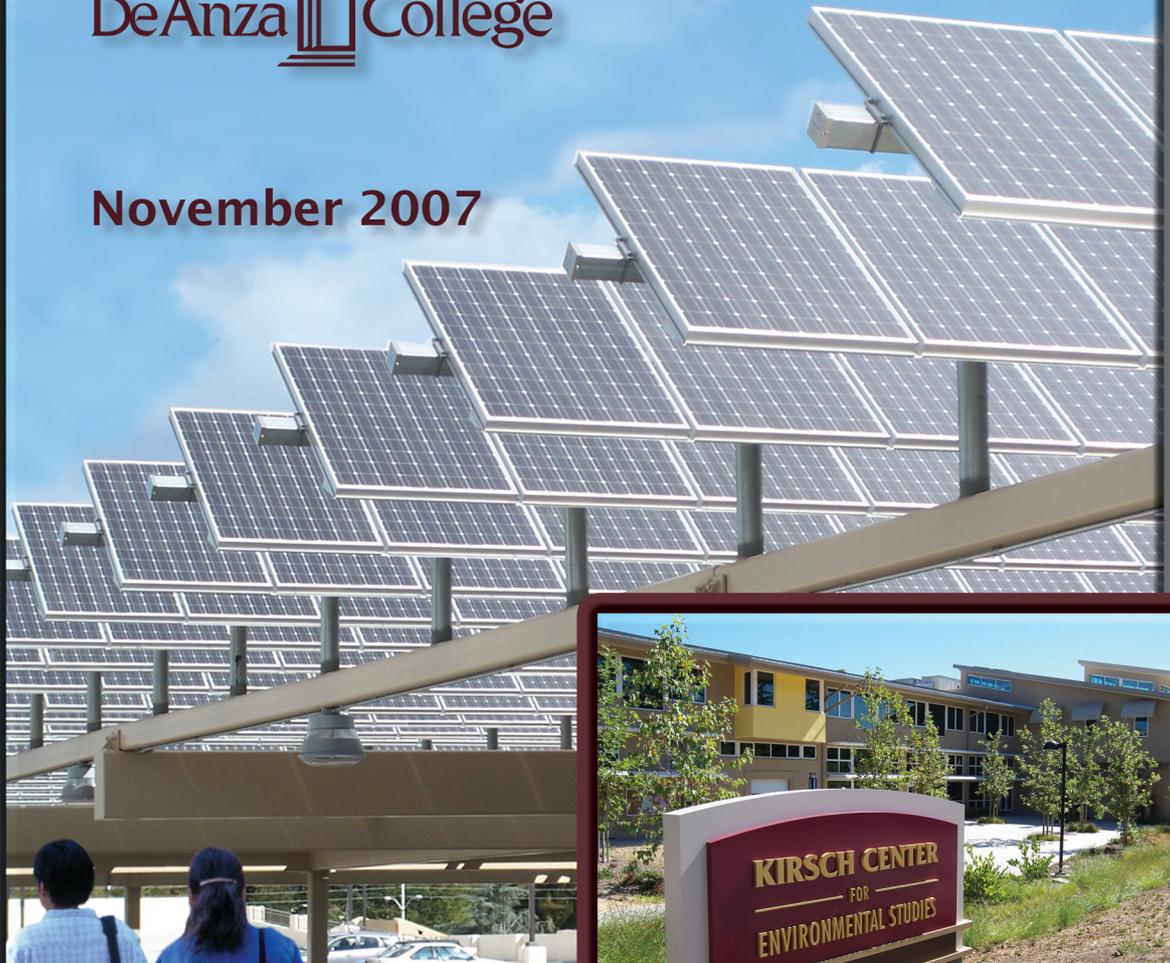


Sustainability Management Plan

DeAnza College

November 2007



Cheeseman
Environmental
Study Area



21250 Stevens Creek Boulevard
Cupertino, California 95014
www.deanza.edu/ceag

Contents

Background	1
1 Introduction	1
2 History of the De Anza College Environmental Advisory Group (CEAG)	3
3 Overview of the Sustainability Management Plan	5
4 Details of the Sustainability Management Plan	7
5 Sustainability Management Plan Areas of Focus	10
Glossary	11
Appendix A - The De Anza College Sustainability Policy	13
Appendix B - The De Anza College Environmental Assessment - Raw Data	14
Appendix C - The De Anza College SMP Implementation Time Line	27

Background

De Anza College opened in 1967 as the second college in the Foothill-De Anza Community College District (FHDACCD). Two words – “excellence” and “innovation” – have captured the essence of De Anza College for nearly four decades. Although each carries importance, together they are a winning combination that has established De Anza in the forefront of community colleges nationwide.

Located 45 miles south of San Francisco, the college occupies a 112-acre site in Cupertino in the heart of Silicon Valley. Cupertino is also home to Apple, Compaq, Sun, Hewlett-Packard and many other high-technology firms.

Nestled near the base of the Santa Cruz Mountains, the college was named after Spanish explorer Juan Bautista de Anza. The college is one of the largest, single-campus community colleges in the country with enrollment averaging 24,000 students.

The De Anza student body is as richly diverse as our course offerings and extracurricular activities. Most students are from local cities, although some come from more than 50 countries. Celebrating cultural and ethnic diversity is part of the college’s philosophy and is reflected in course material and at campus events and gatherings.

1 Introduction

1.1 Executive Summary

The De Anza College Environmental Advisory Group (CEAG) in collaboration with the De Anza College community developed a Sustainability Management Plan (SMP) for the campus. The plan will guide the College toward becoming one of the first sustainable community college campuses in California. The SMP addresses all aspects of our impact on the campus and community. In this context, sustainability management addresses a broader range of human activity than traditional environmental management. Sustainability considers our impact not just on air, land and water, but includes our impact on community vibrancy, environmental stewardship, social equity and financial responsibility.

Throughout the country and indeed globally, institutions of higher education, municipalities and companies of all sizes are designing environmental management plans and sustainability management plans to improve their environmental compliance and stewardship, enhance social equity and responsible business practices, control and reduce financial costs, and enhance long-term financial planning. However, no community college in the nation has yet grasped the opportunity to use either type of plan to achieve these kinds of collegiate and community benefits. Upon the implementation of De Anza’s SMP, the college will model sustainability leadership in this sub-sector of higher education.

The components of the SMP include:

- The Sustainability Policy (Appendix A)
- The Initial Environmental Assessment Data (Appendix B)
- The SMP Implementation Time Line (Appendix C)

The College Sustainability Policy is a strategic statement of concrete actions which De Anza will take toward achieving sustainability. Developed over the year, the policy represents input from more than

25 stakeholders around the college community and has culminated with the approval of participatory governance groups representing faculty, staff and students.

The written processes and procedures are the detailed tactical steps that will deliver on the strategic statement identified by the policy. These processes and procedures will involve all members of the college community in activities intended to drive better decision-making in support of improvements in environmental stewardship, social equity, and financial responsibility.

The Sustainability Management Plan Implementation Time Line is the schedule for putting the written processes and procedures in place, for involving the college community in their implementation, and for auditing and validating that the written processes and procedures are achieving the expected improvements in environmental, social and financial performance committed to in the policy.

Together, these components comprise the SMP, which, using the Energy Management System model, will enable the college to take a more progressive approach to managing opportunities in environmental leadership and stewardship, social equity and community engagement, and financial responsibility, including the following list of breakthrough programs and initiatives:

- Green Building Construction and Renovation
- Community and Civic Engagement
- Hazardous and Solid Waste Reduction and Control
- Energy Conservation, Efficiency and CO₂ Reduction
- Water Use Reduction and Control
- Green Purchasing and Procurement Controls in the College Supply Chain
- Ecologically Responsible Landscaping, Installation and Maintenance

In each of these areas; referred to in this report as the written processes and procedures; there will be opportunities for students, faculty, staff and administrators to contribute to the effort. Those opportunities are described in summary form below in the discussion of the details of the plan. It is important to appreciate, however, that these components of the SMP are only the initial steps in fully implementing the plan at the college. The additional elements of the SMP remaining to be put in place are detailed beginning at page 7 of this report, and in the Implementation Time Line, Appendix C.

The contributions of various members of the college community to achieving these written processes and procedures that will be derived from the Environmental Assessment data laid out in Section 5 of this report.

Finally, two points deserve mention regarding the relationship between the SMP and De Anza College's strategic planning processes: First, the application of the sustainability policy and more specifically the SMP are fully supported, and will be implemented through the De Anza College Strategic and Facilities Master plans. Secondly, the SMP is being incorporated in appropriate ways into the community engagement initiative and elements of the Strategic Plan.

1.2 Terminology and Use Notes

The terminology used in this report is explained where it is used, but there are two clarifications that are worth singling out here. A complete list of terms used in this document can be found in the glossary.

The terms “stakeholder” and “interested parties” are used interchangeably in this report to refer to anyone who is affected or perceives him or herself to be affected by the college. Given the college’s commitment to enhanced community engagement or involvement, the role of stakeholders is a critical continuing theme in this report.

Stakeholders can include internal stakeholders (or interested parties), such as staff, faculty, administration and students of the college, or external stakeholders (interested parties), such as families of employees, faculty, staff and students, other community members, regulators, the Legislature and the college district, or suppliers of the college. The term “community” usually means those who live or work or govern or go to school in an organization’s hometown or city and often means the people who are nearby neighbors of the institution.

The terms “sustainability performance” and “environmental performance” incorporate the notion of continuous improvement and refer to continuous reduction of social, environmental and financial risks and impacts, over time, and continuous enhancement of social, environmental and financial opportunities over time.

2 History of the De Anza College Environmental Advisory Group (CEAG)

The SMP has been spearheaded by the College Environmental Advisory Group (CEAG), which consists of staff, faculty, students, management and community members. The following is a history of CEAG as well as some of FHDA’s sustainability efforts and accomplishments. CEAG is a committee on De Anza’s campus that monitors and makes recommendations to appropriate individuals and groups about college and district policies relating to environmentally sound practices. CEAG embraces and fosters principles of sustainability as core values.

CEAG was founded in 1992 by Julie Phillips, the Morgan Family Chair in Environmental Studies at the Kirsch Center for Environmental Studies, www.kirschcenter.fhda.edu.

In 1994 the Foothill-De Anza district adopted board policy on environmentally sound practices. Part of CEAG’s mission was to ensure that De Anza met the standards set by FHDA’s environmental policy. To assist in the implementation of these standards in all aspects of daily operations, CEAG has continued to monitor and make recommendations on the environmental performance criteria listed below.

- Energy: renewable energy, conservation, energy efficiency – set criteria for compliance with Title 24 and beyond on a case-by-case basis, building commissioning, and site orientation to emphasize day-lighting and efficiency.
- Materials and resources: construction materials, classroom equipment, solid waste recycling, and demolition materials recycling and diversion
- Water conservation: efficient use of water, landscaping, wastewater and storm water management, and native and drought tolerant/resistant flora
- Indoor environmental quality: indoor air quality, employee health and productivity, and day-lighting
- Sustainability efforts: transportation, operations and maintenance, pollution prevention, sky friendly lighting, procurement

CEAG's position has been that the district would benefit from dedicated sustainability staff personnel for the following reasons. In 1992, the CEAG committee advocated for two full-time positions, including an energy management technician and a recycling coordinator. If these positions had been created, the district would possibly be further along on its sustainability pathway. It is therefore CEAG's recommendation that the college create a sustainability coordinator position for a timely and successful implementation of the proposed sustainability management plan.

For more information about CEAG, visit <http://www.deanza.edu/ceag/index.html> or see CEAG's brochure.

CEAG holds monthly meetings that are open to everyone, with a membership goal to include at least one representative from each of the following areas: administration, faculty, staff, a student and one at-large member.

Sustainability efforts and accomplishments to date

De Anza College served as a leader, with support from the district, in sustainability within and for the California Community College (CCC) system, including these past measures and programs: First Community College district in California (and nation) to have three USGBC LEED buildings, with three completed green building LEED projects: Kirsch Center for Environmental Studies (a national model for sustainability and education); Science Center; Student and Community Services Building; and Visual and performing Arts Center (under construction).

- Kirsch Center – State-wide Energy Management Program (SEMP) Building #1 (first of 20 such projects by 2020 in CCC system) and environmental sustainability, stewardship and interdisciplinary education. SEMP training of energy specialists provided both locally and state wide: <http://www.deanza.edu/kirschcenter>
- Student involvement for more than 12 years on greening efforts including De Anza Student Body's (DASB) initial gift of \$180,000 for the conceptual design for the Kirsch Center for Environmental Studies
- California Community College sustainability curriculum workshops
- Energy efficiency efforts for more than 10 years culminating in the Energy Policy and Training Handbook, which provides policy recommendations for California and the Community College System
- Renewable energy projects, including photovoltaic and co-generation systems
- Environmentally sound practices committee effort (CEAG) on the De Anza campus, writing specific sustainable guidelines for the college
- Non-smoking policy on De Anza campus
- Campus-wide recycling effort for 12 years
- Environmental Studies Department – first endowed chair in Environmental Studies in the California Community College system
- Cheeseman Environmental Study Area (ESA) – first of its kind in the California Community College system
- Green building materials are being used in all new and renovated buildings (i.e. sunflower seed husks counter tops and waterless urinals)
- Green maintenance products and green consumables are used campus wide
- Campus wide environmental assessment completed (Appendix B)

3 Overview of the Sustainability Management Plan

The SMP is composed of the early stages of a formal SMP, based on the international standard for EMS, ISO 14001:2004(E) (ISO 14001).

ISO 14001 defines an EMS as “the part of the overall management system that includes organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy.” The standard goes on to provide a methodology to build an auditable EMS so that the organization using EMS can validate that all persons working on its behalf are conforming their decisions and actions to the priorities set by the EMS. In the SMP for the college these priorities are defined in the first instance by the Policy Statement and the written processes and procedures.

ISO 14001 was built and designed primarily for use in manufacturing plants. As such, it is often handled as an “end of pipe” add-on task, something more to do. Most formal industrial EMS built to date conform to the language of ISO 14001, but leave many business value and environmental protection opportunities unplumbed. The SM Plan designed and delivered in this report overcomes many of these deficiencies and is intended to deliver maximum value, measured by real-world environmental performance, environmental protection, cost reduction, quality gains, and by adding demonstrable value to the business of the college in its core educational mission.

Briefly, the SMP will do three things for the college, and reliably so:

1. Help identify and catalogue all of its environmental risks and opportunities (not just those regulated by law),
2. Help set a frame for prioritizing those risks and opportunities, and
3. Help to systematically apply greater management to the risks and impacts it deems most important, with the goal of reducing them to the minimum extent practical.

To date, the college has managed environmental issues in two ways. Regulatory compliance drives some of the college’s responses and, more importantly, the De Anza has a long history of environmental leadership.

Using the SMP, the college will be able to involve the entire college community in more intentional, strategic and tactical efforts to improve sustainability performance in a systematic way. The detailed components of the SMP, which explain how the plan will be implemented over time, are described below. But first, we felt it important to detail the financial, environmental and social performance gains that sustainability management has delivered to other higher education institutions:

Improvement in compliance management

Often, compliance management is undertaken when issues are current and compliance gaps have been already been identified by the organization or by a regulatory agency. The SMP takes a proactive approach to compliance management in all areas of compliance, and it enables measurement of compliance performance, rather than simply a binary approach to compliance (where compliance is either met or not).

Enhanced relationships with regulatory bodies

Typically, firms engage with regulatory bodies when compliance issues arise or when new needs (e.g., permit modifications) drive communications. SMP provides a positive basis for dealing with regulators where there is good news (enhanced compliance performance) to report. This reliably leads to more favorable treatment when and if compliance issues arise and more positive interaction when new permits and other business change needs arise. As well, because SMP provides a more reliable tool for maintaining currency with changes in regulatory requirements, regulatory interactions are typically based on interpretation, rather than applicability, needs of the firm. This heightens the credibility of the firm with overseeing regulators.

Improved risk management

Often, the most mission-critical information about compliance management (in all areas of financial, HR, environmental and other organizational compliance) is held by a few key employees and sometimes contractors. Documenting of this critical information in writing will ensure that it is not lost if a key employee is reassigned or leaves the college.

Because SMP provides a reliable and efficient means of reducing this key information to writing, transition management and control of changing circumstances is improved and maintenance of compliance excellence over time becomes possible.

As well, an effectively designed SMP aids in broader distribution of responsibility for managing compliance. This makes the job of the Environmental Health and Safety (EHS) professionals within the business more easily executed, and sets the basis for more meaningful management engagement with EHS issues. In turn, this can lead to more meaningful, business-based metrics of sustainability performance, which can often get visibility on upper management scorecards and dashboards.

Enhanced reputation

As stakeholders – including community members and regulators, as well as municipal officials – increasingly demand more of colleges as “corporate citizens,” firms with performance-based SMP reliably enhance their reputation vis a vis their communities. This can also pay dividends in terms of improved marketing and branding of the institution, and more success attracting faculty, students, staff and administrative personnel with higher skill levels than the competition.

This is so because SMP provides the means (objectives, targets, measures, and above all, aligned institutional strategies) for institutions to broadcast, both internally and externally, specific information about their environmental stewardship, financial excellence, and social and ethical performance.

Improved employee, student and community engagement

Employee, student and community morale and loyalty to the institution are increasingly functions of the kind of values and commitment to good citizenship exemplified by the college. In an ever more competitive marketplace for human capital, using SMP to achieve compliance excellence is an excellent tool to make tangible the institution’s commitment to responsible business, social and sustainability practices.

Simplified and strengthened change management

The challenge of change management is a constant one. SMP provides useful predictive tools and assessment models that can prove invaluable, e.g., when introducing new materials, building new buildings, commencing new academic departments, renovating existing infrastructure, and purchasing and installing all manner of new equipment, as well as when needs for space expansion occur. Assessing the sustainability implications of these issues up front is a more lucrative and efficient strategy than looking at such changes after or during transition management.

Reduced operating costs

Reduced operating costs typically result from reductions in energy, raw materials and water consumption; employee retention; higher levels of excellence in personnel; student and staff performance. Productivity gains result from healthy and sustainable buildings. Experience shows that these types of building systems more than pay for themselves economically, socially and environmentally.

Tangible operational efficiencies

SMP emphasizes material and human risks in the supply chain of the institution. Cost and effectiveness of instruction are often the key drivers for supply chain decisions and enhanced risk management. Information from suppliers delivers the benefit of discovery and correction of inefficient operating practices in the supply chain, and consequent reduction or elimination in costs and repair.

Improvements in curriculum innovation

Getting the entire institution to begin thinking more intentionally about the long-term future of the college's environmental, financial and social fabric; leads almost inevitably to a more future-oriented mindset about curricular innovation. This focus often brings favorable attention to the institution as an effective innovator and creator of curricular improvement; De Anza could build on its existing strong reputation.

4 Details of the Sustainability Management Plan

Design and Planning of the SMP

Sustainability Policy

Senior management and shared governance committees define the SMP within an appropriate scope for the college's mission, goals, activities and services. These stakeholders should also ensure that the SMP is driven by a commitment to continuous improvement, complies with legal and regulatory requirements, provides a framework for setting and reviewing policy objectives and targets, is communicated effectively to all within the college and is publicly available.

Environmental Aspects

An effective SMP will identify, document and maintain procedures that relate directly to all of the sustainability issues that are relevant to the college's operations, strategic planning process and financial management. The college should identify the sustainability issues that are within the scope of the SMP and those it can control. This process essentially identifies the sustainability priorities that the college will initially address with the SMP and leads to the definition of the written policies

Legal and Other Requirements

All applicable legal and regulatory requirements that affect the college's business and relate to sustainability issues must be identified. When drafting the requirements of the SMP, ensure not only full compliance to these laws and regulations, but strive to exceed them.

Objectives, Targets and Programs

The college shall define all responsible parties (at every level of the college from the president to construction contractors, from academic deans to food service staff) whose actions and decisions may affect the sustainability priorities set by the college. A clear and measurable set of objectives and targets will be tasked to these parties. In doing so, the college shall adhere to the Sustainability Policy and Plan. Appendix B describes applicable legal requirements, technology options, and financial, operational and business requirements.

Gaining Support for and Operationalizing the SMP

Resources, Roles, Responsibility and Authority

The president shall identify point persons and/or teams who will manage the implementation of the SMP. These persons and/or teams (which will include CEAG, student, faculty, staff and administrators) will be responsible for communicating and reporting the performance and status of the SMP in order to identify areas where the SMP can be continually updated.

Competence, Training and Awareness

The college shall encourage participation in training and education programs for all individuals and stakeholders within and outside of the college to ensure awareness of and involvement in the SMP.

Communication

The college shall execute its SMP through oral and written communication and practice to all internal and external stakeholders.

Documentation

The college shall establish a documentation plan for managing compliance and performance of its SMP. This plan shall serve as a guide for all internal stakeholders and provide a framework for evaluation and auditing by internal as well as external parties for continuous improvement of the SMP.

Documentation Control

All important and relevant documents associated with the SMP should be controlled and accessible to the college and external third parties.

Management Controls and Responses

The college shall set specific operational and management guidelines for all decisions-making, activities and services that interact and affect the sustainability priorities it has chosen. These guidelines shall be consistent with the previously identified SMP objectives and targets.

Checking and Validating the Operation and Continuous Improvement of the SMP

Monitoring and Measurement

In order to evaluate the performance of the SMP, the college shall establish, implement and maintain a monitoring and measurement program focused on applicable decisions, activities and services.

Evaluation of Compliance

The college shall develop a protocol and time line for documenting testing, auditing to, and ensuring compliance with all applicable legal and other requirements to which it is committed.

Nonconformity, Corrective Action and Preventive Action

When there are problems with performance of the SMP, with participation in the SMP to achieve the Sustainability ACTION PLANS, or with legal compliance, the college shall address them with a clear process which identifies the non-conformance, sets a program for corrective and preventive actions, and documents the process with timelines and responsibilities/ accountabilities for completion. For continuous improvement of the overall SMP, non-conformities should be evaluated, and the management criteria set out by the SMP shall be reviewed within this context, and if necessary, revised.

Control of Records

Essential documents, data, reports and records shall be maintained and stored via an established process so that they can be retrieved and audited.

Internal Audit

Internal SMP compliance audits shall be conducted at planned intervals to critique, review and assess the entire performance of the SMP. This audit shall address how the college's SMP measures up to its own criteria as well as the requirements set by the written processes and procedures.

Management Review

Senior management shall review and assess the entire performance of the SMP in response to regular audits. Senior management in collaboration with the college community shall address and identify opportunities for improvement and recommend activities and actions to change the sustainability policy. Recommendations shall include specific objectives and targets or other elements of the SMP.

5 Sustainability Management Plan Areas of Focus

To make the SMP tangible and concrete, the following represents Phase I of sustainability performance improvements specified in the chart below. The next step is to create an action plan that will contain measurable goals and objectives for the initial six plan areas of focus.

<u>Sustainability Action Plan Areas of Focus</u>	<u>Potential Student Contributions</u>	<u>Potential Staff Contributions</u>	<u>Potential Faculty Contributions</u>	<u>Potential Administration Contributions</u>
Hazardous and Solid Waste Reduction and Control	Day to day recycling activities; promotion of the activities by word of mouth and example	Day to day recycling activities; promotion of the activities by word of mouth and example	Day to day recycling activities; promotion of the activities by word of mouth and example; development of curricular alternatives and content around written processes and procedures topics	Day to day recycling activities; promotion of the activities by word of mouth and example; enforcement of deviations from compliance and performance-driven recycling goals
Energy Conservation, Efficiency and CO ₂ Reduction	Day to day changes in behavior to achieve energy reductions	Day to day changes in behavior to achieve energy reductions	Day to day changes in behavior to achieve energy reductions; development of curricular alternatives and content around written processes and procedure topics	Day to day changes in behavior to achieve energy reductions; Enforcement and visible support of energy reduction goals and consequences for wasteful use of energy
Water Use Reduction, Control and Reuse	Day to day changes in behavior to achieve water use reductions	Day to day changes in behavior to achieve water use reductions	Day to day changes in behavior to achieve water use reductions; development of curricular alternatives and content around written processes and procedure topics	Day to day changes in behavior to achieve water use reductions; enforcement and visible support of water use reduction goals and consequences for wasteful use of water
Green Purchasing and Procurement Controls in the College Supply Chain	Consider more socially, financially, and environmentally beneficial product use	Consider more socially, financially, and environmentally beneficial product use; participate in development of guidelines and specifications for sourcing goods and services from suppliers, contractors, and vendors who meet these criteria	Consider more socially, financially, and environmentally beneficial product use; development of curricular alternatives and content around written processes and procedure topics; participate in development of guidelines and specifications for sourcing goods and services from suppliers, contractors, and vendors who meet these criteria	Consider more socially, financially, and environmentally beneficial product use; participate in development and enforcement of guidelines and specifications for sourcing goods and services from suppliers, contractors, and vendors who meet these criteria
Ecologically Responsible Landscaping, Installation and Maintenance	Support and make time to participate in better landscaping, greenery, and xeriscape solutions	Support and make time to participate in better landscaping, greenery, and xeriscape solutions	Support and make time to participate in better landscaping, greenery, and xeriscape solutions; development of curricular alternatives and content around written processes and procedure topics	Support and make time to participate in better landscaping, greenery, and xeriscape solutions
Green Building Construction and Renovation	Participate in tracking improvements in comfort, productivity, and cost savings associated with new and renovated green buildings	Support logistical and facilities improvements necessary to maintain and effectively use new and renovated green buildings	Support logistical and facilities improvements necessary to maintain and effectively use new and renovated green buildings; development of curricular alternatives and content around written processes and procedure topics	Developing and enforcing design criteria and materials guidelines for green building design, construction and renovation

The unique contributions that the college can make as a leader and innovator among institutions of higher education will be achieved. Our SMP and Sustainability Policy represent our roadmap to sustainability.

Glossary

Change Management – A structured approach to change in individuals, teams, organizations and societies that enables the transition from a current state to a desired future state. Change management provides a framework for managing the people side of these changes.

Climate Neutral – The effort to offset the carbon footprint (CO₂ emissions) of an organization through investments in sustainable energy, agriculture, reforestation and energy efficiency, whose benefits offset or avoid an amount of CO₂ equivalent to the organization's carbon emissions.

Cultural and Biological Diversity – The adaptive interweave of people, language, place, culture and ecology, which is a source of exchange, innovation, creativity and cultural diversity. (Adapted from UNESCO.)

Energy Management Plans – The plans to implement energy efficiency projects such as sustainable green buildings, renovations, and wind or solar farms that will move the college toward energy independence. (Energy Policy Handbook)

Environmental Literacy – To have a basic comprehension of environmental sustainability, natural capital, exponential growth, carrying capacity, environmental history, ecology, biodiversity, energy, resources, pollution prevention, waste reduction, ethics, economic and political systems. (“Living in the Environment” text)

Environmental Performance – Incorporates continuous improvement and refers to “continuous reduction of social, environmental, and social risks and impacts, over time, and continuous enhancement of social, environmental, and financial opportunities over time.

Green Building – A building that has been designed to reduce both direct and indirect environmental consequences associated with construction, occupancy, operation, maintenance, and eventual decommissioning, whose design is evaluated for cost, quality of life, future flexibility, ease of maintenance, energy and resource efficiency, and overall environmental impact, with an emphasis on life-cycle cost analysis. (Energy Policy Handbook) Economic analysis has shown the merits of green buildings in terms of increased productivity due to day lighting, increased ventilation and fewer chemical irritants.

Interested Parties – see Stakeholder

Personal Sustainability – Plans and actions that individuals take at all ages of their life to help ensure their physical, social and financial sustainability.

Social Equity – Decisions and actions that require that we recognize the values and norms of other peoples and that our decisions and actions are guided by notions of justice and fairness that accept the integrity and validity of other cultures and lifestyles. (Adapted from United Nations University Press)

Stakeholder – refers to anyone who is affected or perceives him/herself to be affected by the college. Given the college's commitment to enhanced community engagement or involvement, the role of stakeholders is a critical continuing theme in this report. “Stakeholder” and “interested parties” are

used interchangeably in this report. Stakeholders can include internal stakeholders (or interested parties), such as staff, faculty, administration and students, or external stakeholders (interested parties), such as families of employees, faculty, staff and students, other community members, regulators, the legislature and the college district, or suppliers of the college. The term “community” usually means those who live or work or govern or go to school in an organization’s hometown or city and often means the people who are nearby neighbors of the institution.

Stewardship – Having an ethical responsibility toward nature. Encouraging environmentally beneficial forms of economic growth in part by using energy and resources wisely. (“Living in the Environment” text)

Sustainability – To utilize components of social, cultural and biological diversity in a way and rate that does not lead to long-term decline, thereby maintaining the potential to meet the needs and aspirations of present and future generations. (Adapted from the “Conventions of Biological Diversity”)

Sustainability Performance – Incorporate the notion of continuous improvement and refer to “continuous reduction of social, environmental, and social risks and impacts, over time, and continuous enhancement of social, environmental, and financial opportunities over time.

Appendix A

The De Anza College Sustainability Policy

As an educational entity, De Anza College embraces and fosters sustainability as a core value. For De Anza College, sustainability encompasses making provision and taking responsibility for ensuring that every action and decision embodies environmental stewardship, social equity and citizenship, and financial responsibility.

In this spirit, the college commits to taking the following actions:

- Nurture environmental stewardship and literacy across the curriculum, thereby creating a culture of responsibility for environmental protection, including prevention of pollution.
- Develop understanding of the inherent relationships between social, cultural, and biological diversity.
- Commit to design and construction of campus facilities using green building materials and methods.
- Expect all members of the college community – administration, faculty, staff, and students – to exemplify leadership by considering environmental, social and financial opportunities and risks in day-to-day decisions.
- Engage the community in open dialogue about sustainability, sharing insights and models of responsible practice.
- Achieve legal compliance through best practices that continually improve our performance.
- Strongly encourage the use of vendors that demonstrate their commitment to sustainability.
- Develop administrative and training procedures in conformity with this policy.
- Regularly measure and assess our performance as responsible stewards.

Dr. Brian Murphy, President

Jeanine R. Hawk, Vice President,
Finance and College Services

Appendix B

Environmental Assessment Data Collected Spring 2006

Raw Data from Audit Team - Initial Observations

Campus Area / Buildings	Aspect Identification	Activities	Description / Comments	Beneficial Impacts	Negative Impacts
Administration Building					
All Parking lots and structures and campus roads					
A Quad A-6 Photo Lab/ Painting Studio/ Wood& Metal Workshop/ A94 Classroom	Energy Consumption	Lighting		Daylight through skylights and inoperable windows.	Fluorescent lights manually operated and kept on even when there is sufficient daylight. Lights often left on when not in use.
		Electrical usage for photography	Use of color print processor, 6 computers, 2 computer printers, digital projector, print dryer, 2 film dryers, light tables, electronic backdrop in studio, 21 enlargers with timers in bow darkroom and 24 enlargers with timers in individual darkrooms.		Supposed to be on only when in use, however students often leave them on. Signs are posted to turn everything off
	Water Consumption	Water use for developing	Color processor uses 1.5-2 gallons/minute when processing prints. Developing trays in B&W darkroom, 12 total when darkroom is at full capacity. Print washers (3) run for 10-20 minutes depending on print type Sinks in print finishing/film developing room, fiber paper washing room, B&W darkroom.		Use of a limited resource
	Energy Consumption	HVAC Temperature control	Not controlled in the building and inconsistent. Temp. Is ideally at 70F to keep all chemicals at this temp, however it is usually too hot/cold, resulting in more energy use to warm/cool the chemicals.		Use of a limited resource and excessive release of Green House Gas
	Indoor Air Quality	Photography developing			No operational windows. There are vents and fans yet due to the nature of the chemicals the odors cannot realistically be eliminated
	Use of hazardous materials	Photography developing			Toxic chemicals are contained and recycled off campus by ROMIC. Containers are also recycled for reuse.
	Discharge to Water	Photography developing			Sign are posted telling student how to manage materials.

Sustainability Management Plan

Campus Area / Buildings	Aspect Identification	Activities	Description / Comments	Beneficial Impacts	Negative Impacts
	Waste / Recycling	Battery collection and disposal	Batteries are collected for recycling however there is no sign saying so.	Recycling of a waste know as Universal Waste	Recycling program unknown to many.
	Noise, odor or aesthetic effect	Messy student use & Clean-up			Not cleaned often enough - should be mopped up regularly due to water/ceramic materials on the floor.
	Energy Consumption	Lighting		Daylights through skylights and large inoperable windows. Fluorescent lighting and 4 spotlights are available (manually controlled)	
A-6 Photo Lab/ Painting Studio/ Wood& Metal Workshop/ A94Classroom	Indoor Air Quality	Painting			No operable windows in large room and high ceiling. Paint and solvent fumes are present in unknown amount.
A-6 Photo Lab & A52 Paint studio	Use of hazardous materials	Brush washing		Brush wash washing done in a small part washer. Cleaning fluid collect by ROMIC. Fluid is approved by Air Agency.	Part washer appears old and dingy. If Art stopped using oil based paints the brushes could be washed in baby oil and totally non-toxic solutions - completely environmentally friendly.
	Waste / Recycling	Recycling			No visible recycling bin, only trash cans
A-51 Ceramic Studio	Use of hazardous materials	Use of glaze	Room containing glazes has no signage, are the materials contained considered hazardous?	Posting informs everyone of health impacts	Potential for unknowingly impacting health and environmental conditions
A71- Wood/Metal Workshops	Energy Consumption	Woodworking		Workspace for metals and wood for design and shop classes; Power tools, air compressor and sand blasting station kept off when not in use.	
	Use of hazardous materials			3 metal closets, 1 for corrosives, 2 for flammable materials, all very well labeled. Hazardous waste buckets piled up in back. 2 cans for oily waste. Sign over sinks saying not to dump plaster.	Is there a potential for waste reduction?
A70-Auxiliary wood/ceramic room	Use of hazardous materials		Storage and use of large devices, i.e. kilns, storage and use of gases and ceramic materials; Gases stored are Argon, CO2, O2, Acetylene?, Propane. Need to be refilled at most once per quarter, done by district.	Use of refillable containers reduces waste	
A91-Classroom	Discharge to Water	Storm drain discharge		Storm drain and sandbags by door, nearby there is a drain that leads to the bay, well marked 'no dumping'	

Sustainability Management Plan

Campus Area / Buildings	Aspect Identification	Activities	Description / Comments	Beneficial Impacts	Negative Impacts
A11-Choral Hall	Energy Consumption	Lighting and Sound			Sound system appeared to be on though not in use. Light system manually controlled, yet most lights are on though unneeded. Unison Lighting Control System. Spotlights around the room. No windows
	Noise, odor or aesthetic effect		No windows		Stuffy
	Waste / Recycling				No recycling or trash cans available.
A31-Instrumental Music	Waste / Recycling				Sign up to recycle paper yet no recycle bin could be found. Trash can by doorway.
	Energy Consumption	HVAC			Building is very warm; air is stale. Heat is obviously on even though the room is unoccupied.
A47-Art Department Office	Energy Consumption	HVAC			Not controlled in the building, inconsistent
AT Advanced Tech Center					
Broadcast Media Center (A-8)	Indoor Air Quality	HVAC	Forced air from outside, natural ventilation available		
	Waste / Recycling		bins available in every office	Consistent message that recycling is important	
	Energy Consumption	HVAC	Air flow / load balancing controls in different rooms, but there is no control of air temperature; lights on timers		
			Investigating using solar power	Renewable energy, commitment to sustainability - very marketable and tangible	
			Plant services refuses to install thermostat for local controls		
		Electronics	Most only run during the work day, but settings are set to sleep	Sleep power efficiency reduces energy use	
	Waste / Recycling	Electronics	E-waste recycling program is not obvious or know by everyone	Good E-waste program protects environment from toxic metals	Everyone must know about e-waste recycling or electronics will get thrown in trash - increasing landfill toxicity
	Paper Consumption	Copier / paper	Use of recycled paper and print toner cartridges	Reduce demand for virgin paper and inks and recycle toner cartridges	
Energy Consumption	HVAC	HVAC and Electric A&E Engineering study from 2004 commissioned to assess leaking ducts and chance for mold - see report for more details.			

Campus Area / Buildings	Aspect Identification	Activities	Description / Comments	Beneficial Impacts	Negative Impacts
California History Center and Cottage #2	Water Consumption	Restroom/ Toilets/ Faucets			Toilets/ Faucets are manually controlled
	Energy Consumption	Indoor Lighting		Lots of big window/doors on all sides of the building for natural daylight.	During exhibits, a lot of flood / track lights are used. No fluorescent lights anywhere in the building. Lights are all manually controlled
		Outdoor Lighting			Lights are on a timer, controlled by Grounds
	Paper Consumption	Paper Source	Paper is sourced from the Print Shop	Copier is duplex copy mode	
	Use of hazardous materials	Cleaning		Would like to learn about green / environmentally friend products	Non-green products introduce risk to staff, students and environment
	Indoor Air Quality	Windows		Have shutters on doors to close and doors normally closed to keep heat in or cool air in. Do have operable doors/windows with shutters and sometimes keep it open.	Single Pane windows
		Copy and Computer machines			Very close together and may be leading to poor air circulation
Campus Center/ Cafeteria		Est. 10K people pass through Campus Center each day. 2.5-3K use cafeteria. 5K use all the foodservice vendors. Most regular users who have ownership of areas are international students. There are some vegetarian offerings but nothing organic. Many commuting students (non-international) go off campus for food. (Jamba Juice, Baja Fresh). Healthier juice offerings did not sell. One of the mom/pop vendors includes juice bar. Recycling education is an opportunity. PG interested in developing a Food Service 101 course. Could use that to promote green food practices.			
Kitchen, Dining Hall	Energy Consumption	Outsourced on-site small business food vendors	There are a few food service trailers near the campus center. These will go away after remodel.		
		Indoor Lighting		Some natural lighting along perimeter of building on first floor	Lights always on in main area.
		Food Preparation	Mostly gas is used for cooking. Electricity is used for chopping, steaming, refrigeration.		Electricity - Equipment is not Energy Star rated
Conference Rooms	Energy Consumption	Indoor Lighting	The campus center is being renovated in 2006. What green practices are being built into new design?		Manual lights, inconsistent in lights on/off when not in use
Foyer	Energy Consumption	Photocopiers			Copiers for student use are very old. No EnergyStar label or signage promoting duplexing.
		Electronics	Some copiers in office area were Energy Star.		

Sustainability Management Plan

Campus Area / Buildings	Aspect Identification	Activities	Description / Comments	Beneficial Impacts	Negative Impacts
Health Center	Energy Consumption	Offices		Staff are very conscious of energy use and turn off lights, computers, when not in use	
Campus Police	Energy Consumption	On-site Transportation		Parking enforcement use electric carts; campus patrol includes 1 bicyclist	All other vehicles are gas-powered
Foyer	Other	Outside Vendors	Are the vendors environmentally responsible?		
		Vending Machines			Candy/Dry snack foods, no real healthy selections
Kitchen, Dining Hall	Other	Food Preparation	Sysco is the main vendor for food service preparation. The cafeteria services are supplemented with mom/pop type vendors for latte and ethnic food offerings. These will be pulled into the cafeteria setting when the Campus Center is remodeled in 2006.	There are vegetarian offerings on the menu. Soy milk is available at Espresso Carts.	Produce comes from SF Produce Mart. Not organic or free-range
	Paper Consumption	Signage		Signage created onsite	
Paper Napkins					PG said he used recycled post consumer napkins but I did not see unbleached napkins during the week of assessment.
Restrooms	Paper Consumption	Hand Towel/ Dryer			Paper Towel Dispensers, Bleached Paper, Trash Sent to Landfill
Health Center	Use of hazardous materials	Patient Treatment		All bio waste collected by disposal vendor	Generation of Bio Waste via rubber gloves, needles, treatment supplies occurs in health center
Kitchen, Dining Hall	Waste / Recycling	Indoor Lighting		Light bulbs and batteries are recycled through facilities pick up.	
		Serving Utensils	Use plastic utensils/plates and styro and some plastic to go containers. Disposable salt/pepper shakers.	Cafeteria used reusable plates in the past but students threw them in trash cans. PG investigating use of biodegradable (corn/sugar) plates, utensils.	Patrick Gannon said used some post-consumer recycled content but I did not see non-bleached napkins.
		Signage and Recycling bins	Signage is posted in a few areas but bins are not clearly marked and signage not necessarily in appropriate to locations.	Recycling bins are available throughout campus center.	
Posters, Banners	Waste / Recycling	Communication		There are a lot of flyers posted in campus center	
		Recycling bins			Small bins, poorly located, and very inconsistent throughout the Campus Center
Kitchen, Dining Hall	Water Consumption	Food Preparation		A lot of frozen produce is used, eliminating washing and waste.	14-year dishwashing machine will be replaced during remodel, current one is water guzzler

Campus Area / Buildings	Aspect Identification	Activities	Description / Comments	Beneficial Impacts	Negative Impacts
Restrooms	Water Consumption	Faucets / Toilets	Possibly too sensitive, =wasted water; but few problems from unflushed toilets with 10k people going through campus center a day	Sensors on all toilets and faucets	
Child Development Center - Office Area	Energy Consumption	Electronics	One copier/ fax for the whole department	Reduce energy load by using one fax/ copier for a whole department	
Bathroom	Water Consumption	Faucets / Toilets	Sinks/ Drinking Fountain are manually operated		Potential for tap to be left open, wasting water
	Energy Consumption	HVAC	Automatic Air Conditioning		Less than optimal use of energy, might not be needed most of the time
	Indoor Air Quality	Windows	Some windows can open manually	Better circulation of fresh air, natural cooling/ heating options	
	Waste / Recycling	Recycling bins	Outside recycling bins; more recycling containers are needed for glass and plastic	Reuse of paper	
Division Offices for F 1-6 and L 1-8 buildings					
E-1 Automotive Tech	Energy Consumption	Appliances, heating			1 space heater in an office Old refrigerator & microwave assumed to not have energy star rating
	Water Consumption	Flushing of toilet	Men's toilet remodeled and are automatic Women's toilet is still manual	Reduced H2O consumption in the men's bathroom	
	Energy Consumption	Lighting		All lights are sensed	
E-1 Automotive Tech 1 Automotive Tech	Indoor Air Quality	HVAC	Heating system in the building is very old probably set up in 1965 There is a combination valve for supply air from outside. The return air goes through big vents on the ceiling & huge shutter doors are open.		Impact on health - Mr. Steve has been working here since 1978 and has seen the vents been cleaned just once. Says he feels sick sometimes and so does Ms. Cathy who works in the office where supplies are kept
	Energy Consumption	HVAC	Heating system in the building is very old probably set up in 1965 There is a combination valve for supply air from outside. The return air goes through big vents on the ceiling		Excessive use of energy
	Use of hazardous materials	Custodial / clean-up	Many products are used such as brake cleaner, carburetor cleaner, citrus soak, lot of chemical such as WD40, lubricant, anti freeze, oil, brake fluids.		
	Emission to Air	Many products are used such as brake cleaner, carburetor cleaner, citrus soak, lot of chemical such as WD40, lubricant, anti freeze, oil, brake fluids. Lingering smell of oil and grease even after leaving the building. Huge shutter doors are open		Shutter door provide ventilation to the area.	Release of odors occur into the air, especially when shutters are open

Campus Area / Buildings	Aspect Identification	Activities	Description / Comments	Beneficial Impacts	Negative Impacts
	Discharge to Water	Many products are used such as brake cleaner, carburetor cleaner, citrus soak, lot of chemical such as WD40, lubricant, anti freeze, oil, brake fluids. Cloth rags are used – there is a cleaning service who clean these periodically		Cloth rags are sent to vendor which recycles them and returns clean rags for use	Selected vendor must have process to handle hazardous inputs so it does not effect POTW and or contamination of the environment
	Use of hazardous materials	A lot of chemicals used not necessarily hazardous – such as overhead dispenser engine oil, grease, transmission oil, etc. There are 2 flammable material holding cupboards containing things like aerosol and cleaning products		Good that flammables are in cupboards	Potential for hazardous spills/ fire if mismanaged
	Discharge to Water	Chlorine bleach is used particularly in the water treatment system.		Mop water and lot water are treated before going to sewer with chemicals	All chemicals including chlorine bleach must be used carefully according to procedures for POTW to handle hazardous inputs and or contamination of the environment
		Mr. Steve took me to the water treatment system outside the lab across a small parking lot. There are trenches on the ground to collect all the cleaning water with the oil and stuff. This then goes to a pit . Then the water and oil mixture is pumped into a tank and then it is sent into a chemical and ph balance drum. Then it flows into another big drum where water goes through a process called flocculation(not sure of spelling). Then the residue is collected and stored in buckets labeled as hazardous waste. The water is then flushed into the sewer system after it goes through the water treatment system. Another adjacent small room is where the engines are cleaned and the final residue collected is picked by Romic Services	Collecting and treating water and stuff benefits sewer	Water that is not treated creates inability for POTW to handle hazardous inputs and or contamination of the environment	
E-2 Machining and Computer Numerical Control					
Electrical Shop and Mechanical Shop					
Emissions/Trans./Energy					
Flint Center					
G-Building					
Gilbane Construction Management					
Grounds and Custodial Warehouse					
Kirsch Center restroom	Water Consumption	Toilets		Waterless urinals in Men's restroom and low flow toilets in women's rest room	
classrooms & offices	Energy Consumption	indoor lighting		Lots of natural lighting and sensored T 5 fluorescent & other energy efficient lights are used when needed	
	Paper Consumption	Grade reports			Some of the paper used for giving out grades are colored
	Paper Consumption	Double-sided printing		May be available	Seldom used because it is inconvenient
Kitchen	Waste / Recycling	Composting		Food composting bin available in the kitchen area	
All	Waste / Recycling	Battery recycling		Recycling batteries is a sound practice and the law	No place for recycling of batteries posted or generally known (now illegal to throw away). Post information on program.

Campus Area / Buildings	Aspect Identification	Activities	Description / Comments	Beneficial Impacts	Negative Impacts
	Energy Consumption	HVAC	West side of the building uses the radiant water under floor type East side of the building uses the raised floor air system		
	Energy Consumption	HVAC/ Water use	Photovoltaic, passive solar and solar hot water heater	Reduced energy requirements.29KW is generated using the PV system	
Landscapes and ESA Buildings & Grounds	Water Consumption	selection of plants			Vast majority of plants are non-native...few native plants include manzanitas, oaks, sycamores and Berkeley sedge
	Other	selection of plants		All of the native plants provide wildlife value in terms of improved biodiversity	A large proportion of the plants are non-native and take away from the potential biodiversity value native plants would offer
		weeding			Often times the weeds are not cut down until after they have set their seeds. In addition, many of the weed species are perennials with deep taproots so they simply grow back
		weeding	Introduced plants: Eucalyptus globulus, Ligustrum spp., Pyracantha, Hedera helix, Vinca spp., Pennisetum spp., Pampass grass, Miscanthus grass, Bermuda grass, several non-native grasses, chickweed, cardamine, shepherd's purse, lactuca spp., taraxacum, several members of the aster family, milk thistle and other thistles, epilobium, mustard		Introduced species are known to germinate readily / some considered invasive including several weed species found throughout campus.
	Water Consumption	irrigation	Most of the landscapes have irrigation	Moisture sensed irrigation in the following areas: Science Center, the Kirsch Center, Child Development Center, the Student and Community Services building and the Learning Center Center.	In some areas, the mix of plants have different horticultural and irrigation requirements so some plants receive too much water, while others receive too little. Eg. Redwoods suffering from lack of H2O
	Water Consumption	irrigation			Athletic fields and the ESA pond and stream require vast amounts of water.
	Waste / Recycling	garbage disposal	litter increasingly prevalent		perimeter and the parking areas have the worst problem

Sustainability Management Plan

Campus Area / Buildings	Aspect Identification	Activities	Description / Comments	Beneficial Impacts	Negative Impacts
Landscapes and ESA Buildings & Grounds	Use of hazardous materials	fertilizers and pesticides		Verbal policy to not use herbicides	No written policy on pesticides Synthetic fertilizer is used on the athletic fields and turf
	Discharge to Water	Storm drain discharge	Recent increase in amount of impervious surfaces due to construction and parking lots		Storm water run off is quite high and the drains often clog with landscape mulch, garbage and other debris from the parking lots
	Other	Mowing & Leaf removal	Removal of leaves and grass clippings		Removes vital organic matter from soil, encourages weeds, increases erosion and runoff to storm drains
	Other	General campus maintenance	several new buildings and landscapes on De Anza's campus but there has not been a corresponding increase in staff . There are not enough people to maintain the campus efficiently and the staff are not sufficiently trained in sustainable landscaping or maintenance of native plants		An overall decline in the health and aesthetics of De Anza's campus
Learning Center					
Learning Center West					
L-Quad					
MCC-Multicultural Center					
Mod Quad			Most of these units will go away when not needed. Some will be moved to Lot E when the Creative Arts building construction begins.		
Mod Quad	Energy Consumption	HVAC	Mod Quad Rooms: 2-14 There are 17+ outside A/C units attached: Bard (The Wall-Mount) units. Heat may also be provided by these units (not sure)		
	Waste / Recycling	Recycling	Mod Quad Rooms: 2/3/4/5/6/9/10/12/13/15 Recycle Bins: 8; Glass Recycle Bin: 1; Waste Bins: 15		Inconsistent recycling bin placement (should be at least 1 per classroom)
Buildings & Grounds	Energy Consumption	Lighting	Windows and Incandescent overhead lighting		All manual on/off
	Paper Consumption	printing	Mod Quad uses 7 Reams/Month recycled paper from DAC Printing Services. Large printer paper ordered when needed (40 inches wide by 125 feet long rolls); Laminate sheets: 25" x 37" as needed.		
Outdoor Event area and athletic fields	Energy Consumption	computers	printers and computer in press box for Scoreboard		
	Waste / Recycling	Recycling bins	not many recycling bins found, excess plastic is being put in trash		increased amount of potentially recyclable waste is being sent to landfill

Sustainability Management Plan

Campus Area / Buildings	Aspect Identification	Activities	Description / Comments	Beneficial Impacts	Negative Impacts
	Energy Consumption	Pool	Heating the Pool to 80 degrees costs around \$100,000 / year!	conduct a study to see what degree is acceptable to athletes and how much money that may save the College, reducing energy use as well.	wasted energy in heating pool.
	Energy Consumption	HVAC	all centrally controlled, 'too hot, too cold.'		lack of local controls can lead to excessive cooling/heating when not needed = wasted energy
	Indoor Air Quality	windows, doors	windows do not open, no fans, doors have to be, and, are propped open - no local controls		lack of consistent air flow, safety issues with doors and windows being left open
OTI					
PE					
Planetarium/Outside Lighting	Energy Consumption				
	Waste / Recycling	rechargeable are being used in area		Dead batteries are recycled and sent to DASB	
	Water Consumption	Water used for cooling laser is sent outdoors			Sometimes there are leaking faucets.
	Energy Consumption	All types of lighting used: fluorescent, incandescent		5-10% of building is illuminated by natural light	manual on/off
	Paper Consumption	purchasing / printing			Single-sided printing of non-recycled paper / 5 percent of use is color paper
	Waste / Recycling	Recycling		recycling bins in offices	no recycling bins in student areas
Printing Services	Paper Consumption	Paper is purchased from the district store and outside company such as Unisource. We only purchase recycled paper. Approx. 30% of paper used is colored paper, in addition, photo quality paper, card stocks, and soy based ink are used. Encourage 2 sided printing (approx. 78% of all impressions) and electronic submitting of print requests (approx. 70% of all print requests). Old course readers and most waste papers are recycled by making them into scratch pads, and approx. 5000 sheets of paper per month are shredded and used for packaging completed orders. Cardboard boxes are reused for storage or shipping printed materials. Printing Services becomes the repository of forms and large documents - this will eliminate the need to maintain documents on paper form and reduce storage space.			
	Use of hazardous materials	Training is provided annually to staff members who handle the solvents and soy-based inks used in printing. Safety data sheets, safety procedures, and OSHA signs are available and posted. In addition, eyewash stations and first aid kits are available in areas that use hazardous materials.			
	Indoor Air Quality	HVAC	Vents are cleaned only when requested; filters have not been changed yet to date.		Potential to forget to clean filter could result in poor indoor air quality

Campus Area / Buildings	Aspect Identification	Activities	Description / Comments	Beneficial Impacts	Negative Impacts
	Energy Consumption	HVAC / Thermal regulation	Central heating and cooling system is used in the building. The EMT temperature setting is at 62 F. Due to uneven heating/a.c. distribution in the offices, we are forced to use personal heaters. Windows and doors are opened for natural ventilation and to help regulate temperature.		Potential to use personal heaters and open windows and doors at the same time could encourage waste of heat energy.
	Indoor Air Quality	Normal printing habits	Printing presses and printers emit odors and fumes and the moving of paper gathers dust, thus creating potential threat to health. Therefore, air purifiers and exhaust fan are needed. Meanwhile, windows / doors are opened for better air quality		Potential for poor indoor air quality
Professional Workforce Development					
S Quad and E-3 Nursing and Allied Health and Math					
Science Center and Chemistry S9	Energy Consumption	electrical usage for food appliances	microwave/ refrigerator is not energy star		
	Indoor Air Quality	Windows	fixed windows, no fans, odors present		limited access to natural ventilation and fresh air, serious issue if there is no fixed HVAC flush out air vents for science lab rooms.
	Other	Education	Staff do NOT know what materials the College recycles	Opportunity to increase awareness through education and signage campaign	potential for recyclables to be thrown away instead of properly disposed of / recycled
S7	Energy Consumption	Lighting	Minimal day lighting, manual fluorescent lighting controls, outside lights are on a timer/ automatic	automatic controls on timer reduce energy use, can be tailored to time equinox/ sun brightness	manual controls can results in lights being left on 24/7
	Use of hazardous materials	Science labs use of haz mat	many haz mat are used in this location. A haz mat book exists but no one was clear on its location, Debbie Wagner to confirm		
S8	Energy Consumption	Lighting	outdoor lights are on timers, energy efficient CFL, very bright	reduce demand on energy, bright lighting for students working late = safety issue	
			No natural indoor lighting, no motion sensors, no sky lights		poor indoor lighting. Opportunity to install CFL
S6	Water Consumption	Bathrooms / Public and Faculty	sinks / toilets have automatic flush/ sensors	water efficient	
S5 and E3	Indoor Air Quality	Construction	under construction for asbestos abatement	improve indoor air quality	
Waste		We have the Waste Management procedure section 01550			
Transportation (Campus owned vehicles, gas and electric carts)					
Seminar Room 1B		Collect used computers and parts, refurbish for distribution to disadvantaged students by Financial Aid			
Room 1A&B	Other				No windows/ daylight
Room 1B	Waste / Recycling	Computer use	(Paper/Glass/Plastic/Other Media/Batteries & e-waste)	e-waste recycled under an agreement with ECS, an electronic recycler. Used computer that can not be	7E has blue paper recycling bin (appears to be only one in building)

Sustainability Management Plan

Campus Area / Buildings	Aspect Identification	Activities	Description / Comments	Beneficial Impacts	Negative Impacts	
				refurbished are used for spare parts. Working equipment not suitable for distribution will be auctioned off.		
	Paper Consumption	Printing	use of paper	30% PCR	One sided printer	
All	Energy Consumption	Indoor lighting		There are occupancy sensors		
Room 1B	Indoor Air Quality	Computers are cleaned outside of the building		Indoor air quality is not degraded		
All	Indoor Air Quality		ventilation		Windows do not open	
	Energy Consumption			two-story windows with northern or southern light, but overhead lights must be used		
Classrooms & Halls	Energy Consumption	HVAC			No individual room control for heating and cooling. Heating/cooling vents are at top of room (20 feet high) room does not heat up on cold days, therefore space heater in 7E	
		Automatic doors	Building was previously used for disabled students up to 9/05		Automatic outside and bathroom doors	
Student and Community Services / Bookstore	Energy Consumption	Electronics	Estar LCD video screens, Estar computers, but no labels. Some computers are shutdown at night, but run on from 7am - 7pm	Estar electronics reduce energy consumption	Program control / settings could improve energy use by putting computers in sleep mode	
	Water Consumption	Bathrooms	sinks have auto faucets, men's room with waterless urinals	Major reduction in water use		
	Paper Consumption	printing	3-part/ 4-part paper, no soy ink, large print orders by 'print services'		not currently using recycled paper, using heavy metal inks	
	Waste / Recycling	Composting	No food composting, non bio-degradable bin liners		increased amount of trash sent to landfill	
			Recycling	no public bin for recycling batteries	battery disposal protects the environment	batteries will most likely get thrown away by students unless distinct collection area are provided and known
			paper recycling bins in offices, but not bookstore; plastic/ glass recycling bins in common areas and in bookstore		Inconsistent recycling bin placement - mixed messages	
	Other	landscaping	No pesticides used, natural vinegar based herbicides, synthetic fertilizer	reduction on use of chemicals, reducing chemical run off and increasing native plants and insects/ birds		
			Non-native species, but drought tolerant plants, auto sprinklers and rain detectors, mulch used	Planted species that require less water than most - reducing need to water + sprinkler system with monitoring		
Energy Consumption	solar	Plans for incorporating solar energy are in the future.	renewable energy, commitment to sustainability - very marketable and tangible			

Sustainability Management Plan

Campus Area / Buildings	Aspect Identification	Activities	Description / Comments	Beneficial Impacts	Negative Impacts
		windows	double pane and insulated windows used	highly efficient light and energy saving windows	

Appendix C

The De Anza College SMP Implementation Time Line

Date/Timescale	SMP Element or Activity
Spring 2007	SMP completed and adopted by all levels of shared governance
Fall 2007 & Winter 2008	<ol style="list-style-type: none"> 1. President develops roles and responsibilities for implementing the SMP 2. Develop detailed written processes and procedures required to implement the plan 3. Develop communication timeline 4. Develop and begin implementing regulatory compliance connections to SMP and timeline for legal and other requirements register 5. Meet with Environmental Health and Safety regarding same 6. Develop and begin implementing plan for faculty communication and support building on Academic Senate work begun by representative of Environmental Studies
Spring Quarters 2008	Develop and optimize existing procedures related to sustainability management and integrate with compliance programs
Spring and Summer 2008	Develop operational controls
Spring 2008	Develop auditing plan
Spring 2008	Complete initial round of communication and education plan
Spring 2008	Develop monitoring and measuring plans
Spring 2008	Begin auditing training
Summer 2008	Completion of SMP documentation
Fall 2008	Begin internal SMP audits
Fall 2009	Begin interviews of registration body
Fall 2009	Select registration body
Spring 2009	Pre-certification audit
Spring 2009	Management review
Spring 2009	Certification audit
Spring 2009	Registration of SMP to ISO 14001