CITY OF RANCHO CUCAMONGA
BUILDING & SAFETY
SERVICES DEPARTMENT

Water Quality Management Plan (WQMP) for Non-Priority Single Family Residential Projects

Background:

All City of Rancho Cucamonga new development and re-development projects such as a new custom single family house or a residential addition to a single family house, are required to comply with the Santa Ana Regional Water Quality Control Board (RWQCB) Water Quality Management Plan (WQMP), and incorporate post-construction Best Management Practices (BMPs).

This form has been created for the express purpose of use for Non-Priority Single Family Residential Projects. For further and more complete information and reference to section numbers, please refer to the WQMP Technical Guidance Document online at:

http://www.sbcounty.gov/dpw/land/pdf/WQMP/AppendixB-WQMPTemplate(editable).doc

Project Requirements Checklist:

1. Owner Certification (Complete and sign form).
2. Confirm that Project is a Non-Priority Single Family Residential Project (see Form2.1-1).
3. Complete attached Sections 1 and 2.
4. Attach a sheet of paper with Site Design and Source Control Best Management Practices (BMPs) incorporated in this project and address Operation and Maintenance plans. (See SAMPLE attached).

Disclaimer:

The City of Rancho Cucamonga is providing this handout for your use and convenience in preparing a WQMP for residential Single Family Non-Priority Projects. The Standards laid out in the approved Model WQMP Technical Guidance document will at all times supercede the text in this document. For a copy of the Model WQMP Guidance document visit:
http://www.sbcounty.gov/dpw/land/pdf/WQMP/AppendixB-WQMPTemplate(editable).doc

CITY OF RANCHO CUCAMONGA
BUILDING & SAFETY
SERVICES DEPARTMENT

Water Quality Management Plan (WQMP)
Non-Priority Single Family Residential Project
For a Single House

OWNER CERTIFICATION

All related Case #'s _____

To: City of Rancho Cucamonga

From: _____
Name of Owner

_____
Address

_____

_____
Phone Number

Project Site Address: _____

_____

Brief Project Description: _____

_____

_____

_____

"I hereby certify that the information contained in this Water Quality Management Plan (WQMP) is true and correct to the best of my knowledge and belief. I hereby certify that I accept the provisions of the WQMP and that I will strive to have the Plan carried out by all future successors. I further understand that additional information may be required to be submitted before an adequate evaluation can be made by the City of Rancho Cucamonga."

_____ _____
Signature Date Print Name

Section 1

Form 1-1 Project Information					
Project Name:					
Project Owner Contact Name:					
Mailing Address:		Email Address:		Phone:	
Permit/Application Number(s):			Tract/Parcel Map Number(s):		
Additional Information / Comments:					
Description of Project:					
Provide summary of Conceptual WQMP conditions (if previously submitted and approved). Attach complete copy.	N/A				

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 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

[1] Development Category (Select all that apply):

☐ Significant re-development involving the addition or replacement of 5,000 ft^2 or more of impervious surface on an already developed site	☐ New development involving the creation of 10,000 ft^2 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^2 or more
☐ Hillside developments of 5,000 ft^2 or more which are located on areas with known erosive soil conditions or where the natural slope is 25 percent or more	☐ Developments of 2,500 ft^2 of impervious surface or more adjacent to (within 200 ft) or discharging directly into environmentally sensitive areas or waterbodies listed on the CWA Section 303(d) list of impaired waters.	☐ Parking lots of 5,000 ft^2 or more exposed to storm water	☐ Retail gasoline outlets that are either 5,000 ft^2 or more, or have a projected average daily traffic of 100 or more vehicles per day

☒ Non-Priority / Non-Category Project *May require source control LID BMPs and other LIP requirements. Please consult with local jurisdiction on specific requirements.*

[2] Project Area (ft^2):		[3] Number of Dwelling Units:	One (1)	[4] SIC Code:	N/A

[5] Is Project going to be phased? Yes ☐ No ☒ *If yes, ensure that the WQMP evaluates each phase as a distinct DA, requiring LID BMPs to address runoff at time of completion.*

[6] Does Project include roads? Yes ☐ No ☒ *If yes, ensure that applicable requirements for transportation projects are addressed (see Appendix A of TGD of WQMP*

The Non-Priority Single Family Residential Projects are required to:

- *Incorporate and implement Site Design BMPs, as determined to be appropriate during the site planning and approval process. These BMPs and the selection process are described in Section 4.1.1 in WQMP.*
- *Incorporate and implement all applicable Source Control BMPs as listed in Form 4.1-1. These BMPs and the selection process are described in Section 4.1.1 in the WQMP.*

Best Management Practices:

Strategies to minimize the pollutants in runoff from the project site include site design BMPs, source control BMPs, and/or treatment control BMPs.

Site Design BMPs aim to incorporate site features such as vegetation to reduce and control post-development runoff rates. Because Site Design BMPs reduce direct runoff and increase infiltration onsite, they reduce the transport mechanism for moving pollutants off-site, and help mitigate the differences between pre-and post-development hydrographs. This minimizes changes in flow regime and reduces the size of necessary structural treatment control BMPs to treat runoff prior to discharge from the site or at regional facilities. Therefore, site design is usually the most efficient and cost effective way to minimize adverse impacts. All projects shall include Site Design BMPs as specified in 5.2.1.

Source Control BMPs reduce the potential for stormwater runoff and pollutants from coming into contact with one another. Source control BMPs are defined as any administrative action, design of a structural facility, usage of alternative materials, and operation, maintenance, inspection, and compliance of an area that aims to eliminate or reduce stormwater pollution. Each new development and significant redevelopment project is required to implement appropriate_Source Control BMP(s). Table 2.2 lists examples of Source Control BMPs.

Site Design BMPs:

The following Site Design BMPs are to be incorporated where possible into the Project to minimize any adverse stormwater related impacts. Such impacts could include harmful effects on drinking water supplies, recreational use and wildlife.

- **Minimize Stormwater Runoff, Minimize Project's Impervious Footprint, and Conserve Natural Areas (refer to Section 4.1.1 in WQMP for details)**

- Maximize the permeable area.
- Runoff from developed areas may be reduced by using alternative materials or surfaces with a lower Coefficient of Runoff, or “C-Factor.”
- Conserve natural areas.
- Construct walkways, trails, patios, overflow parking lots, 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.
- Construct street, sidewalks, and parking lot aisles to the minimum widths necessary, provided that public safety and a pedestrian friendly environment are not compromised. Incorporate landscaped buffer areas between sidewalks and streets.
- Reduce widths of street where off-street parking is available.
- Maximize canopy interception and water conservation by preserving existing native trees and shrubs, and planting additional native or drought tolerant trees and large shrubs.
- Minimize the use of impervious surfaces, such as decorative concrete, in the landscape design.
- Use natural drainage systems.
- Where soils conditions are suitable, use perforated pipe or gravel filtration pits for low flow infiltration.
- Construct onsite ponding areas, rain gardens, or retention facilities to increase opportunities for infiltration, while being cognizant of the need to prevent the development of vector breeding areas.
- Other comparable site design options that are equally effective.

❖ **Minimize Directly Connected Impervious Areas (refer to Section 4.1.1 in WQMP for details).**

- Where landscaping is proposed, drain rooftops into adjacent landscaping prior to discharging to the storm drain.
- Where landscaping is proposed, drain impervious sidewalks, walkways, trails, and patios into adjacent landscaping.
- Increase the use of vegetated drainage swales in lieu of underground piping or imperviously lined swales.
- Use one or more of the following:
  - Rural swale system: street sheet flows to vegetated swale or gravel shoulder, curbs at street corners, culverts under driveways and street crossings.
  - Urban curb / swale system: street slopes to curb; periodic swale inlets drain to vegetated swale / biofilter.
  - Dual drainage system: First flush captured in street catch basins and discharged to adjacent vegetated swale or gravel shoulder, high flows connect directly to municipal storm drain systems.
- Use one or more of the following features for design of driveways and private residential parking areas:

- Design driveways with shared access, flared (single lane at street) or wheel strips (paving only under tires); or, drain into landscaping prior to discharging to the municipal storm drain system.
- Uncovered temporary or guest parking on private residential lots may be paved with a permeable surface; or designed to drain into landscaping prior to discharging to the municipal storm drain system.

- Other comparable design concepts that are equally effective.

Source Control BMPs:

Incorporate and implement all applicable Source Control BMPs as listed in Form 4.1-1. These BMPs and the selection process are described in Section 2.5.2.

Form 4.1-1 Modified Source Control BMPs*	
Routine Non-Structural	Education of Property Owners
	Activity Restrictions
	Spill Contingency Plan
	Employee Training / Education Program
	Street Sweeping Private Street and Parking Lots
	Common Areas Catch Basin Inspection
Routine Structural	Landscape Planning (SD-10)
	Hillside Landscaping
	Roof Runoff Controls (SD-11)
	Efficient Irrigation (SD-12)
	Protect Slopes and Channels
	Storm Drain Signage (SD-13)
	Inlet Trash Racks
	Energy Dissipators
	Trash Storage Areas (SD-32) and Litter Control
Alternate Material	Pervious Pavement (SD-20)
	Alternative Building Materials (SD-21)
* Any BMP including reference such as (SD-30) is included in the California Stormwater Quality Association, Stormwater Best Management Practices Handbook for New Development and Redevelopment (CASQA, January 2003).	

Operations and Maintenance (O&M)

The property owner (or designee) shall be responsible for proper maintenance, repair, replacement, and inspection of the BMPs. Per the WQMP requirements, the O&M responsibilities must be transferred to future site owners.

Permit Closeout Requirements:

The City of Rancho Cucamonga will make a determination that all requirements of the Project WQMP have been satisfactorily completed prior to closeout of permits and issuance of certificates of use and occupancy.

Changes in Site Development

Refer to the WQMP Technical Guidance document in event of Changes in Site Development or Ownership.

Site and Source Control BMPs Implemented / Operation and Maintenance Plan

	Site Design BMPs	Description	Operation & Maintenance Plan
1	Maximize the permeable area	Grading areas will be minimized in accordance with planning ordinances and landscaping will be provided to the maximum extent possible.	Landscaping will be maintained to ensure maximum infiltration of stormwater.
2	Lower C-Factor	Vegetation will be planted to cover the entire development.	Landscaping will be maintained to help reduce the runoff coefficient of post-development runoff.
3	Maximize canopy interception	Trees and shrubs will be planted to maximize water retention and infiltration on site.	Trees and shrubs will be properly maintained to ensure healthy vegetation.
4	Drain rooftops into adjacent landscaping	Downspouts from roof gutters to empty into planters and other landscape areas before entering the storm drains.	Keep gutters and down spouts clear of debris.
5	Drain impervious surfaces into adjacent landscaping	Provide slope to sidewalks, walkways, trails, and patios into adjacent landscaping.	Landscaping will be maintained to ensure maximum infiltration of stormwater.
	etc. (Additional Site Design BMPs)		
	Source Control BMPs	**Description**	**Operation & Maintenance Plan**
6	Education of Property Owners	See attached educational material.	The handouts attached to the WQMP will be transferred to future owners of the property.
7	Landscape Planning (SD-10)	Grading and clearing of native vegetation will be kept to the minimum amount needed to build house, allow access, and provide fire protection. Additional trees and vegetation will be planted on site.	Areas will be maintained to ensure maximum infiltration of stormwater.
8	Hillside Landscaping	Slopes will be planted with native or drought tolerant vegetation to minimize soil erosion.	Plants will be maintained and replaced when necessary to ensure a stable and erosion free hillside.
9	Roof Runoff Controls (SD-11)	Foundation Planting is planned for this project to allow for increased stormwater infiltration. The plants used will be sturdy enough to tolerate heavy runoff sheet flows, and periodic soil saturation.	Landscaping will be maintained to ensure maximum infiltration of stormwater.
10	Efficient Irrigation (SD-12)	a) Rain-triggered shutoff devices will be employed to prevent irrigation after precipitation. b) Flow reducers or shutoff valves triggered by a pressure drop to will be utilized to control water loss in the event of broken sprinkler heads or lines. c) Timers will be implemented to minimize runoff of excess irrigation water. d) Plants with similar water requirements will be grouped together to minimize excess irrigation water runoff.	The sprinkler system will be maintained on a regular basis and “tuned” to be efficient and not wasteful of water resources.
11	Protect Slopes and Channels	Runoff will be conveyed safely from the tops of slopes and steep and unstable slopes will remain undisturbed.	Slopes will be planted with native or drought tolerant vegetation and natural channels will remain undisturbed.

Educational Materials