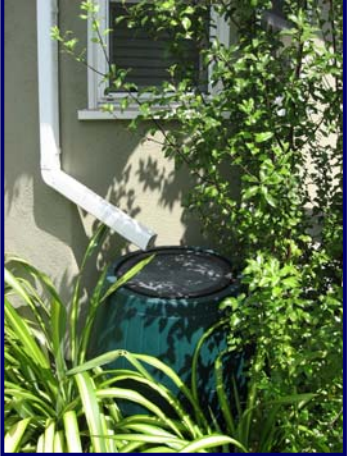




Stockton Municipal Stormwater Program Stormwater Quality Control Criteria Plan Fact Sheet

Introduction

The 2009 Stormwater Quality Control Criteria Plan (2009 SWQCCP) for the City of Stockton (City) is an update to the City's 2005 SWQCCP. The 2009 SWQCCP reflects new municipal stormwater National Pollutant Discharge Elimination System (NPDES) permit requirements with a special emphasis on the implementation of low impact development (LID) strategies. The 2009 SWQCCP is available at: www.stocktongov.com/MUD/General/stormwater/SWQCCP.cfm

<p>What are the goals of the Stormwater Quality Control Criteria Plan (2009 SWQCCP)?</p>	<ul style="list-style-type: none"> • Protect the waters of the City of Stockton and County of San Joaquin from the adverse impacts of urban stormwater runoff • Ensure that the implementation of the measures in the 2009 SWQCCP is consistent with NPDES permit and other State requirements • Provide clear development standards for developers, design engineers, agency engineers, and planners to use in the selection and implementation of appropriate stormwater control measures • Integrate LID strategies • Provide maintenance procedures to ensure that the selected control measures will be maintained to provide effective, long-term pollution control
<p>What projects are required to comply?</p>	<ul style="list-style-type: none"> • Home subdivision of 10 housing units or more • Commercial developments $\geq 5,000 \text{ ft}^2$ • Automotive repair shops $\geq 5,000 \text{ ft}^2$ impervious area • Restaurants $\geq 5,000 \text{ ft}^2$ impervious area • Parking lots $\geq 5,000 \text{ ft}^2$ or with ≥ 25 parking spaces • Street and roads ≥ 1 acre impervious area • Retail Gasoline Outlets $\geq 5,000 \text{ ft}^2$ impervious area • Significant redevelopment <ul style="list-style-type: none"> ○ Creation of $\geq 5,000 \text{ ft}^2$ impervious area on already developed site ○ If alteration results in an increase of less than 50% of impervious area, only the addition is subject to requirements of SWQCCP
<p>What are the requirements?</p>  <p>Source: City of Santa Monica</p>	<ul style="list-style-type: none"> • All Priority New Development and Significant Redevelopment Projects must apply four categories of stormwater pollution controls measures: <ul style="list-style-type: none"> ○ <u>Site Design Controls</u>: practices that protect sensitive environmental features and reduce stormwater runoff by minimizing impervious cover (see Section 3 of the 2009 SWQCCP for more information) ○ <u>Source Controls</u>: operational practices designed to prevent pollutants from contacting stormwater runoff or prevent contact of contaminated runoff to the storm drain system (see Section 4 of the 2009 SWQCCP for more information) ○ <u>Volume Reduction Measures</u>: practices that can be used to direct, retain, reuse and/or infiltrate stormwater runoff (e.g., rain gardens, rain barrels). A combination of Volume Reduction Measures and Treatment Controls must be used to meet the Volume Reduction Requirement (see Section 5 of the 2009 SWQCCP for more information) ○ <u>Treatment Controls</u>: Engineered technologies designed to remove pollutants from stormwater runoff. Treatment controls must be designed to treat the Stormwater Quality Design Flow (SQDF) or Stormwater Quality Design Volume (SQDV). Treatment Controls are classified as either LID Treatment Controls or Conventional Treatment Controls (see Section 6 of the 2009 WQCCP for more information)

<p>What is Low Impact Development (LID)?</p>	<ul style="list-style-type: none"> • "...LID is a storm water management strategy concerned with maintaining or restoring the natural hydrologic functions of a site..." • LID employs a variety of natural and built features that reduce the rate of runoff, filter out its pollutants, and facilitate the infiltration of water into the ground. • By reducing water pollution and increasing groundwater recharge, LID helps to improve the quality of receiving surface waters and stabilize the flow rates of nearby streams." (City of Stockton & County of San Joaquin MS4 NPDES Permit)
<p>What is the Volume Reduction Requirement and how do I comply?</p>	<ul style="list-style-type: none"> • The Volume Reduction Requirement is determined by subtracting the pre-project runoff volume from the post-project runoff volumes for the 0.51-inch storm depth, which is the average 85th percentile/24-hour storm depth estimated for the Stockton urbanized area • Minimizing impervious cover and soil compaction will help to reduce runoff volume and is the first step in meeting the Volume Reduction Requirement • New development sites must apply a combination of Volume Reduction Measures and LID Treatment Controls in order to meet the Volume Reduction Requirement • To assist applicants with determining compliance with the Volume Reduction Requirement, a excel spreadsheet calculator has been developed and is available at: www.stocktongov.com/MUD/General/stormwater/SWQCCP.cfm • See Section 5 of the 2009 SWQCCP for more information <div data-bbox="1182 436 1471 835" data-label="Image"> </div> <p data-bbox="1182 840 1422 865">Source: City of El Cerrito</p>
<p>Does the Volume Reduction Requirement apply to redevelopment projects?</p>	<p>Significant Redevelopment Projects must also comply with the Volume Reduction Requirement; however an additive credit of 0.05-inches may be applied to any of the following types of redevelopment:</p> <ul style="list-style-type: none"> • Significant Redevelopment • Brownfield redevelopment • High density (>7 units per acre) • Vertical Density, (Floor to Area Ratio (FAR) of 2 or >18 units per acre) • Mixed use & Transit Oriented Development (within ½ mi of public transit)
<p>What is the Stormwater Quality Design Volume (SQDV)/ Stormwater Quality Design Flow (SQDF)?</p>	<ul style="list-style-type: none"> • Treatment controls are engineered technologies designed to remove pollutants from stormwater runoff and must be designed to treat the Stormwater Quality Design Flow (SQDF) or Stormwater Quality Design Volume (SQDV) • The SQDV is calculated by multiplying the effective impervious area by the unit basin volume. The SQDF is calculated by multiplying the effective impervious area by the design rainfall intensity • See Section 6 of the 2009 SWQCCP for more information
<p>What if I am unable to fully comply with the Volume Reduction Requirement?</p>	<ul style="list-style-type: none"> • Meeting the Volume Reduction Requirement is an iterative process. Designers should return to prior steps to explore alternative combinations of Volume Reduction Measures and LID Treatment Controls • A waiver may be granted if the Volume Reduction Requirement cannot be met due to site constraints such as a high groundwater table (See Appendix C of the 2009 SWQCCP) • Project must still reduce volume to the maximum extent practicable
<p>Who do I contact for more information on the stormwater quality requirements?</p>	<ul style="list-style-type: none"> • John Wotila, Associate Engineer, City of Stockton Municipal Utilities Department Phone (209) 937-8436 email: john.wotila@ci.stockton.ca.us