occur before rainy season (October 1st) and after any rain event.				
S6	Protect slopes and channels and provide energy dissipation (CASQA New Development BMP Handbook SD-10)			No proposed channels or slopes that need erosion protection or stabilization proposed for this development.				
S7	Covered dock areas (CASQA New Development BMP Handbook SD-31)			No loading docks proposed for this development.				
S8	Covered maintenance bays with spill containment plans (CASQA New Development BMP Handbook SD-31)			No maintenance bays proposed.				
S9	Vehicle wash areas with spill containment plans (CASQA New Development BMP Handbook SD-33)			No vehicle wash ing proposed.				

Form 4.1-2 Structural Source Control BMPs						
		Check One		Describe BMP Implementation OR,		
Identifier	Name	Included	Not Applicable	If not applicable, state reason		
S10	Covered outdoor processing areas (CASQA New Development BMP Handbook SD-36)		$\square$	No outdoor processing area proposed.		
S11	Equipment wash areas with spill containment plans (CASQA New Development BMP Handbook SD-33)			No Equipment wash ing proposed.		
S12	Fueling areas (CASQA New Development BMP Handbook SD-30)			No fueling areas proposed.		
S13	Hillside landscaping (CASQA New Development BMP Handbook SD-10)			No hillside grading proposed for this project.		
S14	Wash water control for food preparation areas			No food preparation areas proposed outdoors, all existing food preparation occurs indoors.		
S15	Community car wash racks (CASQA New Development BMP Handbook SD-33)			No wash racks proposed.		

There are hillsides within project site. Specify whether hillside landscaping will be implemented or if there is no development proposed in these regions.

#### 4.1.2 Preventative LID Site Design Practices

Site design practices associated with new LID requirements in the MS4 Permit should be considered in the earliest phases of a project. Preventative site design practices can result in smaller DCV for LID BMP and hydromodification control BMP by reducing runoff generation. Describe site design and drainage plan including:

- A narrative of site design practices utilized or rationale for not using practices
- A narrative of how site plan incorporates preventive site design practices
- Include an attached Site Plan layout which shows how preventative site design practices are included in WQMP

Refer to Section 5.2 of the TGD for WQMP for more details.

Form 4.1-3 Preventative LID Site Design Practices Checklist
Site Design Practices If yes, explain how preventative site design practice is addressed in project site plan. If no, other LID BMPs must be selected to meet targets
Minimize impervious areas: Yes 🔀 🛛 No 🗌
Explanation: Redesigned site plan to minimize pervious additions to only 3,567 sqft by using pervious pavers instead of asphalt or other pervious material.
Maximize natural infiltration capacity: Yes 🛛 No 🗌
Explanation: Landscaped areas will be depressed 1-inch below finished surface and int basin proposed (ious area for infiltration as best as possible.
Preserve existing drainage patterns and time of concentration: Yes A No A Section of Concentration will improve due to applying an underground infiltration basin with controlled stormwater release of excess flows into the storm drain system.
Disconnect impervious areas: Yes 🖄 No
Explanation: Roof drains will outlet directly into existing and proposed landscaping.
Protect existing vegetation and sensitive areas: Yes 🛛 No 🗌
Explanation: All pervious area disturbed will be re-vegetated for stabilization of underlying soils.
Re-vegetate disturbed areas: Yes 🖾 No 🗌
Explanation: Additional vegetation to be added along West property line, and in addition over 2 acres of currently unused land will be repurposed for agritourism use.
Minimize unnecessary compaction in stormwater retention/infiltration basin/trench areas: Yes 🗌 No 🔀
Explanation: No infiltration BMPs proposed for this project.
Utilize vegetated drainage swales in place of underground piping or imperviously lined swales: Yes 🗌 No 🔀
Explanation: No vegetated swales proposed for this project.
Stake off areas that will be used for landscaping to minimize compaction during construction : Yes 🛛 No 🗌
Explanation: Areas that will be re-vegetated with proposed landscaping will be staked off to limit the amount of unnecessary compaction. Excessive foot traffic and vehicle traffic will not be allowed in these areas to promote infiltration.

Do not omit any sheets even if blank

Form 4.3-7 Volume Based Biotreatment (DA 1) –							
<b>Constructed Wetlands and Extended Detention</b>							
Biotreatment BMP Type Constructed wetlands, extended wet detention, extended dry detention, or other comparable proprietary BMP. If BMP includes multiple modules (e.g. forebay and main basin), provide separate estimates for storage	DA BMP Ty	DMA pe	DA E BMP Typ (Use addition for more	DA DMA BMP Type (Use additional forms for more BMPs)			
and pollutants treated in each module.	Forebay	Basin	Forebay	Basin			
<sup>1</sup> Pollutants addressed with BMP forebay and basin List all pollutant of concern that will be effectively reduced through specific Unit Operations and Processes described in Table 5-5 of the TGD for WQMP							
<sup>2</sup> Bottom width (ft)							
<sup>3</sup> Bottom length (ft)							
<sup>4</sup> Bottom area (ft <sup>2</sup> ) A <sub>bottom</sub> = Item 2 * Item 3							
<sup>5</sup> Side slope (ft/ft)							
<sup>6</sup> Depth of storage (ft)							
<b>7</b> Water surface area (ft <sup>2</sup> ) A <sub>surface</sub> =(Item 2 + (2 * Item 5 * Item 6)) * (Item 3 + (2 * Item 5 * Item 6))							
<b>8</b> Storage volume (ft <sup>3</sup> ) For BMP with a forebay, ensure fraction of total storage is within ranges specified in BMP specific fact sheets, see Table 5-6 of the TGD for WQMP for reference to BMP design details $V = Item 6 / 3 * [Item 4 + Item 7 + (Item 4 * Item 7)^0.5]$							
<b>9</b> Drawdown Time (hrs) <i>Copy Item 6 from Form 2.1</i>							
<sup>10</sup> Outflow rate (cfs) $Q_{BMP} = (Item 8_{foreboy} + Item 8_{basin}) / (Item 9 * 3600)$							
<sup>11</sup> Duration of design storm event (hrs)							
12 Biotreated Volume (ft <sup>3</sup> ) V <sub>biotreated</sub> = (Item 8 <sub>forebay</sub> + Item 8 <sub>basin</sub> ) +( Item 10 * Item 11 * 3600)							
<sup>13</sup> Total biotreated volume from constructed wetlands, extended (Sum of Item 12 for all BMP included in plan)	dry detention, or	extended wet de	etention : 0				

### \*PROJECT IS A NON-CATEGORY PROJECT, BMPs NOT REQUIRED\*

Form 4.3-8 Flow Based Biotreatment (DA 1)							
Biotreatment BMP Type Vegetated swale, vegetated filter strip, or other comparable proprietary BMP	DA DMA BMP Type	DA DMA BMP Type	DA DMA BMP Type (Use additional forms for more BMPs)				
<sup>1</sup> Pollutants addressed with BMP List all pollutant of concern that will be effectively reduced through specific Unit Operations and Processes described in TGD Table 5-5							
<sup>2</sup> Flow depth for water quality treatment (ft) BMP specific, see Table 5-6 of the TGD for WQMP for reference to BMP design details							
<ul> <li><sup>3</sup> Bed slope (ft/ft)</li> <li>BMP specific, see Table 5-6 of the TGD for WQMP for reference to BMP design details</li> </ul>							
<sup>4</sup> Manning's roughness coefficient							
<sup>5</sup> Bottom width (ft) b <sub>w</sub> = (Form 4.3-5 Item 6 * Item 4) / (1.49 * Item 2 <sup>1.67</sup> * Item 3 <sup>0.5</sup> )							
<b>6</b> Side Slope (ft/ft) BMP specific, see Table 5-6 of the TGD for WQMP for reference to BMP design details							
7 Cross sectional area (ft <sup>2</sup> ) $A = (Item 5 * Item 2) + (Item 6 * Item 2^2)$							
<b>8</b> Water quality flow velocity (ft/sec) V = Form 4.3-5 Item 6 / Item 7							
<b>9</b> Hydraulic residence time (min) Pollutant specific, see Table 5-6 of the TGD for WQMP for reference to BMP design details							
<b>10</b> Length of flow based BMP (ft) L = Item 8 * Item 9 * 60							
<sup>11</sup> Water surface area at water quality flow depth ( $ft^2$ ) SA <sub>top</sub> = (Item 5 + (2 * Item 2 * Item 6)) * Item 10							

#### \*PROJECT IS A NON-CATEGORY PROJECT, BMPs NOT REQUIRED\*

#### 4.3.5 Conformance Summary

Complete Form 4.3-9 to demonstrate how on-site LID DCV is met with proposed site design hydrologic source control, infiltration, harvest and use, and/or biotreatment BMP. The bottom line of the form is used to describe the basis for infeasibility determination for on-site LID BMP to achieve full LID DCV, and provides methods for computing remaining volume to be addressed in an alternative compliance plan. If the project has more than one outlet, then complete additional versions of this form for each outlet.

Form 4.3-9 Conformance Summary and Alternative							
Compliance Volume Estimate (DA 1)							
<sup>1</sup> Total LID DCV for the Project DA-1 (ft <sup>3</sup> ): Copy Item 7 in Form 4.2-1							
<sup>2</sup> On-site retention with site design hydrologic source control LID BMP (ft <sup>3</sup> ): Copy Item 30 in Form 4.3-2							
<sup>3</sup> On-site retention with LID infiltration BMP (ft <sup>3</sup> ): Copy Item 16 in Form 4.3-3							
<sup>4</sup> On-site retention with LID harvest and use BMP (ft <sup>3</sup> ): Copy Item 9 in Form 4.3-4							
<sup>5</sup> On-site biotreatment with volume based biotreatment BMP (ft <sup>3</sup> ): Copy Item 3 in Form 4.3-5							
<sup>6</sup> Flow capacity provided by flow based biotreatment BMP (cfs): Copy Item 6 in Form 4.3-5							
<sup>7</sup> LID BMP performance criteria are achieved if answer to any of the following is "Yes":							
<ul> <li>Full retention of LID DCV with site design HSC, infiltration, or harvest and use BMP: Yes No If yes, sum of Items 2, 3, and 4 is greater than Item 1</li> <li>Combination of on-site retention BMPs for a portion of the LID DCV and volume-based biotreatment BMP that address all pollutants of concern for the remaining LID DCV: Yes No If yes, a) sum of Items 2, 3, 4, and 5 is greater than Item 1, and Items 2, 3 and 4 are maximized; or b) Item 6 is greater than Form 4.35 Item 6 and Items 2, 3 and 4 are maximized</li> <li>On-site retention and infiltration is determined to be infeasible and biotreatment BMP provide biotreatment for all pollutants of concern for full LID DCV: Yes No III the form 4.3-1 Items 7 and 8 were both checked yes</li> </ul>							
<sup>8</sup> If the LID DCV is not achieved by any of these means, then the project may be allowed to develop an alternative compliance plan. Check box that describes the scenario which caused the need for alternative compliance:							
<ul> <li>Combination of HSC, retention and infiltration, harvest and use, and biotreatment BMPs provide less than full LID DCV capture: Checked yes for Form 4.3-5 Item 7, Item 6 is zero, and sum of Items 2, 3, 4, and 5 is less than Item 1. If so, apply water quality credits and calculate volume for alternative compliance, V<sub>alt</sub> = (Item 1 – Item 2 – Item 3 – Item 4 – Item 5) * (100 - Form 2.4-1 Item 2)%</li> <li>An approved Watershed Action Plan (WAP) demonstrates that water quality and hydrologic impacts of urbanization are more effective when managed in at an off-site facility: Attach appropriate WAP section, including technical documentation, showing effectiveness comparisons for the project site and regional watershed</li> </ul>							

\*PROJECT IS A NON-CATEGORY PROJECT, BMPs NOT REQUIRED\*

#### 4.3.6 Hydromodification Control BMP

Use Form 4.3-10 to compute the remaining runoff volume retention, after LID BMP are implemented, needed to address HCOC, and the increase in time of concentration and decrease in peak runoff necessary to meet targets for protection of waterbodies with a potential HCOC. Describe hydromodification control BMP that address HCOC, which may include off-site BMP and/or in-stream controls. Section 5.6 of the TGD for WQMP provides additional details on selection and evaluation of hydromodification control BMP.

Form 4.3-10	Hydr	omodification Control BMPs (DA 1)				
<b>1</b> Volume reduction needed for HCOC performance criteria (ft <sup>3</sup> ): (Form 4.2-2 Item 4 * 0.95) – Form 4.2-2 Item	1	<sup>2</sup> On-site retention with site design hydrologic source control, infiltration, and harvest and use LID BMP (ft <sup>3</sup> ): Sum of Form 4.3-9 Items 2, 3, and 4 Evaluate option to increase implementation of on-site retention in Forms 4.3-2, 4.3-3, and 4.3-4 in excess of LID DCV toward achieving HCOC volume reduction				
<ul> <li>Remaining volume for HCOC</li> <li>volume capture (ft<sup>3</sup>): Item 1 –</li> <li>Item 2</li> </ul>	<b>4</b> Volum (ft <sup>3</sup> ): so, attach during a 2	e capture provided by incorporating additional on-site or off-site retention BMPs Existing downstream BMP may be used to demonstrate additional volume capture (if to this WQMP a hydrologic analysis showing how the additional volume would be retained 2-yr storm event for the regional watershed)				
<sup>5</sup> If Item 4 is less than Item 3, incorpora hydromodification Attach in-stream	te in-strea control BM	am controls on downstream waterbody segment to prevent impacts due to <i>P selection and evaluation to this WQMP</i>				
<ul> <li><sup>6</sup> Is Form 4.2-2 Item 11 less than or equal to 5%: Yes No</li> <li>If yes, HCOC performance criteria is achieved. If no, select one or more mitigation options below:</li> <li>Demonstrate increase in time of concentration achieved by proposed LID site design, LID BMP, and additional on-site or off-site retention BMP</li> <li>BMP upstream of a waterbody segment with a potential HCOC may be used to demonstrate increased time of concentration through hydrograph attenuation (if so, show that the hydraulic residence time provided in BMP for a 2-year storm event is equal or greater than the addition time of concentration requirement in Form 4.2-4 Item 15)</li> <li>Increase time of concentration by preserving pre-developed flow path and/or increase travel time by reducing slope and increasing cross-sectional area and roughness for proposed on-site conveyance facilities</li> <li>Incorporate appropriate in-stream controls for downstream waterbody segment to prevent impacts due to</li> </ul>						
Form 4.2-2 Item 12 less than or equal to 5%: Yes No I If yes, HCOC performance criteria is achieved. If no, select one or more mitigation options below:						
<ul> <li>Demonstrate reduction in peak runoff achieved by proposed LID site design, LID BMPs, and additional on-site or off-sire retention BMPs </li> <li>BMPs upstream of a waterbody segment with a potential HCOC may be used to demonstrate additional peak runoff reduction through hydrograph attenuation (if so, attach to this WQMP, a hydrograph analysis showing how the peak runoff would be reduced during a 2-yr storm event)</li> <li>Incorporate appropriate in-stream controls for downstream waterbody segment to prevent impacts due to</li> </ul>						
hydromodification, in a pla	n approve	d and signed by a licensed engineer in the State of California				

#### \*PROJECT IS A NON-CATEGORY PROJECT, HCOC ANALYSIS NOT REQUIRED\*

## 4.4 Alternative Compliance Plan (if applicable)

Describe an alternative compliance plan (if applicable) for projects not fully able to infiltrate, harvest and use, or biotreat the DCV via on-site LID practices. A project proponent must develop an alternative compliance plan to address the remainder of the LID DCV. Depending on project type some projects may qualify for water quality credits that can be applied to reduce the DCV that must be treated prior to development of an alternative compliance plan (see Form 2.4-1, Water Quality Credits). Form 4.3-9 Item 8 includes instructions on how to apply water quality credits when computing the DCV that must be met through alternative compliance. Alternative compliance plans may include one or more of the following elements:

- On-site structural treatment control BMP All treatment control BMP should be located as close to possible to the pollutant sources and should not be located within receiving waters;
- Off-site structural treatment control BMP Pollutant removal should occur prior to discharge of runoff to receiving waters;
- Urban runoff fund or In-lieu program, if available

Depending upon the proposed alternative compliance plan, approval by the executive officer may or may not be required (see Section 6 of the TGD for WQMP).

# Section 5 Inspection and Maintenance Responsibility for Post Construction BMP

All BMP included as part of the project WQMP are required to be maintained through regular scheduled inspection and maintenance (refer to Section 8, Post Construction BMP Requirements, in the TGD for WQMP). Fully complete Form 5-1 summarizing all BMP included in the WQMP. Attach additional forms as needed. The WQMP shall also include a detailed Operation and Maintenance Plan for all BMP and may require a Maintenance Agreement (consult the jurisdiction's LIP). If a Maintenance Agreement is required, it must also be attached to the WQMP.

Form 5-1 BMP Inspection and Maintenance (use additional forms as necessary)								
BMP	Reponsible Party(s)	Inspection/ Maintenance Activities Required	Minimum Frequency of Activities					
N1 - Education of Property Owners, Tenants and Occupants on Stormwater BMPs	PROPERTY OWNER	The owner will implement an education program for BMP information and maintenance. Material will be provided by owner to hired contractors regarding the protection of storm water quality. The provided materials will include, but not limited to, approved "County of San Bernardino Stormwater Pollution Prevention" education materials for commercial sites and applicable maintenance specifications for proposed BMPs. The property owner will maintain, enforce and revise the BMP education program as necessary.	Annually and at beginning of new tenant/occupant					
N2 – Activity Restrictions	PROPERTY OWNER	Owner will be prohibited from any discharges into the on- site infiltration basins and paved areas. Other prohibited discharges listed in the City and County Ordinances will be restricted. Prohibition of these discharges will prevent comingling of on-site pollutants to the existing drainage system.	At all times					
N3 – Landscape Management BMPs	PROPERTY OWNER	Irrigation systems will be designed to supply the correct amount of water for the landscape to flourish and not overwater. Timed irrigation systems will be used. Rain sensors for automatic shut off of sprinklers when it is raining will be used. Shut-off valves triggered by a pressure drop to control water loss in the event of a broken sprinkler head or broken line will be used.	Weekly or as needed for repair Revise					
N6 - Local Water Quality Ordinances	PROPERTY OWNER	Owner will be responsible for maintaining Local Water Quality Ordinance in accordance with the City of Fontana.	At all times					
N11 - Litter/Debris Control Program	PROPERTY OWNER	Maintain trash storage area and inspect trash receptacles for any leakage. Trash to be picked up on a weekly basis.	Weekly Basis					
N12 - Employee Training	PROPERTY OWNER	Property owner will be provided a copy of this WQMP to train any hired contractors on post-construction storm water treatment management.	Quarterly basis and at hiring of employees.					

#### Water Quality Management Plan (WQMP)

N15 - Vacuum Sweeping of Private Streets and Parking Lots	PROPERTY OWNER	Parking lots to be swept and litter to be removed.	Sweep parking lots monthly and remove litter as needed.
S3 - Design and construct trash and waste storage areas to reduce pollution introduction	PROPERTY OWNER	Trash Enclosure to be inspected for leaks in roof covering, bin lids and interior of bin. Trash Enclosure to be immediately fixed to prevent comingling of trash/waste and stormwater upon discovery of leaks.	Inspect on Weekly Basis
S4 - Use efficient irrigation systems & landscape design, water conservation, smart controllers, and source control	PROPERTY OWNER	Irrigation systems will be designed to supply the correct amount of water for the landscape to flourish and not overwater. Timed irrigation systems will be used. Rain sensors for automatic shut off of sprinklers when it is raining will be used. Shut-off valves triggered by a pressure drop to control water loss in the event of a broken sprinkler head or broken line will be used.	Weekly or as needed for repair
S5 - Finish grade of landscaped areas at a minimum of 1-2 inches below top of curb, sidewalk, or pavement	PROPERTY OWNER	Landscaped areas adjacent to curbs and sidewalks will be installed at a minimum of 1-inch below the finished hardscape surface. Inspection will occur before rainy season.	Inspect on Weekly Basis

# Section 6 WQMP Attachments

## 6.1. Site Plan and Drainage Plan

Include a site plan and drainage plan sheet set containing the following minimum information:

- Project location
- Site boundary
- Land uses and land covers, as applicable
- Suitability/feasibility constraints
- Structural Source Control BMP locations
- Site Design Hydrologic Source Control BMP locations
- LID BMP details
- Drainage delineations and flow information
- Drainage connections

## 6.2 Electronic Data Submittal

Minimum requirements include submittal of PDF exhibits in addition to hard copies. Format must not require specialized software to open. If the local jurisdiction requires specialized electronic document formats (as described in their local Local Implementation Plan), this section will describe the contents (e.g., layering, nomenclature, geo-referencing, etc.) of these documents so that they may be interpreted efficiently and accurately.

## 6.3 Post Construction

Attach all O&M Plans and Maintenance Agreements for BMP to the WQMP.

### 6.4 Other Supporting Documentation

BMP Educational Materials

**Documents missing** 

Activity Restriction – C, C&R's & Lease Agreements



# FOR OFFICIAL USE ONLY

NG. VING. IVING. IO COUNTY				
IOWN ON PLANS.	UTILITY COMPANIES	FOR THIS PROJEC	;T:	
IUWIN OIN I LAINS.	TELEPHONE:	ELECTRIC:	SEWER:	
	VERIZON P.O. BOX 641 SAN BERNARDINO, CA. 92401 PH: (909) 482–6711	SOUTHERN CALIFORNIA 287 TENNESSEE STRE REDLANDS, CA. 9237. PH: (909) 335–7191	A EDISON CO. PRIVATE IET 3	E SEPTIC
T IS LESS THAN TU%. AND DETAILS.	CABLE TELEVISION:	GAS:	WATER:	
	SATELLITE SYSTEM	PROPANE	PRIVATE	E WELL
INTEREST.	PARKING SPACE AN	VALYSIS:		
	Land Use/Req'mt.	Parking Rate	<u>Bldg. Size/Rate</u>	No. of <u>Stall Reqd:</u>
	BED AND BREAKFAST/ EVENT VENUE	1 PER GUEST ROOM / 1 PER 4 ATTENDEES (ESTIMATED)	5 GUEST ROOMS / 200 ATTENDEE MAX	5 / 45
	TOTAL PARKING STALLS R	EQUIRED, BED & BREAKFA	ST: 4 1 0 5	Regular Handicap Loading Total
	TOTAL PARKING STALLS R	EQUIRED, EVENT VENUE:		Regular Handicap Loading Total
	PARKING STALLS PRO <u>NOTE:</u> PERMEABLE PAVER = 48	OVIDED: REGULAR STALLS	( 48 = STD. 9'x19 ( 1 = Van Hand ( 1 = Reg. Hand ( = Loading Z ( = Electric V	9') icap) dicap) Ione) (ehicle)
	PARKING 2 HA	ANDICAP STALLS	( = Tesla) ( = Bus) ( = Seim-Tru ( = RV) ( = Impound	ck) Yard)
	TOTAL PARKING STAI	LLS PROVIDED:	50	
ASP VAN ACCESSIBI	HALT PARKING STALLS	9' TRASI	CCESSIBLE NG STALL	
PARKING ST	ALL 5' PERMEABLE PAVER P/	ARKING LOT		ALD PROFESSION ALL FILE ALD RUMARD K. 444 FILE ALL RUMARD K. 444 FILE NO. 36866 Exp. 6-30-22
ROAD SHALL BE LIMITED TO TWO AL DRIVEWAYS AND ONE GATED KED EMERGENCY DRIVEWAY.	REGULAR STALL DE	/VAN ACCESSIBLE PA FAIL – 1 VAN & 3 RE	RKING	STATE CIVIL
S/7	ETECH INC.	APN:	0324-101-	35
8061 CHURCH ST. HIGHLAND CA	92346 PO BOX 592	C.U.P. FOR BED	& BREAKFAST / I	EVENT VENUE
ARD K. MAYER R.C.I	<u>SEPTEMBER 04, 2020</u> E. 36866 DATE 7319	APPLICANT: KIRSTEN ROYSTE 38433 POTATO CANYC OAK GLEN, CA 92 EMAIL: kirsten@royst	EN N ROAD 2399 on.com	ATE: 3ER 04, 2020