



UCIRVINE

**Implementation Procedures for Erosion
Control and Landscape Management**

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1. Introduction:

These Implementation Procedures for the Green and Gold Plan reflect the current management practices in place at UC Irvine for the ongoing maintenance of landscaping and other open space areas on the campus. The protocols included in this document are implemented at all properties under the management of the UC Irvine campus. UCI buildings and grounds staff, contractors, and other stakeholders within the University community work in collaboration to ensure implementation of environmental best practices on UCI campus properties.

2. Scope

This document applies to all open space areas managed by the UC Irvine campus including all landscaped areas, native open space areas, and unimproved open space areas on the campus.

3. Plan Goals

The Green and Gold Plan provides the overall strategy and goals for landscape and open space planning and management for the UCI Campus. The intent of these implementation procedures is to provide implementation strategies and best practices that support the achievement of the Green and Gold Plan goals as listed below.

- Manage UCI landscape and open space resources sustainably and provide for long term conservation of resources: energy, water, labor, and reduced production of green waste.
- Ensure that campus landscaping and open space provides the greatest functional value to the campus community to serve UCI's strategic academic goals consistent with comprehensive campus planning and design objectives.
- Implement sound landscape and open space management practices to preserve campus landscape assets and the environmental quality of UCI land resources.
- To meet the permit requirements stipulated in NPDES Phase II MS4 General Permit, Section F.5.f.9 – Pesticide, Herbicide, and Fertilizer Application and New Landscape Design and Maintenance Management

4. Quality Control Procedures:

Quality control and quality assurance measures will be implemented as follows to ensure that Green and Gold Plan goals are achieved:

1. Annual reviews of building exterior and site management practices will take place to ensure ongoing compliance with these strategies. Successful ongoing implementation of each key element will be measured by the number of variations from the procedures which have been recorded or documented. It is the intent of UCI to minimize the number of variations that take place each year, and that each variation will be documented and used to improve the program.
2. Specific performance metrics for erosion control and landscape management have been identified and are associated directly with the implementation procedures described below.

5. Responsible Parties:

Responsibility for the overall implementation, quality control, and evaluation of these strategies rests with:
UCI Assistant Director of Buildings and Grounds
Facilities Management
(949) 824-5444

Erosion Control Procedures

I. Site Erosion Control

A. Ongoing Site Erosion Control Measures and Guidance for Implementation

Ongoing Landscape Operations

- Perform site checks every four months to assess potential problems such as standing water, erosion, or sedimentation.
- All problems or potential problems will be identified for corrective action.
- Current practices and methods utilized at UCI for ongoing landscape operations include soil stabilization techniques (permanent vegetation maintained onsite to stabilize soil and prevent runoff, temporary and permanent seeding, mulching) and structural controls (dikes, silt fencing, sediment traps and basins) as appropriate to the specific landscape area and site.

Major Rainfall Events

- Inspect grounds for standing water and drainage problems following major rainfall events.
- Inspect storm sewers during major rainfall for evidence of sedimentation.

B. Performance Metrics and Quantitative Thresholds

- a. The erosion control practices identified in this document shall apply to all properties under the management of UC Irvine.
- b. Performance will be measured and evaluated by semi-annual inspections of the campus, conducted by the campus grounds staff; findings will be recorded and reported to the responsible party.

C. Responsible Party

- a. Responsibility for the overall implementation, quality control, and evaluation of erosion & sedimentation control strategies rests with:

UCI Assistant Director of Buildings and Grounds
Facilities Management
(949) 824-5444

D. Quality Assurance / Quality Control Processes

- a. In addition to semi-annual reporting as described above, the responsible party will perform an annual review of E&SC practices and campus-wide grounds inspection. The responsible party will meet with relevant staff to review practices and discuss opportunities for improvement.

Site Landscape Management

A. Landscape Waste

All landscape waste generated at UCI will be collected and processed into mulch or compost either on-campus or through third-party vendors for reuse. No landscape waste will be disposed of via landfill or incineration.

To minimize the generation of landscape waste, UCI limits excessive and unnecessary pruning of shrubs and trees. Pruning is limited and applied as necessary to make structural or safety corrections if needed to maintain natural growth patterns. Hedging, topping, and shearing of landscape plants into formal shapes encourage excessive new growth and is generally discouraged on campus. Where applicable, UCI uses sound arboriculture practices and pruning techniques applied during the proper season to promote healthier plants and also reduce suckering and stabilize growth. As noted above, materials removed from woody , trees, and shrubs are composted on-site or off-site

B. Fertilizer Use

UCI utilizes reclaimed water for irrigation across the campus; Due to the high nitrogen content of this irrigation water, fertilizer is rarely used, generally limited to establishing new plantings during the first 90-days of plant establishment. UCI employs shredded or chipped plant materials with an appropriately high wood content as a mulch cover over the soil in planting beds and other exposed soil areas in the landscape. Mulch insulates plant roots, reduce weeds, minimize water loss, and control erosion, dust, and mud problems. Decomposition of mulch improves the condition of the soil and adds nutrients to the plants. Wherever feasible, UCI selects native and drought tolerant plant materials that do not require excessive use of fertilizers as the first step in controlling fertilizer use. When fertilizer is applied the following procedures are implemented.

- UCI grounds staff is trained to apply fertilization using the correct application rates and timing for each targeted plant species to avoid excessive plant growth, diminish the potential for runoff and water quality impacts, and promote healthy, disease, and pest resistant plants.
- UCI grounds staff are trained to use slow-release and organic-based formulas based on plant nutrient needs. This will reduce excessive growth that increases the need for pruning and mowing. UCI uses organic based fertilizers that are incorporated into the soil within planting beds to avoid runoff. A list of approved fertilizer types are listed below. MSDS sheets are made available upon request (see Responsible Party at the conclusion of this section).
- Use of native and climate appropriate plants (reduce water usage and fertilization) for decorative landscape applications.
- Keep clippings and leaves away from waterways and out of street using mulching, composting or landfilling.
- Preventing application of fertilizers when two or more consecutive days with greater than 50% chance of rainfall are predicted by NOAA.
- Limiting or eliminating the use of fertilizers, including prohibiting application within five feet of pavement, 25 feet of a storm drain inlet, or 50 feet of a water body.

C. Irrigation

UCI utilizes only non-potable reclaimed water for irrigation on the UCI campus except where restricted by code or specific health and safety concerns (e.g. vegetable gardens, day care play areas). In addition, UCI utilizes a master-controlled water-efficient irrigation system to eliminate overwatering which contributes to excessive plant growth and water quality impacts. UCI's irrigation scheduling is centrally controlled and calibrated based on weather conditions, plant types, and topography.