

( revised May 1, 2006 )

### **Mission Statement:**

The mission of the grounds committee for change is to make sustainability one of the key decision making components for grounds design and management. Sustainability includes considering all inputs to grounds relative to their costs and benefits to the earth and the local ecosystem. Our directive is to increase biodiversity and self-sustaining systems while reducing dependence on fossil fuels and other extracted minerals. We propose to have zero pollution of toxins or non-recyclable materials and increased community education about the importance of living sustainably by using locally available water resources and returning it to the system as purely as it came in. Socially, the grounds should facilitate student education, work and play while supporting the staff through living wages and local business opportunities. Communication within the management team should be positive and supportive.

### **Long Term Vision: ( 10 years + )**

#### **WATER**

- No potable water to be used on the grounds
- Grounds water to first be locally derived (rainfall) to the degree possible and only then supplemented by recycled water
- Storm water to be addressed sustainably in all new building and landscape construction – e.g. not in pipes, but through wetlands, biofiltration with natives, storage and re-use, etc.

#### **PLANT MATERIALS**

- All un-necessary non-justifiable turf to be discontinued and replaced by low maintenance, low-water use ground covers or native plantings, Synthetic turf or porous hardscape (e.g., decomposed granite)
- Larger plantings to be dominated by low-water, low maintenance taxa possessing year-round beauty
- Those taxa desired for teaching purposes that have high water-requirements are to be clumped in limited area.
- Exotic taxa are to be clumped towards the center of campus in the “developed zones”, while native taxa are to be placed at the periphery, forming a broad buffer between exotic taxa and the larger natural setting of the campus (as per original landscape plan).
- Invasive exotics (desired for teaching) are to be planted sparingly in the campus core, and then within contained spaces, e.g., courtyards to ensure acceptable control of these plant species.
- Sustainability will be of primary consideration in the selection of all plant material incorporated into grounds projects.

## STAFFING / MAINTENANCE

- Grounds will seek to reduce mechanized maintenance procedures, and base those necessary upon renewable energy sources.
- In developing low maintenance landscape, Grounds will seek to create a smaller, but better paid work force.
- Grounds will use a portion of its lands as a garden to provide food for food services. These gardens will be maintained by grounds staff in return for which they shall be allowed access to produce for their own personal consumption.

## EDUCATION

- Signage will describe sustainability practice to the passing public.
- Grounds will participate and encourage both public education by outreach and the use of its resources in campus courses.
- Grounds will have a staff person assigned to promote sustainable practices by participating in decision-making policies within the University and through public education and outreach.

## GOALS

### Short Term Goals ( 0-1 years )

1. Refine goals for baseline measurements based on detailed measurements and develop mechanism for those measurements to be taken. Categories include:
  - a. Irrigation water type (reclaimed vs potable) and use (quantity) by area
  - b. Energy use (gasoline and other fuels) by Housing, FM, CCBER
  - c. Records of chemical use (herbicide, pesticide, cleaning)
  - d. Coordinate with purchasing and vehicle task team on measurements of sustainability of vehicles and maintenance equipment (need metric, barriers, action items, please elaborate)
2. Group will support student and intern projects (e.g. Bren, ES, TGIF interns) to evaluate sustainability of our practices – especially turf vs artificial turf, reclaimed water benefits and impacts (e.g. nutrient loading of lagoon, boron accumulation), total landscaping water use assessment and rainfall storage options (more concrete goals??? Kind of vague)

3. Identify opportunities to inform people about current sustainable practices. For example signs in CCBER areas and signs about reclaimed water use. (education and outreach? What "outreach" will be first. To do signs on campus don't you need to go through the DRC? What are the action items necessary for making this goal happen?)

### **Intermediate Goals ( 1- 5 years )**

1. Implement baseline monitoring of factors defined in first year. (?)
2. GIS campus landscaping by category so that planning can be more easily managed. Coordinate with planning department's GIS program to support education missions and outreach.
3. Coordinate with Planning department so that all storm water is handled sustainably as new buildings are constructed, e.g. through biofiltration, wetlands, permeable pavement, temporary storage and other non-pipe options in order to use water to bring life to campus and to reduce run-off, erosion and pollution to adjacent wetlands (lagoon, slough and ocean).
- 4 .Initiate a project assessing the relative sustainability of native dominated landscaping opportunities (e.g. Manzanita) with traditional landscaping (e.g. Anacapa, FT or other dorm on campus).
5. Selected areas where turf is used for 'curb appeal' and high visibility will be presented for approval prior to installation. All options for replacement of turf with less water-consuming plants or materials will be considered.
6. Initiate project to assess item # 2 in the 0-1 year goals.

### **Long Term Goals ( 5- 10 and 10- 20+ )**

1. People's attitudes are enlightened such that they see the value in using natural water sustainably and appreciated landscaping with locally adapted plants
2. University adopts official policies to support sustainable grounds choices for water, plants, landscaping plans, incorporation of natural features, retrofitting of old storm drain systems.
3. The majority of vehicles and equipment used by grounds personnel (H&RS, FM, CCBER) are fueled sustainably with naturally generated fuels. ( Note: Certain vehicles need to be maintained as petroleum-based fuels to provide varied options during emergency operations )

4. Reduction of high water use plantings on campus will be reduced by 20% by the year 2015.

**Barriers:**

1. Costs of converting to electric vehicles (building solar panels and waste of current vehicles)
2. Attitudes about synthetic vs. natural grass
3. Addressing multiple uses of lawns and how to fulfill sustainably
4. Attitudes about bioswales and other more sustainable ways to use water on campus.
5. Cost of installation and ongoing expenses associated with water storage

**Action Items:**

- Evaluate sustainability of lawns versus synthetic turf and other alternatives that fulfill the needs for site – e.g. multiple uses, open space, aesthetic, athletics.
- Evaluate current water use by volume and source (reclaimed, natural, potable)
- Evaluate inputs for maintenance at Manzanita – both grounds and CCBER areas relative to those around manicured areas such as San Nicholas or Anacapa resident halls.
- Evaluate pros and cons of water storage versus the use of reclaimed water.
- Evaluate potential long term impacts of reclaimed water – boron, sodium, increased Nitrogen – on soil qualities and toxicity as well as Nitrogen-richness leading to increased weeds and potential side effects of having to control them.
- What plants can survive solely on rainfall that falls on site?
- Quantify vehicle use, fuel use by H & RS as well as FM and CCBER
- Quantify use of toxic substances. (pesticides, herbicides, cleaning policies, disposal of batteries, etc. materials)

