

Reining in the Rain

Regulatory Approaches to Low Impact Development in Southern California

**CalEPA - Los Angeles Regional Water Board
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A dark silhouette of a mountain range is visible at the bottom of the slide, spanning the width of the page.

Storm Water Permitting History

- Clean Water Act Section 402 (p) (1987)
- 40 CFR 122.26 (1990)

- First term MS4 Permit (1990)
 - Program development
- Second term MS4 Permits (1996)
 - Program implementation
- Third term MS4 Permits (2001)
 - Program advancement

Storm Water Permitting History (cont'd)

- Statewide Construction Storm Water General Permits [92-08-DWQ], [99-08- DWQ]
 - Consider post construction control measures
- Proposed Third Term Construction Storm Water General Permit [2008-xx-DWQ]
 - Post construction storm water runoff reduction requirements where there are no MS4 requirements

Storm Water Permitting History (cont'd)

- Model Development Planning Programs
 - Standard Storm Water Mitigation Plans
SUSMPs/ SQUIMPs/ WQMPs
 - CEQA Plan Review Check Lists and Guidelines
 - General Plan Element Revisions
 - Technical Guidance Documents
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Storm Water Permitting Future

Objectives in 4th Term MS4 Permits (proposed)

- Develop land in a sustainable manner to maintain predevelopment hydrology
 - Manage storm water as a resource
 - Reduce storm water pollutant loads
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Planning & Land Development Program

Original Objectives

- Minimize storm water runoff
- Minimize impervious surfaces
- Minimize pollutant loadings
- Properly select, design & maintain BMPs

Planning & Land Development Program

Refined Objectives

- Prioritize BMP selection
 - LID strategies
 - Water resources strategies
 - Landscape BMPs
 - Treatment Control BMPs



New Development Projects

Applicability

- Projects that disturb land area equal to 1 acre or greater
- Redevelopment Projects which alter, add or replace 5000 sq ft of impervious area
- Projects in, adjacent, or directly discharging to an ESA
- Transportation land use projects that disturb 5,000 sq. ft. of surface area

New Development/ Redevelopment Criteria

Water Quality/ Resources Mgmt Criterion

- Reduce Effective Impervious Area (EIA) to less than 5%
- Render ineffective
 - Drain
 - Collect and store
 - Discharge
- Mitigate excess discharge



New Development/ Redevelopment Criteria

Excess Discharge Mitigation Criterion

- Projects less than 50 acres
 - Volumetric Treatment Control BMP* and/ or
 - Flow Based Treatment Control BMP
- Projects more than 50 acres
 - Continuous flow model

New Development/ Redevelopment Criteria

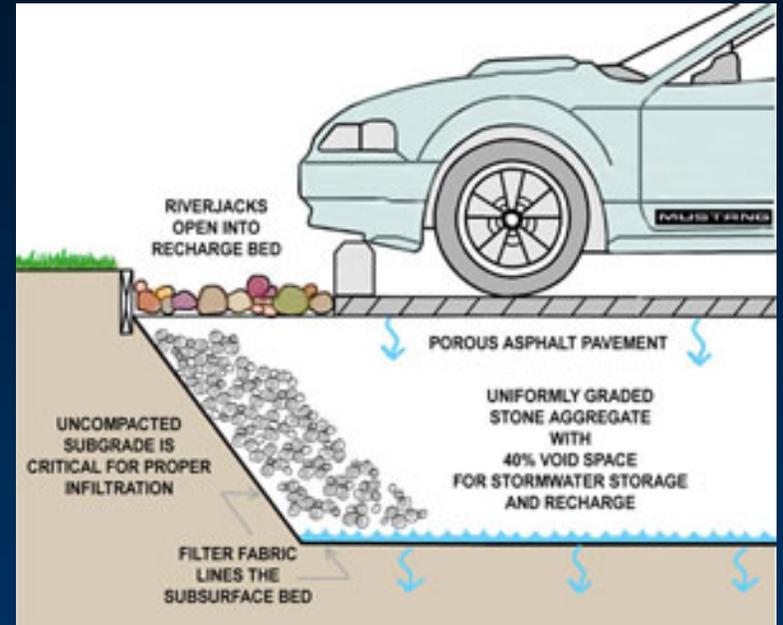
LID Measures

- Integrate principles into project design
- LID technical guidance section

Hydromodification Control Criteria

- Minimize changes in post-development
- Maintain pre-development runoff rates and durations





The Big Picture - Integration



WET PONDS



LINEAR INFILTRATION BASINS



LOCAL STREETS



STREAM CROSSING



NEIGHBORHOOD GREENWAYS



PEDESTRIAN STREAM CROSSING



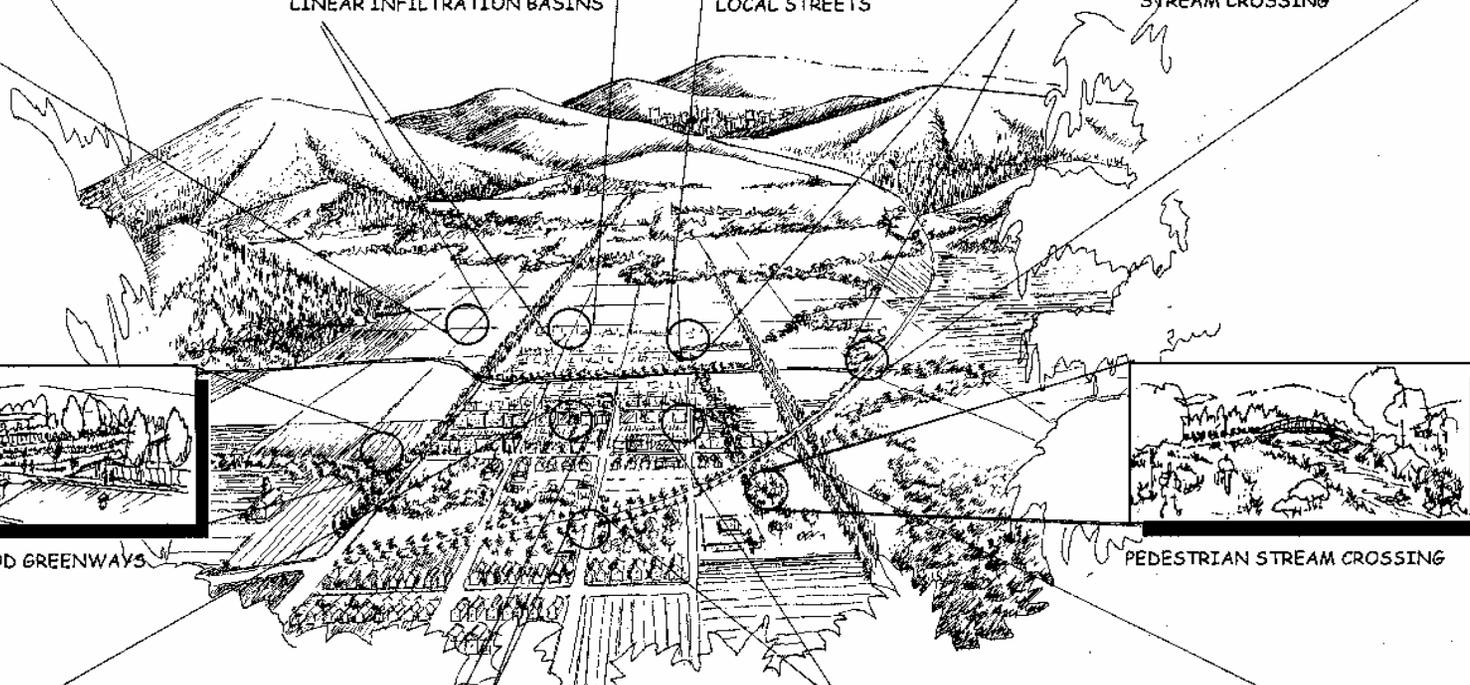
COMMUNITY BOULEVARDS



DOUBLE-MEDIAN BOULEVARDS



PARKING LOTS



Conclusion

- Integrate LID strategies to protect water quality at CEQA review
 - Mimic pre-development hydrology to avoid the adverse impacts of changes in flow and pollutant loads
 - Enact code changes and develop LID technical guidelines to support a sustainable community
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