

New Standards for Development Projects



March 2006
3rd Edition

Update on the Stormwater Quality Design Manual for Sacramento and South Placer Regions

[www.sactostormwater.org/
SSQP/development.asp](http://www.sactostormwater.org/SSQP/development.asp)

Stakeholders in the Design Manual Process

The success of this important project will depend on the involvement of many local professionals whose work will be affected by the new requirements:

- Planners
- Architects
- Landscape Architects
- Engineers
- Environmental Consultants
- Developers
- Property Owners
- Regulatory Agency Staff
- Local Government Staff:
County, Cities, Special
Districts

Design Manual Steering Committee

Representatives of the following agencies and companies have been meeting regularly since May 2005 to prepare the new Design Manual:

- County of Sacramento
- City of Sacramento
- City of Elk Grove
- City of Folsom
- City of Roseville
- CKB Environmental
Consulting, Inc.
- ECORP Consulting, Inc.

Other Participating Agencies

The following additional agencies will require compliance with the new Design Manual in their jurisdictions:

- City of Citrus Heights
- City of Galt
- City of Rancho Cordova

New Rules for Development Projects

The Sacramento Stormwater Quality Partnership, in coordination with the City of Roseville, is preparing new water quality standards for new and redevelopment projects in the Sacramento County and South Placer regions. This is required by the agencies' Stormwater Permits issued by the Regional Water Quality Control Board. The agencies are working together to create a new Stormwater Quality Design Manual to assist developers, design professionals and engineers to comply with the new requirements.

The Design Manual will provide guidance for selecting, designing, installing and maintaining post-construction stormwater quality control measures. It will outline the minimum technical requirements that must be satisfied, while affording the professional designer or developer/property owner flexibility in choosing the approaches that work best for the project site.

The Design Manual will replace and expand upon the *Guidance Manual for On-Site Stormwater Quality Control Measures* produced by the Sacramento Stormwater Quality Partnership in January 2000. It will consolidate into a single document all stormwater quality design information previously published by several local agencies.

The success of this important project will depend on the participation of the local design and development community.

How Runoff from Development Projects Affects Creeks and Rivers

As the Sacramento region grows, more land is covered by roofs, pavement and other impervious surfaces. Rainfall that would have previously soaked into the ground or been absorbed and filtered by trees and plants now flows directly to storm drains. This stormwater runoff combines with water generated by our everyday activities — such as lawn watering or car washing — to form

urban runoff. Untreated urban runoff makes its way through pipes and ditches to our local waterways, carrying with it pollutants such as automotive fluids, oil and grease, pesticides and fertilizers, detergents, food waste, animal waste and trash. This creates unsightly conditions in our rivers and can make water unhealthy for drinking, fishing, swimming and other recreational activities.

In addition, increased runoff from developed areas can erode creek beds and banks, damaging aquatic habitat and leading to downstream sedimentation problems. Steps must be taken during the design of development projects to integrate solutions which mitigate these negative impacts. For example, developments should be designed with stormwater systems that preserve and restore the natural hydrologic cycle to the extent possible. Also, an effective combination of pollutant source control, runoff reduction and treatment should be used to minimize impacts.

Source control measures such as storm drain enclosures prevent and/or minimize pollution from contacting runoff and contaminating stormwater. Runoff reduction measures (also known as Low Impact Development strategies, LID) such as permeable pavement or disconnected downspouts manage runoff close to its source and promote infiltration by minimizing directly connected surfaces. Treatment control measures such as detention basins or vegetated swales remove pollutants that have already been mobilized in runoff.

A New Way of Doing Business

Historically, grading and drainage design has largely neglected the environmental implications of urban runoff. We now recognize that the way we design and build our communities has a direct effect on water quality in our creeks and rivers. We understand that in considering only the large, infrequent storms in our drainage and flood control designs, we have overlooked the impact of the small, frequent storms that can have damaging long-term impact on urban creeks. Today's designers and engineers must consider not only flood

Anticipated 2006 Milestones
(subject to change)

- Spring Stakeholder Outreach (meetings, web site updates, etc.)
- Spring Public Review Draft of Manual Available
- May 18 Sacramento County Agencies Adopt New Standards
- July 1 City of Roseville Adopts New Standards
- Summer/Fall Final Design Manual

control and protection of property, but also how to minimize the creation of new runoff and the pollutants carried in that runoff. The challenge is to strike an optimal balance between end-of-pipe stormwater management approaches such as detention basins and smaller, simpler solutions, such as pervious pavement, that can be achieved on individual sites, closer to the source.

The new Design Manual will provide tools for integrating runoff reduction and pollution control measures into overall site planning and landscape architecture to form the basis of practical, cost-effective, environmentally responsible, and aesthetically pleasing design.

Projects Affected by the New Rules

New development and significant redevelopment projects in eight priority project categories will be subject to the new stormwater quality standards effective May 18, 2006 for agencies in Sacramento County and July 1, 2006 for the City of Roseville. "Significant redevelopment" includes, but is not limited to, expansion of a building footprint, or replacement of a structure; replacement of impervious surface that is not part of a routine maintenance activity; and land-disturbing activities related to structural or impervious surfaces.

Stay Informed!! Add your name and contact information to our mailing list to get notified when the Draft Design Manual is available for review and to learn about other opportunities to provide feedback. Contact dwrw@saccounty.net with stormwater design manual in the subject line.

The eight priority project categories and associated proposed requirements: (Thresholds subject to change until manual is finalized.)

CATEGORY	Source Controls	Runoff Reduction Measures	Treatment Controls ^(c)	DESCRIPTION
1. Residential — Single-Family ^(a) ≥ 10 lots, and < 20 acres ≥ 20 acres Multi-Family ≥ 1 acre	✓ ✓ ✓	(b) • •	✓ ✓ ✓	Single family and multifamily homes, including agricultural-residential development of one acre per dwelling unit. Agricultural-residential developments with two or more acres per dwelling unit are exempt.
2. Commercial (includes industrial) — impervious area ≥ 1 acre	✓	•	✓	Development on private land that is not for residential uses. This category includes, but is not limited to hospitals, laboratories and other medical facilities, educational institutions, recreational facilities, commercial nurseries, car wash facilities, mini-malls and other business complexes, shopping malls, hotels, office buildings, public warehouses, and other light and heavy industrial facilities.
3. Automotive Repair Shops — impervious area ≥ 1 acre	✓	•	✓	A facility that is categorized by one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.
4. Retail Gasoline Outlets — impervious area ≥ 1 acre	✓	•	✓	Any facility engaged in selling gasoline.
5. Restaurants — impervious area ≥ 1 acre	✓	•	✓	Any facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812).
6. Hillside Developments — ≥ 25% slope	✓	•	✓	Any development in an area with known erosive soil located in an area with natural slopes having a twenty-five percent or greater grade.
7. Parking Lots exposed to rainfall — ≥ 5,000 sf or 25 spaces	✓	•	✓	All or portions of parking lots exposed to rainfall (uncovered impervious area) for the temporary parking or storage of motor vehicles used personally, for business or for commerce that are not associated with a commercial, industrial or multifamily residential project. Parking lots associated with buildings/facilities shall meet requirements applicable to that land use zone.
8. Streets/Roads — impervious area ≥ 5 acres	✓	•	✓	Public road capital projects and expansion of existing roads that are not associated with new residential, commercial and industrial developments. Streets and roadways that are associated with new development or redevelopment shall meet requirements applicable to that land use zone.

- ✓ Required
- Optional

- (a) Single family residential development of one acre or more with a density of 15 du/net acre may be required to incorporate treatment controls starting in Fall 2006.
- (b) Runoff reduction measures will be required starting in Fall 2006.
- (c) If the project drains to a regional treatment facility (e.g. detention basin), additional treatment controls may not be required. Contact permitting agency for verification.