

### PUBLIC WORKS DEPARTMENT Environmental Services Division

26135 Mureau Road Calabasas, CA 91302-3172

T: 818.878.4225 F: 818.878.4205

www.cityofcalabasas.com/environment.html

### National Pollutant Discharge Elimination System (NPDES) Requirements

# For Single Family Hillside Residence Of Less Than One Acre Disturbed Area

#### **DEFINITION**

"Hillside" is defined as a property located in an area with known erosive soil conditions, where the development contemplates grading on any natural slope that is 25% or greater, and where grading contemplates cut or fill slopes.

#### **REQUIREMENTS**

#### 1. CONSERVE NATURAL AREAS

The project plans must include BMPs to conserve natural areas.

- Minimize area of soil disturbance and footprint of structural improvements to maximum extent practicable.
- Maximize use of existing landscaped areas.

#### 2. PROTECT SLOPES AND CHANNELS

The project plans must include BMPs to decrease the potential of slopes and/or channels from eroding and impacting stormwater runoff:

- Safely convey runoff from the tops of slopes and stabilize disturbed slopes.
- Stabilize permanent channel crossings.
- Vegetate slopes with native or drought tolerant vegetation.
- Energy dissipaters, such as riprap, must be installed at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable specifications to minimize erosion.

#### 3. PROVIDE STORM DRAIN SYSTEM STENCILING AND SIGNAGE

Storm drain stencils are highly visible source controls that are typically placed directly adjacent to storm drain inlets. The stencil contains a brief statement that prohibits the dumping of improper materials into the stormwater conveyance system. Graphical icons, either illustrating anti-dumping symbols or images of receiving water fauna, are effective supplements to the anti-dumping message.

- All storm drain inlets and catch basins must be stenciled with prohibitive language (such as: "NO DUMPING – DRAINS TO OCEAN") and/or graphical icons to discourage illegal dumping.
- Signs and prohibitive language and/or graphical icons discouraging illegal dumping must be posted along channels and creeks.
- Legibility of stencils and signs must be maintained.

#### **NPDES REQUIREMENTS**

For Single Family Hillside Residence Less Than One Acre Disturbed Area



### 4. DIVERT ROOF RUNOFF TO VEGETATED AREAS BEFORE DISCHARGE UNLESS THE DIVERSION WOULD RESULT IN SLOPE INSTABILITY

The project plans must include BMPs to divert roof runoff to pervious areas such as yards, open channels or vegetated areas, and avoid routing roof top runoff to the roadway or to the storm drain conveyance system.

Should the geotechnical/soils report indicate that such diversions would result in slope instability, this requirement would not apply.

## 5. DIVERT SURFACE FLOW TO VEGETATED AREAS BEFORE DISCHARGE UNLESS THE DIVERSION WOULD RESULT IN SLOPE INSTABILITY

The project plans must include BMPs to divert surface flow to pervious areas such as yards, open channels or vegetated areas, and avoid routing roof top runoff to the roadway or to the storm drain conveyance system.

Should the geotechnical/soils report indicate that such diversions would result in slope instability, this requirement would not apply.

**Table 1: Suggested Resources** 

Suggested Resources	How To Get A Copy
Start at the Source (1997) by Bay Area Stormwater Management Agencies Association Detailed discussion of permeable pavements and alternative driveway designs presented.	Bay Area Stormwater Management Agencies Association 2101 Webster Street, Suite 500, Oakland, CA Tel: 510-286-1255
Design of Stormwater Filtering Systems (1996) by Richard A. Claytor and Thomas R. Schuler Presents detailed engineering guidance on ten different stormwater filtering systems.	Center for Watershed Protection 8391 Main Street, Ellicott City, MD 21043 410-461-8323
Better Site Design: A Handbook for Changing Development Rules in Your Community (1998) Presents guidance for different model development alternatives.	Center for Watershed Protection 8391 Main Street, Ellicott City, MD 21043 410-461-8323
Design Manual for Use of Bioretention in Stormwater Management (1993) Presents guidance for designing bioretention facilities.	Prince George's County Watershed Protection Branch 9400 Peppercorn Place, Suite 600 Landover, MD 20785
Operation, Maintenance and Management of Stormwater Management (1997) Provides a thorough look at stormwater practices including, planning and design considerations, programmatic and regulatory aspects, maintenance considerations, and costs.	Watershed Management Institute, Inc. 410 White Oak Drive Crawfordville, FL 32327 850-926-5310
California Storm Water Best Management Practices Handbooks (1993) for Construction Activity, Municipal, and Industrial/Commercial Presents a description of a large variety of structural and good housekeeping BMPs.	Los Angeles County Department of Public Works, Cashiers Office 900 S. Fremont Avenue, Alhambra, CA 91803 626-458-6959