# Santa Rosa Junior College Program Resource Planning Process

### Facilities - Maintenance 2019

#### 1.1a Mission

Facilities Operations is a District-wide service oriented support for all aspects pertaining to the physical and natural environment in support of Sonoma County Junior College District's mission. This support ranges from planning, design, construction of projects, agency interaction, maintenance, custodial, grounds and landscaping, environmental management, occupational safety, recycling, utility management, and sustainable initiatives.

In addition to new construction, renovation projects, deferred maintenance, we maintain 104 buildings, over 1.6 Million gross square feet, multiple athletic fields, and 500 acres on the Santa Rosa campus, Petaluma campus, Public Safety Training Center, and Shone Farm. We also provide support to the various leased facilities at our Educational Centers.

Our team consists of over 70 talented men and women dedicated to providing the most effective, safe and customer oriented service to the campus community. We are proud of our most valuable resource that is culturally diverse comprising of managers, technical professionals, administrative support, skilled trades, support staff, and students.

Facilities Operations (FO) provides the maintenance and safe operation of the District's physical and environmental properties, custodial services and grounds maintenance. FO develops preventative and scheduled maintenance projects and activities in order to maintain a functional learning and working environment. It is also responsible for maintaining and scheduling college vehicles for field trips and conferences.

Within Facilities Operations, Maintenance Services is responsible for maintaining all buildings systems, at all district locations, including heating, ventilation and air conditioning, electrical, structural and carpentry services, security locking systems, and swimming pools. In addition, the Maintenance is responsible for painting services, general maintenance, institutional safety, and the maintenance of the District fleet of 104 vehicles.

Mission Statement: "Facilities Planning and Operations promotes student learning reflective of the District's academic excellence by providing a safe, clean, well maintained educational, physical and natural environment."

The Mission of Facilities Grounds and Recycling:

To provide a safe, attractive, and sustainable learning environment for the students, faculty, and staff of Santa Rosa Junior College

### 1.1b Mission Alignment

"Facilities Operations promotes student learning reflective of the District's academic excellence by providing a safe, clean, well maintained educational, physical and natural environment."

In support of the Strategic Plan for the District's Mission, Maintenance Services is responsible for providing a healthy safe and working environment. Facilities Operations supports the instructional program and student services by providing and maintaining quality and up-to-date classrooms, offices and support space design to serve the educational interest of the students and the District community.

"Facilities Operations, Grounds and Recycling"

In alignment with our Division's statement and in support of the District's Mission, Facilities Operations Grounds is responsible for providing a healthy, safe and attractive working environment. Facilities Operations Grounds supports the instructional program and student services by providing and maintaining high caliber grounds, athletic fields, horticultural gardens, and learning spaces to serve the educational interest of the students and the community.

### 1.1c Description

The Facilities Operations - Maintenance Service Department provides the following services for the District with such skill trades as: carpenters, heating ventilation/air conditioning techinicians, electricians, plumbers, vehicle mechanics, painter, pool techinician, locksmith services and the energy management techinician. These services are provided to the District to ensure a safe, comfortable learning environment which enhances the culture for student learning.

<u>Facilities Operations</u></u> serves as both an internal consultant assisting with programs when developing new campuses and facilities, and also manages external design consultants, construction management firms, project managers, and contractors in the execution of Board of Trustees approved plans and services. <u>Facilties Operations</u> develops facilities and funding plans in concert with the California Community College System and with local college resources. <u>Facilties Operations</u> provides a Total Cost of Ownership approach that includes planning, design, construction, space planning/management, maintenance, custodial, grounds and recycling, environmental health and safety, emergency management and sustainability.

The Facilities Operations - Grounds and Recycling Department

Our unit is especially proud of maintaining one of the finest campus grounds in the California community college system. People who visit our campus often comment how impressed they

are with the beauty of our campus. Numerous studies show the importance a beautiful landscape has on the health and well being of the people who visit, study, and work there. Because of this the Grounds of the Santa Rosa Campus and those of the entire district, are of immense value and important to the success of our mission as a college.

Our department is responsible for managing and maintaining all the areas outside the walls of our buildings. This includes, turf areas, parking lots, and roads, sidewalks, trees, shrubs, flower beds, groundcover, educational gardens, athletic fields, drainage systems, and the components of our irrigation systems. Our operations also provide pest control, waste management and recycling services that helps maintain the health and welfare of our campus faculty, staff, and student population. Nearly everything we do is directly tied to the promotion of a culture of sustainability, functionality, health, and resource conservation.

Facilities Grounds and Recycling ultimately serve everyone who comes to our campus, but especially those departments within the Athletic department (KAD), and Life and Natural Sciences programs. Facilities Grounds maintain the athletic facilities at Bailey Field and the new artificial fields for Baseball, Softball, Soccer, Golf, (2) Football practice fields, and other athletic program activities. Part of our responsibility is for special event and game set-up/take down. Game preparations often include the following; equipment/apparatus set up and storage; lining and striping of field boundaries; repair and improvements to playing surfaces; cleaning of bleachers and associated areas; installing fencing and field boundaries; turning field lights on and off; PA set and press box set-up; special event set-up and beautification.

Our staff is utilized by our Horticulture, English, and Meteorology departments as guest speakers and to help with projects in the classroom and upon the campus. The Grounds Manager also leads campus walks and speaks to classes, special clubs/groups at PDA Days or on special request.

The Grounds and Recycling corodinator oversees the waste management and recycling operations within the district; We contract with our local waste disposal and recycling companies throughout the county and monitor their service. Our Recycling division is responsible for overseeing the recycling of hundreds of tons of materials on our campuses each year; is involved with promoting source reduction to reduce our waste stream; keeps record of all materials processed for submission of the state SB 1016 report each year, and the promotion of recycling activity and related green practices within the district.

Facilities Grounds oversees a pest control program that covers a wide variety of insects, rodents, birds and plant species at the Santa Rosa Campus and Culinary program. We provide in house pest control for landscape pests, and manage contracts with outside vendors for rodent abatement and other pests.

Our grounds coordinator and employees assist in district construction projects as related to Grounds. This includes, site work, underground utilities (especially water and drainage), landscaping, parking, tree protection, sustainability, recycling, and related activities.

The Facilities Operation Department hours are from 7:00 am until 4:30 pm, Monday - Friday. Emergency calls are reported to the Director of Facilities Operations or Facilities Manager this person is always on call for a needed response or solution provider.

The Facilities Operations Grounds department operates Monday through Friday, from 7:30 am to 4:30 pm, from August through May. During the months of June and July our normal hours of operation are from 6:30 am to 3:30 pm.

Facilities Grounds and Recycling is available for event assistance during hours outside our normal schedule. The Manager of Operations and Grounds is alerted by phone of any grounds related issues during non-scheduled hours. Depending on the severity of the problem between one or all of our staff will respond to emergency situations. Emergency calls regarding irrigation are routed to an irrigation expert. Emergency clean-up of tree debris and other problems related to our trees are routed to our Tree Maintenance Worker.

For special events like Graduation, athletic events, or Day Under the Oaks, our staff will work beyond our regular schedule listed previously.

**FAC OPS** 

Monday - Friday: 8:00 a.m. -4:30 p.m.

Closed for lunch from 12 noon to 1:00 p.m.

Summer (June/July) schedule: Monday - Thursday (Campus is closed on Fridays)

## 1.2 Program/Unit Context and Environmental Scan

Facilities Operations is responsible for all district-wide construction projects. This ranges from Major Capital Funded projects to the smaller/minor capital projects, and Scheduled Maintenance. This has impacted Facilities Operations due to the following: added square footage with new projects, warranty and commissioning issues, new HVAC building technology, Bay Area Quality Management District regulations for the fleet of vehicles, keying/security requirements, lighting control panels, online service request technology and the internal commissioning of a building.

New construction is very important for the future of this college and Facilities will support it in any way possible. The professional design is relying on our team to provide valuable information into all projects. Facilities Operations responsibilities increases per the following: campus wide notification about projects and impact on campus activities, parking and traffic, call ins to the front desk staff, location/verification of utilities, requests for information, punch list items and the ongoing commissioning.

The sustainable aspect of our Environmental Scan is critical for our Facilities Operations department. This relates to all aspects if sustainability such as: recycle and waste reduction program, LED Lighting retrofitting, photovoltaics,

microgrid, cogeneration plant, load shedding, under floor distribution, IDEC systems, a Ground Source Heat Pump system, and alternative transportation.

The Green Building aspect is for all of our newer buildings incorporate green building technologies and materials, and as that market expands and more products are available, we will insist that they be used. The architects and engineers we use are well versed in this and know what our requirements are, from 100% recycled content in new carpets and upholstery, to counter laminates and wall coverings made from recycled wood byproducts, to vinyl flooring made from all natural linoleum components such as linseed oil, jute, and cork. Our interior finishes no longer contain any products with volatile oils that off gas allergens. Even the glues used to secure flooring, laminates, and wall coverings are water based, as are all of our floor finishing products. Our pitched roofs are concrete tile with no petroleum content and our exterior finishes are brick, plaster, and concrete.

Facilities Grounds and Recycling will face many challenges in the next three years (2019-2021);

- Construction related impacts from the buildout of Measure H funding will significantly affect the landscapes we maintain, and require of our staff many hours of commitment to planning, communication, assistance with construction related work, tree and landscape protection, providing safety measures, management and reconstruction of landscapes damaged or effected by the construction process. We anticipate at least 25% of our time will be effected by Measure H construction. Moreso, for the Manager of Grounds.
- Retirement will create a significant turnover in Grounds and Recycling staff. At least two classified staff will retire during this time. There is a good chance other employees could retire, as well as support staff. Education and training will be important tools in bringing new employees up to speed with the skills and procedures for success used within our department.
- New and more far reaching use of technology related to Grounds, data gathering, and event management. Within the Measure H scope of work is a portion that will significantly upgrade our irrigation management system here at the Santa Rosa Campus. To manage and maintain this infrastructure, our Grounds Staff will need to have the knowledge and tools to operate this system effectively. The use of data is a key component in modern landscape maintenance and recycling operations, and I expect it will continue to become a much more important part of a successful operation in our department.
- The effects of climate change will continue to be a slowly increasing burden to the health of our plants, trees, and campus ecosystem. Its effects have already caused an increase in plant diseases and mortality, water shortages, and has increased the need for us to think of sustainably first in all of our important decisions. Two immediate issues that will affect us in the next three years are water (costs and supply), and waste reduction and management.

#### 2.1a Budget Needs

The allocation of funds for the Facilities Operations - Maintenance Services Department is effectively distributed for the needs of the entire District.

Our budget needs are ever growing due to the size of the campus and the neccessary safety and legal requirements that must be attained. Safety concerns and risk management have also evolved increasing the cost of our maintenace operations. Our responsibility of square footage has increased over the last six years reflective of the college growth.

Increase of square footage for the district has resulted in increased cost to maintenance and operations of facilties, both new and aged. This directly correlates to the cost of raw materials such as: steel, concrete, copper, wood and of course fuel!.

Even though we have new facilities coming on board the majority of our buildings on the SR campus are in dire need of modernization. Accordingly Fac. Ops. is working on a Total Cost of Ownership to capture the true cost maintenance and recapitalization.

I'm asking for a budget increase for all of FACILITES / GORUNDS to help cover increases in costs.

The care of our Oak trees alone has tripled in just one year we also are experiencing a increase in fuel cost and with a shortage of staff.

Resources for the <u>Facilities Operations (FO)</u> area are currently inadequate to keep pace with expanded operational demands and shift towards a Total Cost of Ownership. This burden is increased with the additional number of facilities and increased infrastructure developed and constructed over the past several years. We will have better direction once we complete the Total Cost of Ownership Report with the assistance of a total cost of ownership report.

Facilities Operations Grounds budget for categories 4000's and 5000's continue to be very challenging due to budget constraints, price increases for tools and supplies, contractor price increases, and a general increase in the scope and general area of our responsibility during recent years.

We are currently utilizing our present budget as effectively as possible, even though it remains at about the same level as we have had for the past thirty years. We have reduced our fertilizer and spray application programs to very minimal levels, but are being impacted by an expansion of athletic programs, and events.

The Grounds budget accounts for a much smaller percentage than other departments within the overall Facility Operation allocation. For larger contracts and equipment needs, we must seek help through the Facilities budgets administered through Cindy Chong.

**Facilities Grounds** (All Grounds Operations for the Santa Rosa, Petaluma and Windsor campuses) has the following annual expenditures:

- Facilities Grounds has annual expenditures of \$936,055, 0.78% of the District total
- Facilities Grounds has an annual classified payroll of \$421, 367 about 2.20% of the District's total classified expenditures.
- Facilities Grounds has a management payroll of \$87,842, which represents 1.03% of the District management payroll.
- Facilities Grounds has a total salary/benefits costs of \$881,553, 0.98% of the District total.
- Facilities Grounds has total non-personnel costs of \$54502, about .34% of District non-personnel costs.
- **6550-4390, Grounds Supplies:** Current supply budget is for \$21060 per year, which is about equal to the budget we have had during past twenty-five years. Our department has set forth many goals in the areas of sustainability, water conservation, and student support. To accomplish these goals we will need to find funding in some form or another. Please consider these additional fiscal constraints to our Grounds program
- Inflation is continuing to take a bite out of our purchasing power. Fertilizer, chemicals, tools, irrigation supplies, and plant material all have seen significant price increases during the past couple years and continue to increase.
- We have added new property to our grounds coverage in Santa Rosa in recent years and have expanded our overall coverage towards a more district wide approach.
- As I have outlined in other areas of this report, many areas of the campus are in need renovation, protection, or infrastructure upgrade. Because of budget considerations, we have been delaying doing this work as much as possible, but at some point certain areas need to be brought up to an acceptable level, or so that they are simply safe and functional.
- In past years we were able to get some additional funding of close to \$10000 for the maintenance and renovation of the Bailey football field, but this funding is no longer available. This will impact our overall maintenance program for the rest of our operations, and especially the football field program.
- In the past I have purchased some new irrigation controllers that help make our overall system more efficient and saves us in utility costs. Because of the current budget challenges within my budget I may not be able to purchase more of these controllers this year. Hopefully, Measure H funds will allow us to install and upgrade our irrigation system here at the Santa Rosa Campus
- Funding for the purchase of new plants for areas we convert high water use lawn to low water use plantings will be difficult to meet, but we feel this is an important initiative.
- Funds most of the needs of our Waste Diversion program.

**6550-5690, Grounds Contracts:** Current Grounds contract budget is \$14047. This is down from \$20000 about seven years ago. Most of this account, \$6600, is being used to cover our pest control contracts with a contractor Each year, this account is also used to cover the cost of fence repairs and replacement, sewer and drainage line clean-out and repair, sidewalk and path repair, High weed mowing and discing at the Naval base property, and contract spray applications. In a normal year it would be very difficult to stay within budget on these items alone. Typically, we have many fence repair and replacement projects that far exceed this

budget. A fence job last year cost many times this budget alone. Luckily, there are other budgets that seem to be able to cover these costs.

**6550-5659, Equipment:** Current Grounds Equipment budget is \$1783. We use this account to fund the repair and maintenance of our mowers, vacuums, chipper, spray equipment, small power tools, etc. This account is barely adequate for the repairs and maintenance of our equipment. Problems in the other 5000 accounts have overwhelmed this account and made it inconsequential. We have an aging fleet of equipment that requires more time than I would prefer to spend on repairs and maintenance, but overall we are saving money in immediate replacement costs. The college is fortunate that we have some excellent mechanics on our Grounds crew who can fix just about any problem that comes up.

**6550-5210, Staff Travel:** Current funding is for \$449, which covers the cost of the Manager's need for Pesticide Applicator License renewal.

#### **Facilities, Tree Maintenance**

**6551-4390, Tree Maintenance Supplies:** Current supply budget is for \$1260 per year. This is barely adequate to keep our current equipment running, saws sharped and safety gear replaces as needed. But it does not usually cover the cost of replacement of any larger equipment, or components.

**6551-5690, Tree Maintenance Contracts:** Current contract budget is for \$8121 per year. Our contract account is generally adequately funded, however, there are certain years, where we have had to do extensive tree work, such as the removal of large Oaks. One single large Oak removal can cost nearly \$25,000.

#### **Waste Diversion**

**6590-4390, Recycling Supplies,** Current supply budget is for \$546 per year. Our recycling program attempts to operate in a low budget mode, but the college has expanded its commitment towards more sustainable practices. It would be helpful and more realistic to have greater funding. It is impossible to replace old and worn recycling bins, signage and equipment with this scant budget. Basically, I have been using the strained Grounds Supply budget to cover most of the costs for this program.

# 2.1b Budget Requests

Rank	Location	SP	M	Amount	Brief Rationale			
0001	ALL	04	07	\$3,000.00	To allow my staff and Grounds employees to gain knowledge and skills			
					in becoming more effective. Especially in the area of irrigation			
					management			
0001	ALL	04	07	\$3,000.00	Increase the annual budget for Recycling Supplies by \$3000, to cover the			
					costs of increased operations, promotional outreach, and organic material			
					processing.			
0001	ALL	04	07	\$4,000.00	Increase the Grounds supply budget by \$4000 to help us keep up with			
					increasing material, supply, and plant replacement costs.			
0001	ALL	04	07	\$300.00	Increase the annual allocation for dues and membership by \$400 for our			
					Tree Maintenance program.			
0001	ALL	04	07	\$6,000.00	Increase the annual budget for the Grounds Contract account by \$6000 to			
					help cover the cost of contract pest control and specific pest infestation			
					response			
0001	ALL	04	07	\$200.00	Allocate \$500 for Certificates and Membership for our Recycling team			
					employees			
0002	ALL	04	07	\$18,737.00	Bring Present Budget up to \$170,599 from \$151,862: To purchase			
					supplies to maintain the buildings and equipment on all campuses.			

0002	ALL	04	07	\$54,526.00	Bring Present Budget up to \$197,197 from \$142,671: Increase Contracts					
					to service equipment					
0004	ALL	04	07	\$71,257.00	Equipment Servicing					
0007	ALL	06	04	\$5,385.00	Training and Certicication of Fac. Ops Staff					
0017	ALL	04	07	\$15,033.00	Equipment Non-Instructional					
0018	ALL	07	04	\$15,672.00	STNC (1X)					
0021	ALL	04	07	\$125,000.00	Supplies					
0022	ALL	06	04	\$995.00	Travel					
0023	ALL	06	06	\$265.00	Student Travel					
0029	ALL	04	07	\$24,095.00	Equipment Repair					
0030	ALL	04	07	\$100.00	Contracts					
0031	ALL	04	06	\$805.00	Equipment 1x over \$500					
0032	ALL	04	07	\$20,721.00	Suppliese					

# 2.2a Current Classified Positions

Position	Hr/Wk	Mo/Yr	Job Duties
HVAC and Controls Technician	40.00	12.00	Under general supervision, perform master journey-level work in the repair, maintenance, service, modification, troubleshooting, inspection and monitoring of the operation of heating, ventilating, air conditioning and refrigeration equipment and associated plumbing, electrical, mechanical, EMS (EnergyManagement Control System) and controls systems. act as lead worker to other classified staff in the area; and perform related work as required.
HVAC and Controls Technician	40.00	12.00	Under general supervision, perform master journey-level work in the repair, maintenance, service, modification, troubleshooting, inspection and monitoring of the operation of heating, ventilating, air conditioning and refrigeration equipment and associated plumbing, electrical, mechanical, EMS (EnergyManagement Control System) and controls systems. act as lead worker to other classified staff in the area; and perform related work as required.
Locksmith	40.00	12.00	Under general supervision, perform master journey- level work in the installation, repair, remodel and maintenance ofmanual and automated locks, locking systems and security devices; computerized access control systems; dooropeners, closers, and hardware.
Plumber Fitter	40.00	12.00	Under general supervision, perform master journey- level work in the installation, maintenance, inspection,modification, remodel and repair of mechanical plumbing equipment and fixtures for water, gas, oil,steam, sewage, fire sprinkler/prevention, and refrigeration-related plumbing systems; act as lead workerto other classified staff in the area; and perform related work as required
Plumber Fitter	40.00	12.00	Under general supervision, perform master journey-level work in the installation, maintenance, inspection,modification, remodel and repair of mechanical plumbing equipment and fixtures for water, gas, oil,steam, sewage, fire sprinkler/prevention, and refrigeration-related plumbing systems; act as lead workerto other classified staff in the area; and perform related work as required
Building Maintenance Generalist	40.00	12.00	Under general supervision, perform journey level work in the repair and maintenance of related facilities;may serve as lead worker to other classified staff in the area; and perform related work as required.
Energy Management Technician	40.00	12.00	Under general supervision, design, monitor, maintain and upgrade the software applications and communications peripherals of the Energy Management System; ensure efficient operation and integrity of the Energy Management System; provide training and support to users; dispatch the work of

			skilledmaintenance workers; and perform related work as required.
Carpenter	40.00	12.00	Under general supervision, perform journey-level work in the design, construction, repair andmaintenance of structures and related physical facilities; act as lead worker to other classified staff in the area; and perform related work as required.
Carpenter	40.00	12.00	Under general supervision, perform journey-level work in the design, construction, repair andmaintenance of structures and related physical facilities; act as lead worker to other classified staff in the area; and perform related work as required.
Electrician	40.00	12.00	Under general supervision, perform journey-level work in the design, installation, construction,modification, repair and maintenance of electrical apparatuses, equipment and systems; act as leadworker to other classified staff in the area; and perform related work as required
Electrician	40.00	12.00	Under general supervision, perform journey-level work in the design, installation, construction,modification, repair and maintenance of electrical apparatuses, equipment and systems; act as leadworker to other classified staff in the area; and perform related work as required
Administrative Assistant III	40.00	12.00	Under the supervision of the Manager Building & Equipment Maintenance oversees the administration of the Fac. Ops Office and Service Request System including assignment of service request. Performs a great variety of administrative duties, provides budget and expense reports, enters purchasing requisitions and P.O.s into SCAPE. Supports Grounds and Custodial Services and controls the ordering of uniforms and related payment to
Automotive/Equipment Mechanic	40.00	12.00	employees.  Under general supervision, perform master journey-level work in the diagnostic, overhaul, adjustment, repair and maintenance of campus vehicles and equipment; complete metal fabrication and repairs as
			needed; act as lead worker to other classified staff in the area; and perform related work as required.
Pool Maintenance Technician	40.00	12.00	Under general supervision, perform master journey- level providing maintenance, inspection,modification, remodel and repair of Pool Equipment and monitoring Water Quality for the pools and pool related equipment work as required. Ensure the quality of the water in the swimming pools and related equipment are safe for students and users in general during use.
Groundskeeper I	40.00	12.00	Performs routine grounds maintenance and
Groundskeeper I	40.00	12.00	installation duties throughout the district.  Performs routine grounds maintenance and
Groundskeeper II	40.00	12.00	installation duties throughout the district.  Performs grounds maintenance and installation throughout the district while maintaining and repairing tools and equipment, irrigation systems.  Also, responsible for athletic field preparation.
Groundskeeper II	40.00	12.00	Performs grounds maintenance and installation throughout the district while maintaining and repairing tools and equipment, irrigation systems.  Also, responsible for athletic field preparation.
Coordinator, Grounds Operations	40.00	12.00	Performs grounds maintenance and installation throughout the district while maintaining and repairing tools and equipment, irrigation systems. Also, responsible for athletic field preparation. Coordinates and directs work of grounds worker. Collaborates with Manager of Operations and Grounds on operational needs. Consults on projects
Tree Maintenance Worker	40.00	12.00	such as demonstration gardens.  The Tree Maintenance Worker maintains the health and care of campus trees through a variety of tasks including pruning, soil improvement, and pest management practices.

#### 2.2b Current Management/Confidential Positions

Position	Hr/Wk	Mo/Yr	Job Duties
Manager, Building, Grounds & Equipment	40.00	12.00	Under the direction of the Director, Facilities
Maintenance			Operations the Manager, Building & Equipment
			Maintenace is resposible to oversee all the
			maintenace and repairs work for the Santa Rosa
			campus and supporting PSTC and Shone Farm.
			Scheduled Preventive Maintenace and 5 year capital
			projects plan. Overseein the Skilled Trades staff,
			Energy Technician, Mechanic shop, fleet & District
			vehicles and AA staff in the Facilities Operations
			Office

#### 2.2c Current STNC/Student Worker Positions

Position	Hr/Wk	Mo/Yr	Job Duties
STNC - Locksmith Assistant	25.00	12.00	Aid the present locksmith in the security upgrade
			project.
STNC - Auto Mechanic for EOC Mobile Unit	25.00	4.00	Installation of EOC equipment for the new mobile
			incident command vehicle for Fac Ops.
STNC- Electrician	25.00	12.00	Aid the present Electrician in ongoing service
			requests and annual repairs.
Student Recycling Assistant	20.00	12.00	
Student Grounds Assistant	20.00	12.00	
Student Grounds Assistant	20.00	12.00	
Student Grounds Assistant	20.00	6.00	
Student Grounds Assistant	20.00	6.00	
Student Grounds Assistant	20.00	12.00	
Parking Pavilion Maintenance Worker (STNC)	10.00	6.00	
Groundskeeper (STNC)	20.00	3.00	

### 2.2d Adequacy and Effectiveness of Staffing

The <u>Office of the Director for FacilitiesOperations</u> is quite small currently with 1.0 FTE manager (Director)

The <u>Office of the Director for Facilities Operations</u>, when compared to its responsibility level is proud to be a low overhead operation.

#### Grounds

It is hard to compare Grounds Operations with many departments within the District, especially the academic departments, because our function is quite different. It might be more useful to compare Facilities Grounds with other facilities operations departments, where we employee about 15% of the Facilities workforce. Overall, our total salary/benefit expenditures accounts for 0.78% of the district's budget for this category.

There is no doubt that maintaining our Grounds effectively is a very important part of the overall success of our college. A few years ago, in two key college reviews, one being the Accreditation Review, our college grounds at the Santa Rosa campus were singled out as one of the finest in the entire state community college system. They highlighted the beauty and the extreme value of our Grounds in the success of our college. We should never lose sight of the intrinsic value our Grounds have to our overall success.

Our Grounds Operations staffing has been operating at a reduced level since the fall of 2008, when one of our employees passed away. This position has never been filled. This has caused an increase in workload upon all of our staff. As a result, the quality level of our maintenance throughout this campus and our ability to help at other sights has become more difficult. I know that lower priority areas of the campus are now looking much more unkempt and we have not

been able to address pressing issues like athletic field maintenance and some safety concerns as well as before. Additionally, our crew is maintaining more acres of landscape than ever before, while keeping a district wide perspective, which was not previously a part of the culture of Facilities Operations.

In the past year we have experienced the about a 90% loss of our STNC manpower, with the remaining budget probably going away in 17'-18'. This further erodes our ability to maintain the campus, and support operations at other District locations.

Because of these situations, I believe we are understaffed and it would be very helpful, and important to the overall success of the college, to have a full time position restored to our department.

Our student staff has been more difficult to maintain this year. Wage increases and more competition from the outside has dwindled out student staff. This has put an increased burden on our regular classified staff.

### 2.2e Classified, STNC, Management Staffing Requests

Rank	Location	SP	M	Current Title	Proposed Title	Type
0001	ALL	04	07	NEED HVAC Technician	HVAC Technician (Petaluma,	Classified
				(Petaluma, PSTC, Shone)	PSTC, Shone)	
0001	ALL	04	07	Parking Garage Maintenance (STNC)	Groundskeeper I	Classified
0001	ALL	04	07			Classified
0002	ALL	04	07	Locksmith (STNC)	Locksmith	Classified
0003	ALL	04	07	Generalist	Generalist	Classified

# 2.3a Current Contract Faculty Positions

Position
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#### 2.3b Full-Time and Part-Time Ratios

Discipline	FTEF	% Reg	FTEF	% Adj	Description
	Reg	Load	Adj	Load	

#### 2.3c Faculty Within Retirement Range

N/A

2.3d Analysis of Faculty Staffing Needs and Rationale to Support Requests

N/A

### 2.3e Faculty Staffing Requests

Ranl	Location	SP	M	Discipline	SLO Assessment Rationale

# 2.4b Rationale for Instructional and Non-Instructional Equipment, Technology, and Software

# 2.4c Instructional Equipment Requests

Rank	Location	SP	M	Item Description	Qty	Cost Each	Total Cost	Requestor	Room/Space	Contact
0001	ALL	04	07	Maxicom Software for irrigation system	1	\$15,000.00	\$15,000.00	Hank Lankford		

## 2.4d Non-Instructional Equipment and Technology Requests

Rank	Location	SP	M	Item Description	Qty	Cost Each	Total Cost	Requestor	Room/Space	Contact
0001	ALL	04	07	Small Fleet Trucks	2	\$12,000.00	\$24,000.00	Hank Lankford	Fac Ops Yard	Hank Lankford
0001	ALL	04	07	Central Irrigation Controllers and upgrades/Cable	4	\$4,500.00	\$18,000.00	Hank Lankford	Fac Ops Yard	Hank Lankford
0001	ALL	04	07	Lawn Aeration Machine (Deep Core)	1	\$35,000.00	\$35,000.00	Hank Lankford	Fac Ops Yard	Hank Lankford

0001	ALL	04	07	Hot Rot Model 1811 Composting Unit	1	\$288,000.00	\$288,000.00	Hank Lankford	Fac Ops Yard	Hank Lankford
0001	ALL	04	07	Large '3 gang' Riding Lawnmower	1	\$35,000.00	\$35,000.00	Hank Lankford	Fac Ops Yard	Hank Lankford
0001	ALL	04	07	Solar PV Charging System for small tools	1	\$10,000.00	\$100,000.00	Hank Lankford	Fac Ops Yard	Hank Lankford
				and carts						
0001	ALL	04	07	Power Trim Lawn Edger	2	\$1,000.00	\$2,000.00	Hank Lankford	Fac Ops Yard	Hank Lankford
0001	ALL	04	07	John Deere Garden Tractor	1	\$20,000.00	\$20,000.00	Hank Lankford	Fac Ops Yard	Hank Lankford
0001	ALL	04	07	Tow Behind Air Compressor	1	\$20,000.00	\$20,000.00	Hank Lankford	Fac Ops Yard	Hank Lankford
0001	ALL	04	07	Chainsaw	1	\$700.00	\$700.00	Hank Lankford	Fac Ops Yard	Hank Lankford
0003	ALL	04	07	Kawasaki Mules/ Gas Carts	4	\$14,000.00	\$56,000.00	Hank Lankford	Fac Ops Yard	Hank Lankford
0004	ALL	04	07	Wood Splitter	1	\$8,000.00	\$8,000.00	Hank Lankford	Fac Ops Yard	Hank Lankford
0005	ALL	04	07	Back Pack Torch Kit	2	\$800.00	\$1,600.00	Hank Lankford	Fac Ops Yard	Hank Lankford

# 2.5a Minor Facilities Requests

Rank	Location	SP	M	Time Frame	Building	Room Number	Est. Cost	Description
0000	Other	04	07	Unknown	2.5b for requests	All locations	\$54,560,900.0	Various urgent needs district wide
							0	
0000	ALL	04	07	Urgent	Bailey Field	Tuff Shed	\$7,000.00	The pumphouse has been red tagged and slated for demolition. We
					Pumphouse			urgently need to replace this important storage space for Bailey Field
								Grounds Operations.
0000	ALL	04	07	Urgent	Lounibos well	Lounibos	\$120,000.00	Tie in existing Lounibos well to irrigation main lines across campus.
								Will significantly reduce irrigation costs and increase long term
								supply in a time of increasingly more likely drought conditions.
0000	ALL	04	07	Urgent	Operation Building	Grounds Operations	\$48,000.00	For storage of tools, supplies, and especially equipment needed for the
					for Waste Diversion			grounds maintenance of the Santa Rosa campus.
					operations			

# 2.5b Analysis of Existing Facilities

Status	Location	Project Description	Delivery	Fund	Budget/Bid	Budget	Start	End
			Method			Source	Construction	Construction
PETALL	JMA							
Plan	Pet	Testing Environment Assessment, Jacob Hall	CUP	Н	\$0	Faculty	TBD	TBD
Plan	Pet	Dedicated Space for PC Puente Program	CUP	Н	\$0	Faculty	TBD	TBD
Plan	Pet	Leak Repair Building 100 Above PC13	CUP	Н	\$5,000	Faculty	TBD	TBD
Plan	Pet	Leak Test at Clock Tower	CUP	Н	\$3,500	Faculty	TBD	TBD
Plan	Pet	Leak Inspection and Repair at Call Building	CUP	Н	\$3,000	Faculty	TBD	TBD
Plan	Pet	Floor Replacement and Slab Repair	CUP	Н	\$20,000	Faculty	TBD	TBD
Plan	Pet	Cooling System Review and Upgrade, PC634	CUP	Н	\$40,000	Faculty	TBD	TBD
Plan	Pet	Additional Lighting to be Installed in Reading Room	CUP	Н	\$15,000	Faculty	TBD	TBD
Plan	Pet	Installation of Window Shades Needed, Mahoney Library	CUP	Н	\$3,400	Faculty	TBD	TBD
Plan	Pet	Ventilation Assessment for 700 Mahoney Library	CUP	Н	\$0	Faculty	TBD	TBD
Plan	Pet	Assessment Signage, PC127	CUP	Н	\$750	Faculty	TBD	TBD
Plan	Pet	Our House Large Sign in Front, Clock Tower Quad	CUP	H	\$12,000	Faculty	TBD	TBD
Plan	Pet	Replace Carpet w/Linoleum, PC1101	CUP	Н	\$15,000	Faculty	TBD	TBD
Plan	Pet	Additional Storage and Sink, PC1101	CUP	Н	\$15,000	Faculty	TBD	TBD
Plan	Pet	New Carpet, PC229	CUP	Н	\$2,000	Faculty	TBD	TBD
Plan	Pet	New Carpet, PC230	CUP	Н	\$2,000	Faculty	TBD	TBD
Plan	Pet	Addition of Student Seating in Waiting Area, Counseling	CUP	H	\$12,000	Faculty	TBD	TBD
Plan	Pet	Sink Installation, PC227	CUP	Н	\$25,000	Faculty	TBD	TBD
Plan	Pet	Installation Automatic Door Actuator, PC631	CUP	Н	\$7,000	Faculty	TBD	TBD

SHUNE	rakivi							
Plan SHONE	PSTC	Replace blinds in gym.	CUP	Н	\$30,000	Faculty	TBD	TBD
Plan	PSTC	Install 3 exterior lights on fire tower	CUP	Н	\$2,000	Faculty	TBD	TBD
Plan	PSTC	Repair interior lights in fire tower	CUP	Н	\$500	Faculty	TBD	TBD
Plan	PSTC	Concrete or cinderblock enclosure for fire extinguisher pan	CUP	Н	\$15,000	Faculty	TBD	TBD
Plan	PSTC	Painting interior/exterior and rot repair	CUP	Н	\$500,000	Faculty	TBD	TBD
Plan	PSTC	Convert conference room to interactive video conference room	CUP	Н	\$25,000	Faculty	TBD	TBD
Plan	PSTC	Upgrade outdated security cameras to Digital	CUP	Н	\$50,000	Faculty	TBD	TBD
Plan	PSTC	Replace all vinyl and rubber flooring PSTC 200, 300, 400, 500, 600, and 700	CUP	H	\$400,000	Faculty	TBD	TBD
Plan	PSTC	Pedestrian crosswalk needed on Skylane Blvd.	CUP	Н	\$100,000	Faculty	TBD	TBD
Plan	PSTC	Replace all Airdale HVAC units and controls in the PSTC 200, 300, 600 & 700	CUP	Н	\$750,000	Faculty	TBD	TBD
PUBLIC	SAFETY 1	RAINING CENTER						
		Doyle hall PC 247						
Plan	Pet	lnstall under cabinet lighting	CUP	Н	\$500	Faculty	TBD	TBD
Plan	Pet	Noise Abatement, PC667, 671,	CUP	Н	\$0	Faculty	TBD	TBD
Plan	Pet	Install Card Reader Access, Counseling	CUP	Н	\$4,000	Faculty	TBD	TBD
Plan	Pet	Install C-Cure Exterior Entrance Card Reader, PC310c- 2/310c-2/311-2	CUP	Н	\$15,000	Faculty	TBD	TBD
Plan	Pet	Install C-Cure Exterior Entrance Card Reader, PC712- 2	CUP	Н	\$5,000	Faculty	TBD	TBD
Plan	Pet	Temp. and Humidity Control, PC717-Archive Room	CUP	Н	\$15,000	Faculty	TBD	TBD

Plan	SR	Outlet Addition to West Wall of Bertolini	CUP	Н	\$500	Faculty	TBD	TBD
Plan	SR	Salad Bar Replacement/Redesign in Bertolini	CUP	Н	\$5,000	Faculty	TBD	TBD
Plan	SR	Light Ballast Replacement in Bertolini	CUP	Н	\$500	Faculty	TBD	TBD
Plan	SR	Socket Replacement in Bertolini	CUP	Н	\$500	Faculty	TBD	TBD
Plan	SR	Dedicated Space for SR Puente Program	CUP	Н	\$0	Faculty	TBD	TBD
Plan	SR	Venting Solution Assessment, Plover Hall	CUP	Н	\$0	Faculty	TBD	TBD
Plan	SR	Expansion of Veterans Office	CUP	Н	\$244,00.00	Faculty	TBD	TBD
Plan	SR	Installation of Theater Style Curtains in Bertolini	CUP	Н	\$700	Faculty	TBD	TBD
Plan	SR	Expansion of EOPS-CAFYES	CUP	Н	\$30,000	Faculty	TBD	TBD
Plan	SR	Dream Center Expansion - Plover	CUP	Н	\$30,000	Faculty	TBD	TBD
Plan	SR	Hot Water for Pioneer Hall Staff Bathrooms, DSPS	CUP	Н	\$3,000	Faculty	TBD	TBD
Plan	SR	Plover Sound Proofing	CUP	Н	\$0	Faculty	TBD	TBD
SANTA	ROSA							
Plan	Shone Farm	Build diesel repair shop	CUP	Н	\$0	Faculty	TBD	TBD
Plan	Shone Farm	Build coed student dormitory	CUP	Н	\$1,000,000	Faculty	TBD	TBD
Plan	Shone Farm	Storage unit needed for small tools and equipment	CUP	Н	\$30,000	Faculty	TBD	TBD
Plan	Shone Farm	Installation of fencing of open pasture	CUP	Н	\$20,000	Faculty	TBD	TBD
Plan	Shone Farm	Installation of fencing and covered area at winery	CUP	H	\$1,500,000	Faculty	TBD	TBD
Plan	Shone Farm	Enclosed space w/roof for various winery needs.	CUP	Н	\$60,000	Faculty	TBD	TBD
Plan	Shone Farm	Establish leadership retreat area	CUP	H	\$50,000	Faculty	TBD	TBD
Plan	Shone Farm	Evaluate location for Wine evaluation lab	CUP	Н	\$150,000	Faculty	TBD	TBD
Plan	Shone Farm	SUSAG Shed	CUP	Н	\$3,000	Faculty	TBD	TBD

Plan	SR	Plover Retrofit	CUP	Н	\$6,000	Faculty	TBD	TBD
Plan	SR	Installation of Electrical Support, Race Building	CUP	Н	\$1,000	Faculty	TBD	TBD
Plan	SR	New Office Location for Dean, Student Success, Equity and Retention	CUP	Н	\$0	Faculty	TBD	TBD
Plan	SR	Partician Addition, Bertolini 3rd Floor	CUP	Н	\$4,000	Faculty	TBD	TBD
Plan	SR	Electric Entry Door Addition, Plover Hall	CUP	Н	\$4,000	Faculty	TBD	TBD
Plan	SR	Carpet Replacement in Resource Room, Race Building	CUP	Н	\$3,000	Faculty	TBD	TBD
Plan	SR	Additional Office/Workspace Needed, Student Services Office	CUP	Н	\$150,000	Faculty	TBD	TBD
Plan	SR	Installation of Exit Door w/Panic Bar, Plover Hall	CUP	Н	\$10,000	Faculty	TBD	TBD
Plan	SR	Repurpose Lark Hall Ag Student Lounge	CUP	Н	\$25,000	Faculty	TBD	TBD
Plan	SR	Reglaze glass on Lark Greenhouse	CUP	Н	\$115,000	Faculty	TBD	TBD
Plan	SR	Remodel central supply	CUP	Н	\$50,000	Faculty	TBD	TBD
Plan	SR	Repair to Lark Greenhouse	CUP	Н	\$1,200	Faculty	TBD	TBD
Plan	SR	Construction of veterinary clinic and lab	CUP	Н	\$300,000	Faculty	TBD	TBD
Plan	SR	Enlarge access area to central supply and classrooms for loading/unloading and for outside storage at Lark Hall	CUP	Н	\$100,000	Faculty	TBD	TBD
Plan	SR	Resurface concrete floor at Lark Greenhouse	CUP	Н	\$54,700	Faculty	TBD	TBD
Plan	SR	Renovation of Garcia Hall room 835, 855, & 875	CUP	Н	\$100,000	Faculty	TBD	TBD
Plan	SR	Installation of power outlets in patio area of Burdo Culinary Arts Center	CUP	Н	\$0	Faculty	TBD	TBD
Plan	SR	Reinstallation of floor drain in Burdo teaching kitchen #1	CUP	Н	\$0	Faculty	TBD	TBD
Plan	SR	Burdo ice cream/chocolate room	CUP	Н	\$10,000 - \$50,000	Faculty	TBD	TBD
Plan	SR	Installation of dryer vent in Burdo laundry room	CUP	Н	\$0	Faculty	TBD	TBD
Plan	SR	Installation of door in Burdo office workroom	CUP	Н	\$0	Faculty	TBD	TBD
Plan	SR	Installation of osmosis water filtration system for Burdo	CUP	Н	\$0	Faculty	TBD	TBD

Plan	SR	Lighting for the outside patio of Burdo	CUP	Н	\$0	Faculty	TBD	TBD
Plan	SR	Screening for the window to the outside at Burdo 4912	CUP	Н	\$0	Faculty	TBD	TBD
Plan	SR	Installation of new roof for Lark Hall Greenhouse	CUP	Н	\$60,000	Faculty	TBD	TBD
Plan	SR		CUP	Н	\$50,000	Faculty	TBD	TBD
Plan	SR	Furniture needs in Garcia Hall rooms 855 & 875	CUP	Н	\$30,000	Faculty	TBD	TBD
Plan	SR	Relocate walls in Garcia hall 835 and 801	CUP	Н	\$15,000	Faculty	TBD	TBD
Plan	SR	Installation of full spectrum color balanced LED lightbulbs for all of Analy Hall	CUP	Н		Faculty	TBD	TBD
Plan	SR	Installation of A/C in all of Analy Hall	CUP	Н	\$800,000	Faculty	TBD	TBD
Plan	SR	Remodel of all restrooms in	CUP	Н	\$300,000	Faculty	TBD	TBD
Plan	SR	Analy Hall Installation of retractable motorized sunshades mapping the width of the sculpture yard Analy Hall 760	CUP	H	\$3,600	Faculty	TBD	TBD
Plan	SR	Repair/remodel ceramics studio floor Analy Hall 718	CUP	Н	\$100,000	Faculty	TBD	TBD
Plan	SR	Construction of 6 new wood drawing horses in Analy Hall 714 and 740	CUP	Н	\$600	Faculty	TBD	TBD
Plan	SR	Replacement of sheetrock in Analy 714	CUP	Н	\$5,000	Faculty	TBD	TBD

Plan	SR	Black-out window covering for the west-facing window above the sink in the Painting prep room 712.	CUP	Н	\$500	Faculty	TBD	TBD
Plan	SR	Waterproof exterior storage for plaster in Analy Hall 760	CUP	Н	\$2,200	Faculty	TBD	TBD
Plan	SR	Remodel of Burbank Theater	CUP	Н	\$0	Faculty	TBD	TBD
Plan	SR	Painting of studio spaces and fi spaces in Analy Hall	CUP	Н	\$0	Faculty	TBD	TBD
Plan	SR	Display window in Garcia Hall to exchange Plexiglas for tempered glass	CUP	Н	\$3,000	Faculty	TBD	TBD
Plan	SR	Relocate floor outlets in Garcia Hall 885	CUP	Н	\$1,000	Faculty	TBD	TBD
Plan	SR	Remodel of Garcia Hall room 875	CUP	Н	\$200,000	Faculty	TBD	TBD
Plan	SR	Upgrade of Forsyth furniture, displays, etc.	CUP	H	\$10,000	Faculty	TBD	TBD
Plan	SR	Replace severely worn and discolored carpeting. Forsyth classrooms and hallways	CUP	Н	\$10,000	Faculty	TBD	ТВО
Plan	SR	Re-paint walls and lockers (color-matched to new carpeting). Forsyth classrooms and hallways	CUP	Н	\$2,000	Faculty	TBD	TBD
Plan	SR	Install sound baffles in the percussion studio (room 122) Forsyth	CUP	Н	\$3,000	Faculty	TBD	TBD
Plan	SR	Provide a secure entrance into the Choral Library from the outside Forsyth 105A	CUP	Н	\$10,000	Faculty	TBD	ТВО

Plan	SR	Remodel Music administration office, instructional offices, and the student media library, Forsyth 130	CUP	Н	\$30,000	Faculty	TBD	TBD
Plan	SR	Replace severely worn and discolored linoleum Forsyth classrooms and hallways	CUP	Н	\$10,000	Faculty	TBD	TBD
Plan	SR	Repair desk arms on seats Forsyth 105	CUP	Н	\$2,000	Faculty	TBD	TBD
Plan	SR	Installation of retractable stage curtain Forsyth 105	CUP	Н	\$100	Faculty	TBD	TBD
Plan	SR	Improved track lighting Forsyth 105	CUP	Н	\$1,000	Faculty	TBD	TBD
Plan	SR	New clock needed Emeritus 1518	CUP	Н	\$50	Faculty	TBD	TBD
Plan	SR	Installation of temperature control Lounibos 2347 and 2330	CUP	Н	\$20,000	Faculty	TBD	TBD
Plan	SR	Replace worn carpets in offices and common areas 1st and 2nd floor Maggini	CUP	Н	\$50,000	Faculty	TBD	TBD
Plan	SR	Installation of ceiling-mount HD projector and screen (as requested in 2.4c) in Maggini room 2920.	CUP	Н	\$7,000	Faculty	TBD	TBD
Plan	SR	Remodel/upgrade of Garcia Hall	CUP	Н	\$100,000	Faculty	TBD	TBD
Plan	SR	Repair/replace shed in front of Lounibos 2330	CUP	Н	\$0	Faculty	TBD	TBD
Plan	SR	Enclose CNC room and expand east wall out at Lounibos 2330	CUP	Н	\$30,000	Faculty	TBD	TBD
Plan	SR	Temperature control Lounibos 2330 in machine shop	CUP	Н	\$15,000	Faculty	TBD	TBD
Plan	SR	Create a new classroom by removing the wall separating the grinding and storage rooms Lounibos 2330	CUP	H	\$0	Faculty	TBD	TBD
Plan	SR	Installation of weather proof storage area Lounibos	CUP	Н	\$1,000	Faculty	TBD	TBD

Plan	SR		CUP	Н	\$32,000	Faculty	TBD	TBD
		welding stations Lounibos 2395						
Plan	SR	Replace fence in the Children's Center	CUP	Н	\$15,000	Faculty	TBD	TBD
Plan	SR	Painting of the interior and exterior of the Call Child Development Center	CUP	Н	\$15,000	Faculty	TBD	TBD
Plan	SR	Artificial grass needed to replace mud/real grass at Call Children's Center	CUP	Н	\$10,000	Faculty	TBD	TBD
Plan	SR	Wall mounted TV (already purchased) to use in conference room Bailey Hall 1330	CUP	Н	\$100	Faculty	TBD	TBD
Plan	SR	Remodel of existing darkroom; Race dental dark room 4032	CUP	Н	\$10,000	Faculty	TBD	TBD
Plan	SR	Large screen monitor for back of class/lab so students can see what's on the screen, Maggini Hall 2920	CUP	Н	\$2,000	Faculty	TBD	TBD
Plan	SR	Addition of skills lab in Emeritus or Race	CUP	Н	\$106,000	Faculty	TBD	TBD
Plan	SR	Install Air Conditioning/replace all windows(vital in951,958)- health and safety. Tauzer 905, 951, 958, 999, and 921	CUP	Н	\$75,000	Faculty	TBD	TBD
Plan	SR	Resurface tennis courts	CUP	Н	\$25,000	Faculty	TBD	TBD
Plan	SR	Repaint/refinish Haehl Pavilion gym floor		Н	\$100,000	Faculty	TBD	TBD
Plan	SR		CUP	Н	\$20,000	Faculty	TBD	TBD
Plan	SR	Repair synthetic track surface and high jump runway Bailey field	CUP	Н	\$8,000	Faculty	TBD	TBD
Plan	SR		CUP	Н	\$16,000	Faculty	TBD	TBD

Plan	SR	Repairs/replacements Quinn swim center	CUP	Н	\$50,000	Faculty	TBD	TBD
Plan	SR	Install new infield turf including track resurfacing and shot-put area and fieldhouse Bailey Football field	CUP	Н	\$10,000,000	Faculty	TBD	TBD
Plan	SR	Chip old paint off the walls of the gym and repaint from the mid point of the wall down to the floor Tauzer Gym	CUP	Н	\$2,000	Faculty	TBD	TBD
Plan	SR	Greenspace Field Area list of items to complete	CUP	Н	\$500,000	Faculty	TBD	TBD
Plan	SR	Replace water polol goals and tarps Tauzer outdoor pool	CUP	H	\$6,000	Faculty	TBD	TBD
Plan	SR	Install carpet for the 3 walls in Tauzer 905	CUP	Н	\$15,000	Faculty	TBD	TBD
Plan	SR		CUP	Н	\$15,000	Faculty	TBD	TBD
Plan	SR		CUP	Н	\$10,000,000	Faculty	TBD	TBD
Plan	SR		CUP	Н	\$20,000	Faculty	TBD	TBD
Plan	SR	Resurfacing of green space	CUP	Н	\$3,000,000	Faculty	TBD	TBD
Plan	SR	Hammer throwing area for track team; Off campus facility needed	CUP	Н	\$50,000	Faculty	TBD	TBD
Plan	SR	50 meter pool and aquatic center Quinn swim center	CUP	Н	\$20,000,000	Faculty	TBD	TBD
Plan	SR		CUP	Н	\$100,000	Faculty	TBD	TBD
Plan	SR	Install golf driving/hitting net cage area; Golf practice area	CUP	Н	\$6,000	Faculty	TBD	TBD
Plan	SR	New infield turf Bailey Field	CUP	Н	\$1,000,000	Faculty	TBD	TBD
Plan	SR	Install drop down curtain room divider Haehl Pavilion 1105	CUP	Н	\$17,000	Faculty	TBD	TBD

Plan	SR	Office hallway carpet replacement Analy Village building G	CUP	Н	\$10,000	Faculty	TBD	TBD
Plan	SR	Additional English room needed in Emeritus or other	CUP	Н	\$0	Faculty	TBD	TBD
Plan	SR	Update/upgrade heating and AC in Emeritus	CUP	H	\$0	Faculty	TBD	TBD
Plan	SR	Replacement of fixtures Barnett 1288, 89, 65, 75, and 79	CUP	Н	\$1,000	Faculty	TBD	TBD
Plan	SR	Interior ceiling panel replacement and repairs in Barnett 1201 and 1206	CUP	H	\$1,000	Faculty	TBD	TBD
Plan	SR	Repair/replace window covering Barnett Hall	CUP	Н	\$4,000	Faculty	TBD	TBD
Plan	SR	Automatic door opener (hard-wired) plus installation Emeritus 1525	CUP	Н	\$8,000	Faculty	TBD	TBD
Plan	SR	Reconfiguring of physical space Emeritus 1525	CUP	Н	\$20,000	Faculty	TBD	TBD
Plan	SR	Remove steps in Shuhaw 1783 and replace existing, inadequate, broken, fixed chairs with tables and moveable chairs	CUP	Н	\$25,000	Faculty	TBD	TBD
Plan	SR	Create a door to enter the office space on the east side of Shuhaw Hall 1799	CUP	Н	\$3,000	Faculty	TBD	TBD
Plan	SR	Building slated for demolition Remove window and replace with chalk/whiteboard repurposed from Bech Hall labs	CUP	H	\$0	Faculty	TBD	TBD
Plan	SR	Replace chalkboards with whiteboards Bech hall 19448, 1960, and 1980	CUP	Н	\$500	Faculty	TBD	ТВО

Plan	SR	Lark Planetarium: Remove existing wiring and rewire for replacement projector.	CUP	Н	\$0	Faculty	TBD	ТВО
Plan	SR	Replace existing carpet and countertop, improve ventilation, and clean/update walls Lark Hall 2009	CUP	Н	\$0	Faculty	TBD	TBD
Plan	SR	Create adequate and safe storage Lark Hall 2046	CUP	Н	\$0	Faculty	TBD	TBD
Plan	SR	Paint exterior and interior of building. Replace rotted wood trip; Lark Hall	CUP	Н	\$0	Faculty	TBD	TBD
Plan	SR	HVAC upgrade for Baker	CUP	Н	\$0	Faculty	TBD	TBD
Plan	SR	Shuhaw slated for demolition. Repair in excess of \$40,000.	CUP	Н	\$0	Faculty	TBD	TBD
Plan	SR	New offices for mathematics instructors; Shuhaw	CUP	H	\$0	Faculty	TBD	TBD
Plan	SR	Fire door in Shuhaw 1717 needs magnetic fire door closer installed	CUP	Н	\$0	Faculty	TBD	TBD
Plan	SR	Shuhaw slated for demolition, district police to review	CUP	H	\$0	Faculty	TBD	TBD
Plan	SR	Tiles in need of replacement Shuhaw	CUP	Н	\$0	Faculty	TBD	TBD
Plan	SR	Build partition Shuhaw Hall 1799	CUP	H	\$6,000	Faculty	TBD	TBD
Plan	SR	Remodel of 1st & 2nd floor public bathrooms; Emeritus	CUP	Н	\$0	Faculty	TBD	TBD
Plan	SR	Remodel of 1st, 2nd, and 3rd floor public restrooms; Maggini	CUP	Н	\$0	Faculty	TBD	TBD
Plan	SR	Relocation/remodel of Lark Hall public restrooms	CUP	Н	\$0	Faculty	TBD	TBD

Plan	SR	Installation of new VCT floor tiles in 1st floor hallway of Forsyth	CUP	Н	\$0	Faculty	TBD	ТВО
Hold	SR	Digital Marquee Sign	DBB	Н	\$750,000	Facilities	05/09/16	12/30/16
Hold	SR	Greenhouse Glass Replacement	DBB	Н	\$200,000	Facilities	TBD	TBD
Hold	SR	Garcia Hall Renovation Project	DBB	Н	\$450,000	Consulta nt Est	01/25/16	TBD
SANTA	ROSA & F	PETALUMA						
Plan	SR/Pet	Space needed for Ag/NRM Dean Office	CUP	Н	\$0	Faculty	TBD	TBD
Plan	SR/Pet	Amphitheater classroom for wine teaching and sensory analysis	CUP	Н	\$0	Faculty	TBD	TBD
Plan	SR/Pet	Wine teaching lab	CUP	Н	\$0	Faculty	TBD	TBD
Plan	SR/Pet	Analy Hall 714, 750, 740, 790, and ceramics studio sink drainage	CUP	Н	\$20,000	Faculty	TBD	TBD
Hold	SR/Pet	Signage Elliott, Mendocino, and Petaluma	CUP	Н	\$75,000	Facilities		TBD
				TOTAL EST BUDGET : TOTAL FUNDIN G AVAILAB LE: Over or (Under)	\$54,560,900 \$33,000,000 \$21,560,900			
				Budget?				

## 3.1 Develop Financial Resources

To help with the colleges General Fund obligations, Facilities Grounds continues to operate efficiently under very low budgetary levels.

Facilities Grounds pursues resource development and diversification while maintaining responsible fiscal practices and financial stability, including:

- Increase the amount of discretionary, unrestricted general fund local revenue; Facilities Grounds
  has begun to seek funds for our operations by charging fees for our set-up, employee assistance,
  take down and clean up at events. This is especially true with outside organizations. Better rules
  and guidelines for these charges needs to be put in place and utilized for this to be an effectively
  fund source for our operations.
- Pursue alternative funding sources including grants, partnerships, and scholarships to support
  our diverse communities and students: This past year our Recycling Technician was able to write
  a successful Grant for over 20 new, more effective recycling bins that we are using in the most
  populated areas of our campus. We have expanded our popular wood sales operation to include
  larger pieces of milled wood and bulk amounts of wood. Revenue from processing CRV beverage
  containers will reach an all time record this year. Over \$10000 (17-18')

#### 3.2 Serve our Diverse Communities

The Facilities Operations Department staff has been trained in the areas of sensitivity to the diversity and sexual harrassment training seminars offered by the college's compliance officer. **Facilities Planning and Operations** supports and is committed to the District's diversity policies and efforts.

Our Grounds and Recycling staff is a very culturally diverse group of employees. The variety of cultures in our workgroup is rarely a source of friction, actually it seems to bring us all together, and makes our work more interesting. The Ground manager always includes everyone in work discussions, treats everyone with respect, and helps empower them to have a voice and to give their perspective in things that affect their job.

We are very lucky to work with a group of people who are caring and understanding of the differences we may have, but who also realize that we are all more alike than different, and that our appearance, gender, religious belief, sexual orientation, or race, is not something that separates us, but a source of enrichment for us all.

Santa Rosa Junior College has a diversity policy that is communicated to all employees during the hiring process, and through many of our publications. It is clear to anyone who is hired at our college that we value and are sensitive to diversity and each new employee is required to state their views on diversity before they are hired. The Grounds and Recycling staff interacts with a great number of students, faculty, and staff each day. Because we are such a diverse group to begin with, I believe it is easy for our staff to value and respect the diversity of others.

# 3.3 Cultivate a Healthy Organization

Building Operator Certificate program offered by PG&E. This seminar will enhance their ability to troubleshoot their particular trade. To enroll the staff in all of the Environmental Health & Safety training seminars. To encourage and support classes offered by the college or appropriate training service.

Whenever and wherever possible, <u>Facilities Planning and Operations'</u> staff are supported in efforts to professionally develop. In recent years this has been most frequently related to technology training activities.

The following is a list of items our department has done in the past two years that have helped cultivate a healthy work environment for our students, staff, and faculty.

 One of the basic and most fundamental goals of Facilities Grounds and Recyling is to maintain our campus in away that promotes safety, health, appreciation of the beauty of our gardens landscapes and natural areas. We believe we do our best to achieve this goal and have done a good job at this during 2015-17'.

- We have worked with the Students for Sustainability group to support their initiatives and goals regarding making our campus more sustainable. This included attending meetings, working on specific events they have sponsored. Also speaking to them about our recycling program.
- Developed a 'tree tour' for two students to lead at the 2015 and 16' Day Under the
  Oaks' event and on Earth Day celebration. The purpose of this tour was to educate
  visitors in the value of our campus trees, tree identification, campus and tree history,
  and the Tree Protection program we have at SRJC.
- Our college won Tree Campus USA designation for 2016 and 2017.
- Worked closely with the Horticulture department to share our experience and knowledge of landscaping and gardening with students in class and project settings.
- Our department provides flowers without charge for many campus events throughout the year. We also provide firewood at a low cost to employees through our staff firewood program.
- We have provided fruit from campus trees and campus flowers for fundraising for a variety of district departments and programs.
- Our Sustainable initiatives that Facilities Grounds and Recycling are particularly proud of are: 1. Reducing water usage for irrigation by approximately 25% during the past three years 2. Increasing the diversion of recycled materials while increasing our recycling rates. 3. Are using less and less pesticides and unhealthy chemicals in our operations. Are much more active and successful in promoting recycling, waste diversion and conservation through the work of our Waste diversion Technician, Guy Tillotson.

In Facilities Grounds and Recycling, we encourage our employees to go to seminars and conferences, lead classes, teach a seminar, get a professional certificate in a grounds or horticultural field, attend safety training seminars, and get first aid and CPR certification. Our department has a very small budget that helps pay for training and certification of our staff. Our department would like to increase our budgets for staff travel to attend more seminars and visit other Facilities. We began doing this in our department in 2015 with trips to UC Davis and UC Berkeley. These trips brought new knowledge, ideas, and energy to our department.

# 3.4 Safety and Emergency Preparedness

Safety Trainings required in the Facilities Gounds and Recycling department are as follows:

- Annual Pesticide Safety Training
- Respirator fit and safety training
- Ladder safety
- Emergency management training
- Small tool and equipment operator safety trainings
- Blood-born pathogens

Building Safety Coordinator, Casey Haufler Plumber

Area Safety Coordinator, Matt Burge

# Progress on Strategic Plan Goal E

by Robert Ethington & David Liebman



# Strategic Plan Goal E

"Establish a Strong Culture of Sustainability."

 This includes the three core elements (also known as pillars) of Sustainability as listed in the SP: Environmental Stewardship, Economic Vitality and Social Equity

Specifically, the planning and implementation has been focused in the following four Goal E objectives that align with the three pillars of sustainability:

- Expand, support, and monitor district-wide sustainability practices and initiatives;
- Infuse sustainability across the curriculum and promote awareness throughout District operations;
- Promote social and economic equity in the communities we serve;
- Ensure economic sustainability by leveraging resources, partnering with our communities, and contributing to the economic growth of the region.

# New Sustainability Committee



# Core Indicators

- ► Carbon Footprint
- ► Sustainable Transportation
- ► Sustainability in Curriculum
- Sustainable Facilities

# **Key Performance Indicators**

- Energy Efficiency
- ▶ Water
- Waste
- Carbon Footprint (Scope 2)
- Transportation
- ▶ Facilities TBD
- ▶ Grounds TBD
- ▶ Education upcoming survey
- Culture TBD

# **Energy Efficiency**

Energy Utilization Index - EUI (Kbtu/sqft/yr)

District Baseline 2013-14 Fiscal Year: 64.5

2015-16 Fiscal Year: 60.5

6% reduction from baseline so far!

2030 Goal: 27



### Water

Gallons of Potable Water used per year

District Baseline 2013-14 Fiscal Year: 47,167,000 gpy

2015-16 Fiscal Year: 36,798,000 gpy

22% reduction from baseline so far!

2020 Watershed Budget Goal: 29,865,000 gpy

## Waste

% of waste diverted from landfill per year

District Baseline 2013-14 Fiscal Year: 69%

2015-16 Fiscal Year: 71%

2% increase from baseline so far! (Thanks Guy and recycling)

2030 Waste Goal: 95% Zero Waste

Matches state mandated goals



# Carbon Footprint (Scope 2)

Metric Tonnes of CO2e per year

District Baseline 2013-14 Fiscal Year: 8,342

2015-16 Fiscal Year: 7,277

Decrease is due to loss of Cogeneration Plant. 2015-16fy will become new baseline

Goal 2030 Carbon Neutral Operation: -1 Metric Tonne of CO2e

Goal 2040 Carbon Neutral District (Scope 3)

# Transportation

% of Students that take alternative transportation (not single occupancy vehicles)

District Baseline 2013-14 Fiscal Year: 4%

2020 Goal: 8%

# Highlights

- \$32 million dollars from Measure H allocated for Sustainability projects
- ▶ Student Transportation Fee
- New Sustainability Standing Committee focused on Goal E
- ► Facilities Sustainability Internships (3 pilot students getting community involvement credit)
- > 3<sup>rd</sup> annual Sustainability Summit happened in March

# **Sustainability Standards**



The SCJCD Sustainable Design & Construction Standards apply to all capital projects and should be included in all Requests for Proposals issued for new projects, including new buildings, major renovations, interior fit-outs, system upgrades and other related infrastructure projects. In addition, these standards should be referenced in contracts for design related and construction management services.

Application of these standards in projects is intended to help establish SCJCD as a recognized leader in green building and sustainable campus operations. They are an essential component of the District's commitment to sustainability, including its desire to use it's facilities as a teaching tool for behavior change and sustainable practices.

These standards identify a <u>minimum level</u> of design and process requirements for all new construction and renovation projects, while providing enough flexibility for individual project teams to meet project goals. The Standards also include recommendations (stretch goals) that project teams should attempt to achieve.

Recognizing that different project scopes represent different levels of sustainable design opportunity and operational impact, the sustainability standards are organized within four different project tiers.

Tier 1: Tier 1 projects include all new buildings and major building renovations with a comprehensive scope that includes room configuration modifications, new HVAC systems, envelope modifications, and new lighting.

Tier 2: Tier 2 projects are partial renovations or fit-outs of existing facilities in which systems within the renovated spaces are largely replaced (e.g. lighting, finishes, plumbing, and/or HVAC), but base building HVAC systems and the building envelope generally remain unaffected.

Tier 3: Tier 3 projects include renovations to systems with an energy impact but are focused only on those systems (e.g. renewable energy installation, HVAC upgrades, AHU replacement, lighting replacement, etc.)

Tier 4: Tier 4 projects have no or limited energy and GHG impact, such as installing bike lanes or other landscape renovation project or an interior project which only renovates finishes and furnishings.

Tier 1	Tier 2	Tier 3	Tier 4
New Building or Major Renovation	Interior Upgrades and Fit- Outs	System Upgrades	Non-Energy
New Buildings and Building- Wide Fub-Gult Removations	Partial Building Interior Upgrades and Fit-Outs HVAC, Lighting, and Materials Within the Scope	Limited Scope Projects w / Energy and GHG Impact	Limited Scope Projects w / No or Limited Energy and GHG Impact

# Tier 1 Project Sustainability Standards

Tier 1 projects include all new buildings and major building renovations with a comprehensive scope that includes room configuration modifications, new HVAC systems, envelope modifications, and new lighting.

Sustainability Category	Criteria					
1. Integrated Approach	A. Implement a collaborative and integrated design process, engaging key SCJCD stakeholders, designers, engineers and construction team members.  B20-50 year Life Cycle Cost Analysis, including total cost of ownership modeling, shall be used throughout the project development process for all major building envelope and systems decision making. Time horizon will be dependent upon project scope (20 year for major renovation, 50 years for new building).					
2. Ecological Site Design	A. Optimize use of site specific passive design strategies including maximizing natural ventilation, fresh air, daylight, passive heating and cooling.     B. Maximize stormwater capture through green infrastructure features (pervious pavement, bioswales, french drains and bioretention basins.     C. Specify regional appropriate, native vegetation					
3. Energy Optimization	A. Perform ongoing energy modeling throughout the project and complete comparison of modeled energy performance to actual performance one year after start of operations.  B. Determine Net Zero Energy Ready target for the project. Provide on-project renewable energy to meet Net Zero demand or negotiate allocation of SCJCD renewable energy production.  C. Provide project whole building life cycle assessment (LCA) including materials, construction impacts and operating energy usage. Greenhouse Gas (GHG) impact shall be reported as carbon dioxide equivalents (CO2e).					
4. Water Management	A. Design and install dual plumbing (purple pipe) reclaimed water systems for all non-potable uses (eg toilets, urinals, cooling tower, and irrigation uses)					
5. Responsible Sourcing	A. Prioritize sourcing of locally produced goods and services     B. Require publicly available environmental product declarations (EPDs) and ingredient disclosure for all major materials and product purchases     C. To the maximum extent select goods and services compliant with SCJCD's Environmentally Preferable Purchasing (EPP) policy					

## Tier 1 Project Sustainability Standards, continued

Sustainability Category	Criteria				
6. Optimize Comfort and Well Being	A. Provide at least 1 water bottle filling/hydration station per floor.     B. Specify low emitting materials (including finishes, furnishings, flooring, ceiling, composite wood and insulation materials.     C. Maximize natural light into classrooms, offices and learning environments     D. Apply active design/universal design principles.     E. Maximize opportunities for outside views and other biophilic features.				
7. Waste Management	Recycling and compost collection bins shall be provided at a minimum 1:2000 sf ratio.     B. Achieve 95% construction waste diversion from landfill.				
Built Environment					
9. Sustainable Operations	A. Design, install and connect metering based controls for all systems including HVAC, lighting, water, gast electricity., renewable energy, and hot/chilled water. Metering and control network shall be BacnetIP Native/Compatible.  B. Design, install and connect sensor network mesh capable of reporting occupancy, light levels and temperature as a minimum. Sensor network shall report conditions for each room or per 2000 sf in open space. Network shall be BacnetIP Native/Compatible.  C. Projects are toe be commissioned prior to occupancy and one year after occupancy. Commissioning shall be performed by an independent 3rd party.  D. Minimum 3 year maintenance service contract shall be provide for all large appliances and advanced building controls.  E. Building Operational Manual and training (for building operators and occupants) shall be provided.				
10. Sustainability Leadership	A. Design and construct to LEED Silver certified minimum; stretch goals of LEED gold for major renovations and LEED platinum, Certified Net Zero Energy or Living Building Challenge Certified for new buildings				

### Tier 2 Project Sustainability Standards

Tier 2: Tier 2 projects are partial renovations or fit-outs of existing facilities in which systems within the renovated spaces are largely replaced (e.g. lighting, finishes, plumbing, and/or HVAC), but base building HVAC systems and the building envelope generally remain unaffected.

Sustainability Category	Criteria				
1. Integrated Approach	A. Implement a collaborative and integrated design process, engaging key SCJCD stakeholders, designers, engineers and construction team members.  B. 10-20 year Life Cycle Cost Analysis, including total cost of ownership modeling, shall be used throughout the project development process for all major building envelope and systems decision making. Time horizon will be dependent upon project scope.				
Ecological Site     Design	A. Optimize use of site specific passive design strategies including maximizing natural ventilation, fresh air, daylight, passive heating and cooling.				
3. Energy Optimization	A. Perform ongoing energy modeling throughout the project and complete comparison of modeled energy performance to actual performance one year after start of operations.     B. Determine Net Zero Energy Ready target for the project. Provide on-project renewable energy to med Net Zero demand or negotiate allocation of SCJCD renewable energy production.				
4. Water Management	A. Design and install dual plumbing (purple pipe) reclaimed water systems for all non-potable uses (eg toilets, urinals, cooling tower, and irrigation uses)				
5. Responsible Sourcing	A. Prioritize sourcing of locally produced goods and services     B. Require publicly available environmental product declarations (EPDs) and ingredient disclosure for all major materials and product purchases     C. To the maximum extent select goods and services compliant with SCJCD's Environmentally Preferable Purchasing (EPP) policy				
6. Optimize Comfort and Well Being	A. Provide at least 1 water bottle filling/hydration station per floor.     B. Specify low emitting materials (including finishes, furnishings, flooring, ceiling, composite wood and insulation materials.     C. Maximize natural light into classrooms, offices and learning environments     D. Apply active design/universal design principles.     E. Maximize opportunities for outside views and other biophilic features.				

# Tier 2 Project Sustainability Standards, continued

Sustainability Category	Criteria					
7. Waste Management	Recycling and compost collection bins shall be provided at a minimum 1:2000 sf ratio.     B. Achieve 95% construction waste diversion from landfill.					
8. Built Environment as Teaching Tool	Collaborate with curriculum development team to define experiential learning environments and opportunities for sustainability.					
9. Sustainable Operations	A. Design, install and connect metering based controls for all systems including HVAC, lighting, water, gas electricity., renewable energy, and hot/chilled water. Metering and control network shall be BacnetIP Native/Compatible.  B. Design, install and connect sensor network mesh capable of reporting occupancy, light levels and temperature as a minimum. Sensor network shall report conditions for each room or per 2000 sf in open space. Network shall be BacnetIP Native/Compatible.  C. Projects are toe be commissioned prior to occupancy and one year after occupancy. Commissioning shall be performed by an independent 3rd party.  D. Minimum 3 year maintenance service contract shall be provide for all large appliances and advanced building controls.  E. Building Operational Manual and training (for building operators and occupants) shall be provided.					
10. Sustainability Leadership	A. Design and construct to LEED Silver certified minimum; stretch goals of LEED gold or Living Building Challenge Petal Certified.					

# **Sustainability Guidelines**



#### Purpose

Knowing that public institutions of higher education have the ability to influence the ideals and principles of our future decision makers, Sonoma County Junior College District (SCJCD) holds an important role in promoting sustainability. SCJCD is passionate about our responsibility to strive for the highest achievable sustainability standards to encourage positive change through example. The district is also driven to provide continued leadership in sustainability. From a campus-wide level to individual classrooms, our aim is to model a living laboratory from which everyone can learn.

These Sustainability Guidelines are a key component to the District's overall sustainable performance; helping the District and its constituents align and implement the goals of the SCJCD Sustainability Action Plan that are germane to campus building projects.

These guidelines are intended to inform both the day to day operations at all SCJCD sites as well as all upcoming construction activities including new buildings, renovations and infrastructure projects. SCJCD regards capital projects as an important opportunity to demonstrate through action our commitment to sustainable design and construction.

For all new capital projects, these guidelines should be used in conjunction with the relevant project performance criteria described in Section 5: Technical Standards - Sustainability.

### **Ten Guiding Principles**

To truly embrace the value of sustainability, equal consideration must be given to environmental, social, and economic excellence. Specifically in support of the District's Strategic Plan Goal E: "The establishment of a culture of sustainability," we require the thorough assessment and analysis of environmental stewardship, social equity, and economic management for all projects. The ten guiding principles listed below and described in this section should be taken into account for all day to day operations as well as when designing and constructing capital projects for SCJCD.

- Use an Integrated Approach to Building Design, Construction and Operations
- Implement an Ecological Site Design Methodology
- Reduce Fossil Fuel Reliance and Related Energy Costs
- 4. Manage Water Carefully
- 5. Source Materials and Services Responsibly
- Optimize Occupant Comfort , Health and Well Being
- 7. Reduce Waste
- 8. Use the Built Environment as a Teaching Tool
- Facilitate Sustainable Management of Campus Operations
- 10. Showcase Sustainability Leadership

#### 1.1 Use an Integrated Approach to Building Design, Construction and Operations

The best buildings result from continual, organized collaboration among all players. The college should engage in a collaborative and integrated design process for active and continuing participation of users, facilities operators, and design and construction members in SCJCD building projects.

- 1. In the formative programming phase, identify sustainability priorities and key milestones in the project time-line.
- 2. Engage facility maintenance and operations personnel as well as other key SCJCD stakeholders throughout the design development and construction process.
- 3. Provide a project relevant (20-50 year) Life Cycle Cost Analysis/Total Cost of Ownership assessment for all major building envelope elements and systems as well as value engineering proposals.

#### FIGURE 1 Traditional Process vs. Integrated Building Design



The traditional process is fairly linear. source: REBERHAH ALDRICH

Traditional Process		Integrated Building Design
Linear	-	Whole Systems Approach
Team members involved only when necessary	-	Team members included throughout
More decisions made by fewer people	-	More decisions made in teams, iteratively
Emphasis on up-front costs	-	Emphasis on full life-cycle costs and benefits
Systems considered in isolation	-	Systems considered in relationship to others, allowing for full optimization
Loss time, energy, and collaboration exhibited in early stages	-	Front-loaded—time and energy invested early

SOUNCE: U.S. DEPARTMENT OF ENERGY

#### 1.2 Implement an Ecological Site Design Methodology

Land is a crucial component of the built environment. Ecological approaches to site design should be employed to minimize negative environmental impacts and support healthy and natural ecological processes while also ensuring that site and building design fit the campus aesthetic and create a unique sense of place.

- 1. Integrate landscape and people with living processes occurring on its campuses.
- 2. Maintain and restore climate appropriate landscaping.
- 3. Follow SCJCD Guidelines on tree protection, to minimize all disturbances and damage to District trees.
- 4. Design buildings to make use of climate resources, such as solar income, wind income, water income from rain and ground water, and work to design buildings that embody the ecological culture of Sonoma County.
  - 5. Strive to be a permaculture rich college, connecting students, faculty and the community through experiential garden based ecological learning and practice.
  - 6. Implement landscape based integrated stormwater capture including use of bioswales, french drains, mulched basins, pervious pavement and bioretention basins.

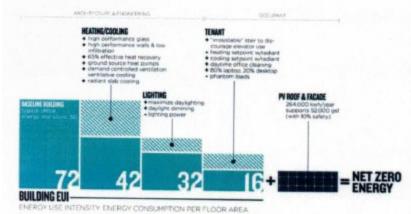
#### 1.3 Reduce Fossil Fuel Reliance and Related Energy Costs

Implementing strategies to save energy and utilizing renewable energy sources will lower greenhouse gas (GHG) emissions, reduce operating costs, and minimize the district's reliance on fossil fuels.

SCJCD has the goal of becoming a Zero Net Energy (ZNE) District by 2030. In pursuing this goal, the district recognizes a design pathway that focuses first on conservation, followed by maximizing energy efficiency, lowering power demand, and finally generating power on-site, for example with rooftop and carport solar (PV) arrays.

- All new buildings and major renovations shall be modeled to determine what the target Energy Use Intensity (EUI) is for the project to achieve ZNE (Source) performance.
- All new buildings and major renovations shall be at least 15% more energy efficient than required by current California Title 24 energy

- requirements.
- Passive design strategies (eg natural daylight, operable windows, correct solar orientation) shall be the primary focus in order to lower buildings loads as much as possible before active systems are designed.
- All new buildings and existing buildings must be benchmarked on EPA's Portfolio Manager.
   New buildings shall be designed to result in an EnergyStar rating of 95 or higher.
- 5. All new buildings and deep retrofits to existing buildings must be designed to accommodate roof top renewable energy systems (eg PV, CSP or solar hot water) or green roofs/ terraces for at least 75% of the available roof surface. Alternatively, provision is to be made to procure energy from some other on-site renewable source.
- Bacnet IP native/compatible Energy Metering and Energy Management Systems shall be implemented in all existing buildings, new building construction and renovation projects as well as campus systems and landscape projects. HVAC, lighting and occupancy sensoring are also to be integrated.
- New construction and all retrofit/renovation projects shall research and apply for all available utility incentives, assist in grant applications, and ensure follow through with all applicable programs including PG&E's Savings by Design and any other new offerings.
- Provide preferred parking for alternative fuel vehicles and carpooling
- Provide electric vehicle charging stations powered by on-site PV.



## THE PATH TO NET ZERO ENERGY

#### 1.4 Manage Water Carefully

Water is a valuable resource fundamental to our health, the economy and the environment. In California, water is precious and conservation is critical. SCJCD plans to manage water on its campuses responsibly and conserve wherever possible.

- All new buildings, surrounding pathways and roads must be designed to integrate with the campus stormwater management system, which is to capture 100% stormwater on site from a 10 year magnitude storm.
- All new building projects, deep retrofits to existing buildings, and site infrastructure projects must include dual plumbed piping to accommodate secondary water for use in toilets, cooling towers, irrigation and other non potable uses.
- Provide water bottle filling stations in all buildings.
- All new buildings and existing building renovations must include sub-metering infrastructure that separates out Domestic usage from Irrigation usage and connects to an IP platform that is approved by the Information Technology Department.



#### 1.5 Source Materials and Services Responsibly

Responsible sourcing of goods and services requires a holistic approach to supply chain management, product selection, and procurement criteria transparency. SCJCD aims to increase efforts to procure goods and services that encompass responsible management across social, economic and environmental dimensions.







- Select materials that meet the District's new Environmentally Preferred Purchasing (EPP)Policy, including recycled content, FSC certified wood and low-emitting materials.
- Prefer materials and services that are sourced locally, using local labor and resources.
- Require publicly available product environmental and ingredient transparency (Environmental Product Declarations and Health Product Declarations/Ingredient Disclosure)
- Prefer materials that have low embodied energy and carbon footprints.
- Require EnergyStar and WaterSense compliant appliances and fixtures for all new buildings and facility renovations.
- Require that all computers (including desktops, laptops and monitors) meet EPEAT Gold standard.

#### 1.6 Optimize Occupant Comfort, Health and Well 1.7 Reduce Waste Being

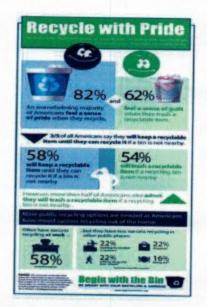


People spend a majority of their time indoors and therefore, the indoor environment has a significant influence on their health, well-being, and productivity. Student, faculty, and employee's health and comfort directly impacts ability to learn and work productively.

- 1. All regularly occupied space must have operable windows that give access to fresh air and sunlight. Unless it does not comply with District safety and energy standards.
- Include measures for monitoring Indoor Environmental Quality and thermal comfort
- Design buildings to promote walking, healthy movement, and exercise whenever possible
- Include considerations of biophilic design, including access to nature, safety, texture and
- Provide building occupants control over their environment (eg open windows, move chairs, sit or stand while working).
- Implement green cleaning practices
- 7. Provide water bottling filling/hydration stations on every floor of each building
- Provide an occupant oriented sustainability hub at each site that includes: bike repair station, solar powered docking station, water bottle filling station, covered seating, recycle and compost center, covered bike parking and video surveillance.
- Work continually to improve public transit and alternative forms of access to district sites.

Construction and demolition generate enormous quantities of solid waste and reducing waste as well as diverting waste from the landfill provides financial savings in addition to environmental benefits. SCJCD aspires to reduce waste all of its construction projects and ensure adequate recycling and composting facilities are designed in their new facilities.

- Promote source reduction in all aspects of facility design, construction and operations.
- Exceed statewide landfill diversion goal of 75% by 2020
- Include building and campus infrastructure for collection and storage of recyclables, trash and on-site composting, including appropriate signage.
- Provide at least on recycling and one composting collection bin in every 2000 sf of building space.



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- Include building and campus infrastructure for collection and storage of recyclables, trash and on-site composting, including appropriate
- Provide at least on recycling and one composting collection bin in every 2000 sf of building space.



Describe the way(s) in which your department/program/unit contributes to SRJC's sustainable mission. For more information go to SRJC's Sustainability website "Sustainable SRJC" as www.santarosa.edu/sustainability.

It would be accurate to say that everything that Facilities Grounds and Recycling does is directly tied the college's sustainability mission. In obvious ways, we are the people who are directly responsible for maintaining the outdoor environment of the college. However, within the

details of how we perform this responsibility and the level of care we take to ensure the beauty, safety, and sustainability of our campuses, this is not always evident. I'll try to summarize many of the specific methods and means we employ to maintain our district in a way that not only is beautiful to the eye, but also, are mindful of the safety of the people who work, teach and study here. But far beyond that, we always try to consider the effects of what we do and how the decisions we make today are going to effect this place for generations to come.

The primary and most evident responsibility of Facilities Grounds and Recycling is in maintaining the outdoor environment of the college. But there is quite a variety of places, land uses, and habitats, that are found on each campus, especially those located at the Santa Rosa campus. I'll highlight some of ways we maintain these places in ways that have been more recently termed as sustainable practices

#### **Grounds Operations**

- Preserving Heritage trees: Facilities Grounds has an extensive tree maintenance program that utilizes modern arboricultural management practices to maximize tree health and promote strong limb structure for safety. We recognize the importance of our trees both for their beauty, but also for their history and how they link us to our past and to our future. Our Oaks are such an important part of the college's identity that we have adopted the oak leaf as our logo. They are a part of SRJC that impresses everyone who visits our campus and a memory everyone remembers about this place. Because of this, we take great care in maintaining the health and safety of these incredible trees. The core of our maintenance program is a 5 year tree inventory, assessment, and maintenance plan that is prepared for us by a third party registered consulting arborist. About one-hundred and fifty of our largest trees (mostly Oaks) are assessed on their overall health, limb structure, and root collar condition. Each tree is given a priority on a 1-5 scale as to the highest need of care and attention along with specific maintenance recommendations. This inventory cycle is scheduled in May/June 2017. In addition, we are actively evaluating the health and structure of our trees each day. Our Tree Maintenance Worker is highly skilled in the assessment of tree health, but also the methods used to improve their overall condition. We are proud of the fact that our grounds crew has greatly slowed the loss of these majestic trees during the past twenty years. We are also excited to have successfully relocated many young trees that we had planted ourselves to many sites within the district.
- Water conservation: We recognize that water is a precious and limited resource, especially within this region. Because of this, we are constantly looking for ways to improve our water management at each of our campuses. Our use of a central control system has expanded from its original use at the Petaluma Campus, to the Windsor Training Center and now to roughly half of the Santa Rosa Campus. Our central control system gathers weather information from our own weather station and calculates a daily evapotranspiration rate. With this information a desktop computer in the Grounds office adjusts and schedules appropriate watering amounts at each of our sites every day. The accuracy of this system produces a very efficient watering schedule. As we bring more of these systems on-line our overall efficiency will continue to increase. Each year we continue to convert more areas to low flow irrigation systems with native plant and drought tolerant plantings. As part of section 6.1 of the PRPP, I have identified adding more system infrastructure to the Santa Rosa campus to increase the control and conservation of irrigation watering.

- Native Plants: We continue to increase our use of native California plants throughout the district. These not only have very low water needs, but are also excellent habitat plants which promote endemic populations of insects, birds, and other life that is important to our overall environment. These plants are also important teaching tools for our Horticulture, and Ag/Natural Resource classes. By using California natives we have been able to take many areas of the campus off of scheduled irrigation.
- Integrated Pest Management: Facilities Grounds Operations continues to actively follow integrated pest management practices. Some of the components of an IPM program are, use of low toxicity materials, enhancement of beneficial insect populations, use of good cultural practices of pruning, mowing, and watering to insure plants are healthy and able to withstand pest attack, use of mulches, minimal of inorganic fertilizers, use of native plants, and other strategies that enhance the health of our plants, trees, and overall habitat, which keeps pest populations in balance. We do use a small amount of low toxicity pesticide on campus. However, our use levels are very low when considering properties of our scope and size. A new pest control contractor is beginning in May 2017 to help us become a more healthy campus.
- **Composting:** In order to reduce waste and enrich campus soil conditions our Grounds department composts a wide variety plant clippings, leaves, coffee grounds, and wood chips. This past year we processed 250 tons of greenwaste materials, most of which was put back onto campus soils or used as mulch as part of our overall IPM program.
- Habitat restoration: Since the Petaluma Campus was opened in 1995, the Grounds Operations has been involved in restoring habitat along Capri Creek. This ephemeral stream runs from the middle of the east side of the campus to the extreme northwest corner of the property near the north entrance. Working in conjunction with our local Resource Conservation District, the SRJC Biology Department, and independent consultants, a plan was adopted in the 90's to restore the grade and quality of the stream bed and also to establish a wide variety native plants and trees. Phase I of this plan has been accomplished. In Fall 2016 we began to plant the upper portions of the creek. This project has turned out to be an excellent learning opportunity for student in the Environmental Science, Geography, and Biology departments.
- Assisting with construction projects: Recent construction projects have created an
  excellent opportunity for the college to install a variety of sustainable infrastructure. It also
  presented a potential peril to existing Heritage Oaks and local ecosystems. The Grounds
  department assisted with each of these projects by working with contractors and staff to
  help insure that best practices and specifications were followed during construction. We
  also created tree protection zones and specifications and directly worked with contractors
  to help insure that the least amount of damage possible would be inflicted to our large
  trees within each construction area.
- Education and Outreach: Throughout the year our Grounds staff assists the Horticulture department with a variety of classroom projects. Some of the recent projects we have worked on with them are irrigation sprinkler retrofitting, drip system installation, planting projects, A central control irrigation tour in Petaluma, irrigation water audits, stepping stone installation, post and rail fence installation, and a talk on employment in grounds maintenance fields. In the past we have worked with the Biology, Geography, Natural Science and English departments with a variety of talks and projects. We have spoke at PDA day activities, and worked closely with student clubs, especially Students for Sustainable Practices.

• Use of Recycled Materials: We have made it our standard to use recycled materials for our campus benches (Oak branches, too) and outdoor trash and recycling receptacles.

#### **Recycling and Waste Diversion**

Our successful district recycling program has been in place since the early 1990's and has been responsible for recycling nearly fifty thousand tons of materials. Our department is responsible for processing a variety of materials such as; paper, plastic, cardboard, beverage containers, scrap metal, compostable materials, greenwaste, scrap wood, firewood, food composting and wood chips. In addition we assist our warehouse department with the processing electronic surplus and waste; surplus furniture and appliances; and other recyclable materials that flow through their operations. We occasionally assist the Facilities auto shop and Environmental Health and Safety departments with the processing of oil, antifreeze, tires, batteries, and light bulbs.

During the past two years our program has promoted and performed recycling, waste reduction, and diversion through a variety of activities. Some of these are listed here.

- As part of the the State of California's requirement for state agency waste diversion and recycling in SB1016 and implemented through CalRecycle, our college district is required to submit an annual report detailing all of our recycling and waste diversion activities. The past two years we have had this requirement waived by CalRecycle, the state office governing waste management and recycling.
- Provided recycling at most campus special events and games
- At Day Under the Oaks we have added food composting to the materials we processed a few years ago.
- Began a food composting program at the Burdo Culinary building for the Culinary program.
   Shone Farm is now picking up this material to process into their organic crop program. We are processing only vegetable material, at this time. We continue to compost coffee grounds generated from Fresh and Natural's operations at Grounds Operations.
- We are actively looking into purchasing a large scale composting system (Listed in my noninstructional equipment needs, section 2.4d) which would process a wide range of organic materials and bring us much closer to zero net waste.
- Earlier this year we updated our indoor recycling bin signage/labeling to reflect current recycling requirements.
- Web sites for Sustainability, Grounds and Recycling were updated in 2016 to reflect current sustainability initiatives and objectives. More updates and improvements are planned.
- We regularly perform bin and large dumpster audits for capacity (weight and volume records) and for content to determine what types of materials are creating the most waste in each particular area.
- Within both Grounds and Recycling we process about 10 tons of recyclable materials each
  week on average. The recycling crew alone processes about 7000 lbs. of materials each
  week. These materials are primarily office paper, cardboard, newspaper, and beverage
  containers. Our Santa Rosa Team covers the entire Santa Rosa Campus, every office and
  building nnd all outdoor bins.

- 4.1a Course Student Learning Outcomes Assessment
- 4.1b Program Student Learning Outcomes Assessment

### 4.1c Student Learning Outcomes Reporting

Type	Name	Student	Assessment	Change
		Assessment	Results Analyzed	Implemented
		Implemented		

#### 4.2a Key Courses or Services that address Institutional Outcomes

Course/Service	1a	1b	1c	2a	2b	2c	2d	3a	3b	4a	4b	5	6a	6b	6c	7
College				X	X	X	X	X	X							X
Tours/Broadcasts																
Integrated		X		X	X	X	X	X	X	X	X	X				X
Enviromental Planning																
Committ																
Sustainable/Green				X	X	X	X	X	X			X				X
Practices																

### 4.2b Narrative (Optional)

#### 5.0 Performance Measures

### **Increased Responsibility**

1) Acreage maintained by the Grounds crew at the Santa Rosa campus continues to be roughly 118.25 acres. Our staff size continues to be less than in the 1990's and 2000's This has created a significant impact on the workload of each Grounds employee and has affected the ability of our staff to maintain the campus to a high standard.

During the reduction of our department staff, we began to take on a district wide scope of responsibility. This trend continues. While certainly a good thing for our entire district, this has strained our ability to maintain this campus.

The following chart details the increase in area covered by our Grounds employees, and a comparison to a general industry standard used for grounds maintenance of commercial or institutional properties. Just for comparison 19.667 acres is roughly equal to maintaining 79 quarter acre properties; a quarter acre equates roughly to the size of a very large home property these days. Our 'property', the campus, has about 75 times more residents per quarter acre than a typical family of four does. All this equates to a very large workload for our Grounds staff.

#### Acres/Grounds per Grounds Professional

<u>Year</u>	Total Acres	Net Sta	ıff A	cres/Staff	Notes
01'-02' 10	14 7	•	14.857		
02'-03' 10	14 7	•	14.857		
03'-04' 10	14 7	•	14.857		
04'-05' 10	)4 7	•	14.857		
05'-06' 10	)4 7	•	14.857		
06'-07' 10	)4 7	•	14.857		
07'-08' 11	.5 7	•	16.429		+ 5 flr. garage
08'-09' 11	6.25	i	19.375		+ Misc. Prop.
09'-10' 11	6.25	i	19.375		
10'-11' 11	6.25	i	19.375		+ Bertollini
11'-12'	117.5	6		19.583	+ Culinary
12'-15'	118.25	6		19.708	+ Salem Lot
16 -17'	118.25	6	19	9.708	

2) The amount of events and KAD related activities has also caused a significant increase to our Facilities Grounds and Recycling workload. Please look at the Custodial Services PRPP data on the increase in the number of events the past few years, 2015-17'. This is especially been true during the critical months of April and May, when typical landscape maintenance activities reach there busiest time of the year. It equates to a truly difficult couple of months that taxes our crews to the fullest.

KAD activities and fund raising camps/leagues are at an all time high. it is made our efforts to maintain and provide safe and playable athletic fields and surfaces very difficult. This spring 17' we have had to cancel much scheduled maintenance work due to increased use of our fields.

### 6.1 Progress and Accomplishments Since Last Program/Unit Review

Rank Locatio	SP M	Goal	Objective	Time Frame	Progress to Date
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### 6.2b PRPP Editor Feedback - Optional

### 6.3a Annual Unit Plan

Rank	Location SP	M	Goal	Objective	Time Frame	Resources Required