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(Overlooking East Field. Photo courtesy of Laura Hartung)

Learn more about the UCSC Storm Water Management Program and UCSC Storm Water Management Plan at cleanwater.ucsc.edu

#### **Report Concerns:**

#### **Storm Water Quality Hotline:**

Please report any concerns, illegal dumping into storm drains, or suspicious activities that may cause environmental harm to the Storm Water Quality Hotline (459-2553).

Report an Emergency: call 911 from any campus phone or 459-2345 when calling from a cell phone (911 calls made from cell phones will not reach Campus dispatch).



(Photo courtesy of Carolyn Lagattuta)

This brochure is created by Joanne Yee, Storm Water Management Program Intern for the UCSC Storm Water Management Program.

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UCSC Storm Water

Management Program

Contact us at: cleanwater@ucsc.edu

(831) 459-4520

# STORM WATER: Low Impact Development (LID)

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One of many beautiful drainages that UCSC is committed to protecting. (photo courtesy of UCSC Physical Planning and Construction Office)



One of the LID Designs at UCSC Campus: Bioretention at Cowell Health Center

## Low Impact Development (LID)

#### What is Low Impact Development?

Low Impact Development (LID) is a storm water management approach to manage rainfall at the source. It is a design approach that attempts to mimic predevelopment site hydrology

by using site planning and storm water management practices that store, infiltrate, evaporate, and detain runoff. LID aims to minimize the impacts that development has on the natural hydrologic cycle through low impact designs. (LID designs aim to prevent developed landscapes from alterations and erosion as photographed above and on the right.)

#### Why is LID important?

LID focuses on using decentralized controls instead of collecting and treating storm water in large pipe facilities and conveying it to the bottom of drainage areas.

LID design elements, which follow the Green Infrastructure Approach, include:

preserving natural drainage and landscape features reducing and delaying storm water runoff volumes and peak flows enhancing groundwater recharge storm water pollutant reductions

#### Green Infrastructure:

Refers to natural systems that capture, cleanse and reduce storm water runoff using plants, soils and mic crobes.regional scale: a network of open spaces that improve water



quality, recreational opportunities, wildlife habitat, air quality and urban heat island benefits, and other community benefits site scale: green infrastructure is designed to maintain natural hydrologic functions by absorbing and infiltrating precipitation where it falls.

#### What are the different types of LID Designs?

#### LID Design Techniques

- Minimize impervious surface
- Disconnect impervious surfaces
- Green rooftop systems
- Permeable paving
- Bioretention areas
- Infiltration trenches and planters
- Vegetated buffers
- Vegetated swales
- Level spreaders

#### Rain barrels and cisterns

(Biorention Areas are photographed at the Cowell Health Center)



#### How is UCSC Implementing LID?

- LID is a requirement of the UCSC Storm Water Management Plan (SWMP) and a mitigation measure as part of the Long Range Development Plan EIR.
- A checklist including many different LID techniques are required to be completed for all capital projects adding impervious surface.
- The University has recently updated our design standards to encourage LID practices on Campus.

Campus Maintenance Staff and Project Managers have been receiving yearly LID training since 2006.