

# Stormwater Plan Application

All BLD & ENG Permit Applicants Must Completely Fill Out This Page

## 1) APPLICANT & CONTRACTOR INFORMATION

Applicant Name: \_\_\_\_\_ Construction Company: \_\_\_\_\_

Applicant Mailing Address: \_\_\_\_\_ Construction Contact Name: \_\_\_\_\_

Applicant Phone No.: \_\_\_\_\_ Contractor's License No.: \_\_\_\_\_

Applicant Email: \_\_\_\_\_ Construction Phone No.: \_\_\_\_\_

Construction Contact Email: \_\_\_\_\_

## 2) PROJECT INFORMATION

Tract Map                       Commercial                       Other: \_\_\_\_\_

Parcel Map                       New Single Family Residence

Project Location: \_\_\_\_\_

Description of Work: \_\_\_\_\_

Distance to Nearest Creek or Storm Drain: \_\_\_\_\_ ENG Permit #: \_\_\_\_\_ BLD Permit #: \_\_\_\_\_

Construction Stormwater Plan:     SWPPP                       GRADING / BUILDING WPCP                       MINOR PROJECT WPCP

(MUST CHOOSE ONE)                      (INCLUDED WITH PLANS- SEE WPCP CHECKLIST)                      (SEE PG 2)

## 3) IMPERVIOUS SURFACE VALUES

Pre-Project (sqft) Impervious Area: \_\_\_\_\_ Total Project Area: \_\_\_\_\_

Total Post-Project Imp. Area: \_\_\_\_\_ Pervious Area: \_\_\_\_\_

Total Post-Project New Imp. Area: \_\_\_\_\_ Removed Imp. Area: \_\_\_\_\_

Total Post-Project Replaced Imp. Area: \_\_\_\_\_

Total Project Site Disturbance: \_\_\_\_\_

## 4) REVIEW FOR STORMWATER CONTROL PLAN POST CONSTRUCTION REQUIREMENTS

SWCP REQUIRED – The project creates or replaces at least 2,500 square feet of impervious surface area.

SWCP NOT REQUIRED – The project creates or replaces less than 2,500 square feet of impervious area.

## 5) PERFORMANCE REQUIREMENTS

Check the applicable performance requirements and identify whether the project meets the requirement:

SWCP Not Required

#1 – Site Design                      Performance Requirement Met?     YES     NO

#2 – Water Quality Treatment                      Performance Requirement Met?     YES     NO

#3 – Runoff Retention                      Performance Requirement Met?     YES     NO

#4 – Peak Management                      Performance Requirement Met?     YES     NO

Are structural stormwater control measures proposed?     YES     NO

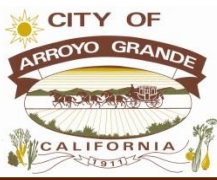
## 6) CERTIFICATION

SWCP Not Required (if checked, pages 3-9 not required)                       Full Compliance with SWCP

### Engineer of Record

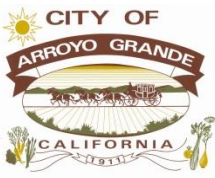
Name: \_\_\_\_\_ License No.: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



# Minor Project Water Pollution Control Plan

BMP to be Implemented		BMP Description
<b>Good Housekeeping BMPs</b>		
<input checked="" type="checkbox"/>	Equipment Maintenance	Maintain, repair, fuel, storage location, inspect vehicles
<input checked="" type="checkbox"/>	Stockpile Management	Cover Stockpile, Place Waddles
<input checked="" type="checkbox"/>	Sweeping	Sweep work area daily and prior to rain events
<input checked="" type="checkbox"/>	Spill Management	Plan and materials for mitigating spills onsite
<b>Waste Management BMPs</b>		
<input checked="" type="checkbox"/>	Saw-cut Slurry	Vacuum slurry and contain
<input checked="" type="checkbox"/>	Washout	Plastic lined washout areas for concrete and tools
<input checked="" type="checkbox"/>	Portable toilets	Provide and ensure secondary containment
<input checked="" type="checkbox"/>	Solid waste	Contain and remove trash from site daily
<b>Work Specific BMPs (check and add all that apply)</b>		
<input checked="" type="checkbox"/>	Water Pollution Control Manager Contact Info	Contact info on plans for Water Pollution Control Manager
<input type="checkbox"/>	Creek Protection Controls	BMPs and Controls to protect adjacent waterways
<input type="checkbox"/>	Storm Drain Inlet Protection	Gravel bags and entrance
<input type="checkbox"/>	Construction Entrance	BMPs to eliminate tracking from construction site
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<b>BMP Maintenance</b>		
<input checked="" type="checkbox"/>	Inspect, Document, Clean & Repair	Daily maintenance of required BMPs
<b>Acknowledgment</b>		
<p><b>I have read, understood, and agree to the requirements of:</b></p> <ol style="list-style-type: none"> <li>1. This WPCP</li> <li>2. City of Arroyo Grande's Engineering Standard and Specifications and Stormwater Management Plan</li> <li>3. State of California's General Construction Permit and the Federal Clean Water Act</li> </ol> <p><b>I understand and agree that:</b></p> <ol style="list-style-type: none"> <li>1. Additional BMPs may be required during the course of the work to ensure the protection of local water quality</li> <li>2. It is the Applicant/Contractor's obligation to take corrective actions to protect local water quality</li> <li>3. Failure to comply with all requirements could cause:               <ol style="list-style-type: none"> <li>a. All construction work to be stopped until compliance is achieved</li> <li>b. Permit to be revoked</li> <li>c. Lose the privilege to work within the City right-of-way for 2 years</li> </ol> </li> </ol>		
		Email
Water Pollution Control Manager Name		Phone No.
Water Pollution Control Manager Signature		Date



## Stormwater Site Design Analysis FOR PROJECTS COMPLYING WITH PR1

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### SITE DESCRIPTION

Was the project site previously developed?

YES  NO

Is the project site surrounded on all sides by development?

YES  NO

### SITE DESIGN

For each of the following, please describe how this project has complied to the maximum extent practicable with the following site design and runoff reduction strategies (attach additional pages if needed):

1. Limit disturbance of creeks and natural drainage features.

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2. Minimize compaction of highly permeable soils.

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3. Limit clearing and grading of native vegetation at the site to the minimum area needed to build the project, allow access, and provide fire protection.

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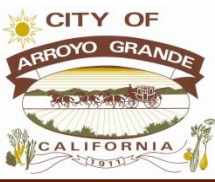
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4. Minimize impervious surfaces by concentrating improvements on the least-sensitive portions of the site, while leaving the remaining land in a natural, undisturbed state.

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## Stormwater Control Plan Checklist FOR PROJECTS REQUIRING SWCP PER PG 1

### Report

- Stormwater Control Plan (SWCP) Application (**Page 1 of this package**)
- Stormwater Site Design Analysis (**Page 3 of this package**)
- SWCP Completed according to SWCP Template (**per Appendix G in the SLO County PCR Handbook**)

### Attachments

- Support Calculations
- Completed checklists (**Pages 4 to 9 of this package**) for SWCP and each applicable Performance Requirement or Alternative Compliance, as appropriate.
- Site Stormwater Assessment Exhibit.
  - Site map with (existing and proposed) topographic information
  - Delineation of sensitive areas, native vegetation and soils types. (Can be provided on multiple exhibits to supplement design strategy narrative)

### For projects subject to PR 2, 3, and/or 4:

- Drainage Management Area (DMA) Exhibit.
  - Uniquely identify each DMA and indicate if the DMA is self-retaining (zero discharge), self- treating, or draining to a treatment/flow control facility.
  - Include location of all infiltration, treatment, or flow-control facilities, their tributary area and basis for sizing (rational C, NRCS CN value, Tc, etc.)
  - Potential pollutant source areas (if applicable), including loading docks, food service areas, refuse areas, outdoor processes and storage, vehicle cleaning, repair or maintenance, fuel dispensing, equipment washing, etc.
  - Plan Set with Construction Details for drainage related items (as appropriate)
- Operation and Maintenance Documentation (if applicable)
  - Operation and Maintenance Recorded Document (Either Agreement or CC&Rs)
  - Exhibit B Documentation per Exhibit B Instructions and Table
  - Stormwater System Contact Information
  - Stormwater System Plans & Manuals per Stormwater System Plans and Manuals Instructions
    - Include Stormwater Inspection Coversheet and applicable Inspection Forms
  - Engineer Stormwater Certification Form

**PERFORMANCE REQUIREMENT 1: SITE DESIGN AND RUNOFF REDUCTION SWCP CHECKLIST**

DESIGN STRATEGY		MEANS OF DEMONSTRATING COMPLIANCE
1.	Limit disturbance of creeks and natural drainage features.	<i>Provide pre and post drainage feature map. Delineate natural drainage features on Site Stormwater Assessment Exhibit and DMA Exhibit, as applicable.</i>
2.	Minimize compaction of highly permeable soils.	<i>provide site Stormwater Assessment Exhibit of soil types, overlain with development footprint.</i>
3.	Limit clearing and grading of native vegetation at the site to the minimum area needed to build the project, allow access, and provide fire protection.	<i>Provide site Stormwater Assessment Exhibit with native vegetation, overlain with development footprint.</i>
4.	Minimize impervious surfaces by concentrating improvements on the least-sensitive portions of the site, while leaving the remaining land in a natural undisturbed state.	<i>Provide site Stormwater Assessment Exhibit with delineated sensitive areas overlain with development footprint.</i>

**MINIMIZE STORMWATER RUNOFF BY IMPLEMENTING ONE OR MORE OF THE FOLLOWING MEASURES:**

MANDATORY SITE DESIGN MEASURES (SELECT AT LEAST ONE)		Selected	Reason, for not selecting
a.	Roof runoff directed into cisterns or rain barrels for reuse?		
b.	Roof runoff directed into vegetated areas (safely away from building foundations and footings)?		
5. c.	Runoff from sidewalks, walkways, and/or patios directed onto vegetated areas (safely away from the building foundations and footings)?		
d.	Runoff from driveways and/or uncovered parking lots onto vegetated areas (safely away from the building foundations and footings)?		
e.	Are bike lanes, driveways, uncovered parking lots, sidewalks, walkways, and patios constructed with permeable surfaces?		

## PERFORMANCE REQUIREMENT 2: WATER QUALITY TREATMENT SWCP CHECKLIST

### Project Level Documentation, identify

- Project Net Impervious Area
- Certification that on-site water quality treatment measures have been met on site, or if not achievable:
  - Documentation of the volume of runoff for which compliance cannot be achieved on site and the associated off-site compliance requirements.
  - Statement of intent to comply with Water Quality Treatment Performance Requirement through Alternative Compliance (see Attachment 1 pg 12 of Central Coast Regional Board Resolution No. R3-2013-0032).

### For each Drainage Management Area, provide:

- Unique DMA Number, area, and likely pollutant(s) of concern.
- Water Quality Treatment Approach (N/A if self-treating, or, through the use of LID, Biofiltration or Non-Retention Based Treatment System).
- Supporting calculations demonstrating compliance with Treatment Performance Requirement.
- Plan sheet page and detail number (if appropriate) of DMA Exhibit where construction details are provided for each DMA.

### For DMAs using Low Impact Development Treatment Systems, provide:

- 85<sup>th</sup> percentile 24-hour storm event value, and basis of determination.

### For DMAs using Biofiltration Systems, provide:

- Statement indicating why an LID treatment system was not appropriate.
- Surface loading rate approach, and basis of determination (0.2 x per hour intensity, or 2 x 85<sup>th</sup> percentile hourly rainfall intensity).
- Calculations to demonstrate that the minimum surface reservoir volume is equal to the biofiltration treatment system surface area time a depth of 6-inches.
- Construction detail (or reference to page on plans) which provides:
  - Minimum planting depth.
  - Planting medium specifications. Either:
    - Specify 60 to 70% ASTM C33 sand, with 30-40% compost; or
    - Provide testing documentation demonstrating planting medium specified can minimally infiltrate at a rate of 5 inches per hour).
  - Plant selection consistent with Appendix L in the SLO County Post-Construction Handbook.
  - Subsurface drainage/storage (gravel) layer with an area equal to the biofiltration treatment system surface area and having a minimum depth of 12 inches.
  - Underdrain with discharge elevation at top of gravel layer.
  - No compaction of soils beneath the biofiltration facility (ripping/loosening of soils required if compacted).
  - No liners or other barriers interfering with infiltration, except for situations where lateral infiltration is not technically feasible.

### For DMAs using Non-Retention Based Treatment Systems, provide:

- Statement indicating why an LID, or Biofiltration treatment system was not appropriate.
- Hydraulic Sizing Criteria used, and basis of determination (Volume = to 85<sup>th</sup> percentile, 24-hour storm, or flow basis 2 x 85<sup>th</sup> percentile hourly rainfall intensity or 0.2 x inches per hour intensity).

**PERFORMANCE REQUIREMENT 3: RUNOFF RETENTION SWCP CHECKLIST**

**SITE ASSESSMENT MEASURES:**

Include an exhibit and narrative of the opportunities and constraints to implementing LID Stormwater Control Measures based on the following items (as applicable):

<ul style="list-style-type: none"> <li><input type="checkbox"/> Site topography.</li> <li><input type="checkbox"/> Hydrologic features including contiguous natural areas, wetlands, watercourses, seeps or springs.</li> <li><input type="checkbox"/> Depth to seasonal high groundwater.</li> <li><input type="checkbox"/> Locations of groundwater wells used for drinking water.</li> <li><input type="checkbox"/> Depth to an impervious layer such as bedrock.</li> <li><input type="checkbox"/> Presence of unique geology (e.g., karst).</li> <li><input type="checkbox"/> Geotechnical hazards.</li> <li><input type="checkbox"/> Documented soil and/or groundwater contamination</li> <li><input type="checkbox"/> Soil types and hydrologic soil groups</li> <li><input type="checkbox"/> Vegetative cover/trees</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Run-on characteristics (source and estimated runoff from offsite which discharges to the project area).</li> <li><input type="checkbox"/> Existing drainage infrastructure for the site and nearby areas, including the location of municipal storm drains.</li> <li><input type="checkbox"/> Structures, including retaining walls.</li> <li><input type="checkbox"/> Utilities.</li> <li><input type="checkbox"/> Easements.</li> <li><input type="checkbox"/> Covenants.</li> <li><input type="checkbox"/> Zoning/Land Use.</li> <li><input type="checkbox"/> Setbacks.</li> <li><input type="checkbox"/> Open space requirements.</li> <li><input type="checkbox"/> Other pertinent overlay(s).</li> </ul>
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**SITE DESIGN MEASURES**

Include in narrative, and provide supporting exhibits as necessary, to demonstrate that the project design has implemented the following design strategies (as applicable).

DESIGN STRATEGY		MEANS OF DEMONSTRATING COMPLIANCE
1.	Define the development envelope and protected areas, identifying areas that are most suitable for development and areas to be left undisturbed.	<i>Provide site Stormwater Assessment Exhibit.</i>
2.	Conserve natural areas, including existing trees, other vegetation, and soils.	<i>Provide site Stormwater Assessment Exhibit with native vegetation, overlain with development footprint.</i>
3.	Limit the overall impervious footprint of the project.	<i>Provide discussion regarding other building configurations considered (and ultimately rejected).</i>
4.	Construct streets, sidewalks, or parking lot aisles to the minimum widths necessary, provided that public safety or mobility uses are not compromised .	<i>Provide discussion on minimum allowable widths, and rationale for using larger values (if applicable) or confirmation that minimum values were used (where applicable).</i>

5	Setback development from creeks, wetlands, and riparian habitats.	<i>Provide discussion on set-back dimensions chosen.</i>
6	Conform the site layout along natural landforms.	<i>Within the Drainage Management Area (DMA) Exhibit, show Topo survey with existing and planned contours cut and fill lines. Provide discussion of grading approach.</i>
7	Avoid excessive grading and disturbance of vegetation and soils .	<i>Provide exhibit with native vegetation, overlain with planned disturbed area limits.</i>

**STORMWATER STRUCTURAL CONTROL MEASURE SIZING**

**For Overall project,**

- Certification statement indicating that the selection, sizing, and design of Stormwater Control measures meets the applicable Water Quality Treatment and Runoff Retention Performance Requirements, or, if not achievable:
  - Provide documentation of the volume of runoff for which compliance cannot be achieved on-site and the associated off-site compliance volume; or
  - Provide a statement of intent to comply with Water Quality Treatment and Runoff Retention Performance Requirements through an Alternative Compliance Agreement
- Documentation demonstrating percentage of the project’s Equivalent Impervious Surface Area dedicated to retention-based Stormwater Control Measures

**For each DMA,**

- Indicate sizing strategy used as follows:
  - Hydrologic analysis and sizing methods as outline in **Appendix C of the SLO County PCR Handbook;**
  - Locally/regionally calibrated continuous simulation model that results in equivalent optimization of on-site runoff retention volumes; or
  - Hydrologic analysis and sizing methods, equally effective in optimizing on-site retention volumes of the runoff generated by the design rainfall events.
- Provide supporting calculations demonstrating compliance with Runoff Retention Performance Requirement.



**PERFORMANCE REQUIREMENT 4: PEAK MANAGEMENT SWCP CHECKLIST**

**Project Level Documentation, identify:**

- Point source discharge locations.
- Hydraulic Report demonstrating that post development stormwater runoff peak flows discharged from the site do not exceed pre-project peak flows for the 2- through 10-year storm events).
- Certification that on-site water quality treatment measures have been met on site, or if not achievable:
  - Provide documentation of the volume of runoff for which compliance cannot be achieved on site and the associated off-site compliance requirements; or
  - Provide a statement of intent to comply with Water Quality Treatment Performance Requirement through Alternative Compliance.

**PERFORMANCE REQUIREMENT 5: SPECIAL CIRCUMSTANCES**

Projects may only be determined to comply with PR5 by the City. Projects complying with PR5 will work with the City to compile appropriate documentations on a per case basis.