



**De Anza Grounds  
Educational Resources & College Operations  
Program Review  
December 2008**

**Supervisor: Joseph Cooke**

**Mission**

The Mission of the Grounds Department is to provide safe, clean, aesthetically pleasing and professionally well maintained campus grounds; grounds that are environmentally safe, conducive to life-long learning and user friendly to students, faculty, staff and visitors.

**Role and Function**

The Grounds Department functions as the keepers and stewards of the 112 acres that comprise the De Anza College grounds. As such the unit is tasked with the following service functions; picking up trash, garbage collection \*(roughly 293 cans), recycle collection \*(85 cans), cleaning storm drains and gutters, planting, pruning, trimming, mowing and the general care and maintenance of the campus plant life.

The Grounds Department also performs tasks that are not explicitly within the scope of the department but are important to college life, such as hanging banners, delivering schedules and pulling out bleachers for the PE Department.

\* Grounds is currently in the process of increasing the number of both trash and recycling receptacles and adjusting their placement across campus to maximize recycling (co-mingle), diversion from the waste stream. Grounds has also instituted a composting program, diverting approximately 2 tons of kitchen scraps per month from the waste stream.

## **Descriptive Summary**

Currently the Grounds Department is staffed with nine FTE who are responsible for a total of 81.8 acres or 9.09 acres per person including supervisor.

Functionally the 81.9 acres are used in the following manner:

Landscaped area	28.5 acres
Athletic Facilities	10.1 acres
Parking Lots and Roadways	<u>43.2 acres</u>
	81.8 acres

The remaining 30.2 acres are buildings.

The nine Grounds positions fall into the following classifications:

- 1 Grounds Supervisor
- 1 Head Grounds Keeper
- 3 Grounds II
- 2 Grounds III
- 2 Grounds IV

The Grounds Supervisor manages the unit and the Head Groundskeeper is the lead for the Grounds Crew in the Supervisor's absence.

### **Shifts**

- 6 A.M. - 2:30 P.M. 1 supervisor and 5 crew members Monday-Friday  
1 crew member Tuesday-Saturday
- 7 A.M. - 3:30 P.M. 1 Head Groundskeeper and 1 crew member Monday-Friday

<b><u>A Budget Summary (Actual)</u></b>	<b><u>2007-2008</u></b>	<b><u>2008-2009</u></b>
	\$740,655	\$862,747

<b><u>B Budget Summary (Actual)</u></b>	<b><u>2007-2008</u></b>	<b><u>2008-2009</u></b>
	\$22,000	\$22,000

	\$11,500*	\$11,500*
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**B Budget Summary (cost overrun 2007 – 2008 fiscal year)**

\$5,612 in supply cost increases and equipment repair costs

**B Budget Summary (anticipated shortfall 2008 – 2009)**

\$3,100 increase in supply costs e.g. liners (trash & recycling) and p.p.e.  
 \$2,430 equipment repair costs (based on deficit in 2007 – 2008 fiscal year  
\$3,420 contract tree services for removals and potential storm hazards  
 \$8950\*\*

\$1,350\* increase in costs e.g. fertilizer, marking paint athletic fields

\* Fields account

\*\* Does not include increases for plant material infill or conference trainings

**Strengths**

- Newly Landscaped areas w/state-of-the-art irrigation systems
- Crew that has long term familiarity with campus
- Crew that is dependable when necessary for seasonal events
- Flexibility that promotes the efficient use of time and human resources
- Ability to response to emergency situations quickly
- Organization of crew into cohesive work teams

**Weakness**

- Lack of professional training in horticultural and plant husbandry
- Shortage of specific technical horticultural skills among staff
- Lack of institutionalized calendar of major work tasks e.g. pruning, fertilizing
- Antiquated irrigation systems requiring manual operation and ongoing repairs
- Trees needing seasonal and structural pruning by arboricultural skilled staff
- No proactive seasonal maintenance program or current inventory for trees

Although the Grounds Department a new supervisor with both field experience and horticultural education background the department has lost one technically

skilled position. As additional landscaped areas are brought on line through Measure E and C building and renovation projects the impact of the loss of these positions will become more obvious.

### **Quantitative Workload Measures**

The Grounds Department is currently in the process of developing quantitative workload service level measurements based on specific tasks which can be used to evaluate tasks based on each areas functional characteristic, e.g., Parking lots and roadway acreage, landscaped acreage, and athletic facilities.

Another quantitative measure is the tonnage of debris and recycling. Audits of our waste stream provides an accurate assessment of the effectiveness of our recycling program and is done based on \*data provided by our contracted waste stream hauler. The data analysis can be done monthly or quarterly and provides important details that the Grounds Department can use to improve recycling efforts based on the various materials we divert from the waste stream, keeping these materials out of Landfills.

#### **\*September 2008 to December 2008:**

Construction & Demolition = 4.57 tons  
Cardboard = 34.82 tons  
Green (yard debris) = 12.86 tons  
Metal = 6.74 tons  
Co-mingle (plastic bottles & cans) = .68 tons  
Wood = 0.0  
Compostables = 6 tons (does not include September)

Total waste & recycling = 227.46  
Total recycling = 96.72 tons  
Percentage of total diverted material = 43%

### **Qualitative Measurements**

Customer surveys will be distributed to sample groups of staff, faculty and student groups. The results of the survey will be included in future program reviews.

Implementation of the campus Sustainability Management Plan in correlation with comparisons to similar educational institutional program successes will allow for a gage in the success of our Grounds Department support services. Comparisons can be made through membership in organizations such as the Association for the Advancement of Sustainability in Higher Education.

Maintaining LEED certification standards for all Measure C and Measure E expansion and improvement projects will also identify the quality of our landscaped areas in support of life-long learning and user friendliness to students, faculty, staff and visitors.

## **Trends**

- Push for the completion of a campus-wide computerized irrigation system with native landscape additions for all Measure E and Measure C expansion and improvement projects.
- Continue planting native and adaptive plant species that are drought tolerant and more suited to the campus' micro climate.
- Move to change landscaping practices and techniques to those that are more environmentally sensitive and supportive of academic programs.
- Move away from pesticides and herbicides with the development and implementation of an integrated pest management program.
- Move to artificial turf, promoting water conservation, low maintenance athletic fields.
- Move toward better waste management practices so that more solid and green waste is recycled and a greater amount of nutrients are maintained within the campus landscape, balancing the cycle.
- Move to increase knowledge of horticultural, plant husbandry and landscape maintenance techniques that support a more natural and environment friendly urban landscape environment.

## **Planning Agenda**

- Establish training program for the Grounds Crew in horticultural management, low maintenance landscape practices and resource conservation efforts.
- Equipment purchase and replacement program incorporating routine maintenance and repair program.
- Customer (student, staff) satisfaction surveys with avenues for suggestions of improvements encouraged by a transparent service support program.
- Native species planting and tree replacement program with ongoing support and collaboration with academic programs such as Science, Biology and Environmental Studies.
- Program for routine, seasonal tree maintenance program developed through inventory of existing population and promotion of species diversity through planting and transplanting.

## **Comments**

Optimization of the role and function of the Grounds Department will require the restoration of one deleted, skilled Grounds position. Future equipment needs of the department include the purchase of new mulching mower. Purchase of additional trash and recycling cans with increases in education for campus community in recycling procedures will enable the Grounds Department to increase the effectiveness of recycling efforts, redirecting the flow of a greater percentage of our waste stream to reuse and recycling and away from landfills. Improvements in service levels with the expansion of sustainable practices e.g. composting, integrated pest management, water conservation will all help to support grounds that are environmentally safe, conducive to life-long learning and user friendly to students, faculty, staff and visitors.

## **Strategic Planning**

**1. How does your program or service respond/address the College's Strategic initiatives?** Management of campus grounds along with the services the Grounds Department provides supports the college's strategic initiatives to increased retention of new and returning target-group students. This includes maintaining aesthetically pleasing and safe landscape areas that are conducive to the learning environment. Grounds also uses sustainable procedures and processes in its operations that support current trends that help to empower students and staff to remain informed of prominent issues of present day society, as well as, the future needs of industry and potential employers. Grounds' also provides the athletic field maintenance necessary for the promotion of physical education activities not only for college students, but also for specialty sports programs and community events.

**2. Which initiatives does your program or service respond to and in what ways can the response be measured or evaluated?** The Grounds Department responds to the various campus programs that focus attention on current, vital and relevant needs of our students, staff and community by supporting an infrastructure that promotes social, economic and environmental issues faced in every day, real life situations with the use of sustainable practices, procedures and policies the department uses. One way to evaluate the effectiveness of the departments' processes is through organizations such as the Association for the Advancement of Sustainability in Higher Education that link similar educational institutions' effectiveness based on the similar sustainable practices and procedures.

**3. How does the work of your program, or service respond to increased access, growth, retention and or student equity?** Increases in student access, growth and retention are incorporated into the Grounds Department specific functions and services through adjustments in work priorities and schedules. Policies and standardized procedures, along with improvements to campus infrastructures, as new buildings that come on-line, are renovated, with upgrades in irrigation and the use of native plant materials, allows for low maintenance landscaping and more effective use of scarce resources. Establishing programs for increasing the diversion of solid waste through recycling and composting of Dining Services materials, not only enables a self-sufficient campus community, but also promotes and endorses the expansion of those practices out into the community through staff training and throughout society as students graduate, transfer and continue a life-long learning trend.

**4. What other programs/services are you working with to accomplish your proposed goals/outcomes?** The Grounds Department works closely with the Environmental Studies program to promote more sustainable practices and procedures. The “real world” disconnection and isolation of classroom lectures and text book dependent teaching methods is overcome through the coordination between academic programs and the services provided to the college community. Environmental Studies offers courses which teach methods of landscaping with native and adaptive plant species the Grounds Department also uses to conserve scarce resources. Composting methods Grounds uses to recycle kitchen scraps from the Dining Center and use to amend the soil nutrients of native planting beds throughout campus is a perfect example of how the Environmental Studies Department can advocate the use of sustainable practices to create a balance in the local urban environment.

**5. What is important to understand about your program, or service and the consequences to the college if it was discontinued or reduced?** Discontinuing or reducing the services provided by the De Anza Community Colleges Grounds Department would seriously affect the college’s ability to maintain grounds that are environmentally safe, conducive to life-long learning and user friendly to students, faculty, staff and visitors. Reductions in the services Grounds supplies would have an immediate and serious impact on campus grounds safety and sanitation levels. The aesthetic appeal of the entire campus would degrade significantly, possibly reducing the numbers of new and returning students. A decrease in sustainable practices the grounds department uses would increase operational costs to the college in regard to both simple maintenance and in maintaining environmental safety. Eliminating the composting program would reduce the availability of a readily available and inexpensive nutrient source for the campus landscape areas. Substituting the compost or soil amendment with commercial fertilizers would increase operational costs. Eliminating the use of soil amendments and fertilizers would create stress throughout the landscaped areas decreasing the plants ability to fight off disease vectors further stressing the plantings and creating an avenue for accelerated plant die-back and loss of valuable vegetation. In larger trees die-back often results in serious risk to the safety of pedestrians from limb failure. The lack of trash and recycling collection would become immediately apparent with a reduction in Grounds staffing. Outsourcing the services Grounds provides is cost prohibitive and would eliminate response to the needs of the campus community in a timely manner.