

**Report of the Johnson County Community College Sustainability Committee
Submitted to Dr. Terry Calaway
May 2008**

Purpose:

This document is a JCCC's first campus-wide, fully participatory, sustainability assessment and contains recommendations for further action as compiled by members of the college's 49-member Sustainability Committee. Sub-committees of this larger group created this report and its recommendations. This report should not be seen as the final word on these issues, but rather as a baseline against which progress and later recommendations can be judged.

Why Sustainability? Why JCCC?

At its heart, sustainability as a concept is a politically-neutral way of describing a more ecologically sensitive way of thinking and acting as individuals and a campus community. Whether we are talking about increasing recycling of waste materials, offering new courses in water conservation, creating new certificate programs in green technology, or planting more of the campus to native prairie, we are indeed now in the realm of sustainability. Sustainability (philosophically and in practice) offers a rare opportunity for economics and ecology to unite rather than clash. The benefits to the environment are many; the economic benefits to the campus are substantial. President Terry Calaway's March 2008 signing of the College and University Presidents Climate Commitment demonstrates JCCC's belief in these ideas.

Community colleges like JCCC are particularly well-suited to lead this effort. Not only can community colleges green their facilities, but their traditional foci on vocational and community-based education make them ideal for green workforce training and teaching homeowners how to save energy during a one-day workshop. JCCC can and should indeed become a leader in promoting sustainability not only among our peer institutions but in our local community. Whether one credits Al Gore or high gas prices, some sort of tipping point about environmental/energy issues has clearly been reached in the United States over the last year. JCCC needs to respond to this new calling and time is of the essence. The public is interested in green issues as are businesses. This attempt to shift campus culture cannot be implemented top-down. While administrative leadership will be needed to remove obstacles, this effort needs to be holistic, organic, and bottom-up. Different aspects of this initiative (cost-savings, catering to business constituencies, ethics, stewardship) will appeal to different members of the JCCC community including students and that is all to the good. JCCC should model sustainability: in the curriculum, in the institutional mission and in the daily operations on campus.

Summary:

While this report contains a variety of conclusions and recommendations, several broad categories of conclusions and recommendations can be noted.

1. **Efforts to green the campus need systematic support and planning.** Whether the issue is recycling, pursuing potential renewable energy installations, or planting more of the campus to buffalo grass, resources must be allocated to ensure that the signing of the Presidents Climate Commitment does not become another example of greenwashing. In particular, recycling at JCCC needs sustained attention.
2. **A variety of new technologies/design elements can be used to reduce JCCC's environmental impact.** Many of these will pay for themselves over time through increased efficiency. LEED certification for new/retrofit buildings, energy management systems, and water control systems are a few examples with quantifiable cost savings over time.
3. **Curriculum initiatives must be aggressively supported.** New environmental science programs, a sustainability certificate, and various green workforce training programs should be at the core of any community college in the 21st Century.

Administrative Recommendations:

While many of the recommendations in this report are administrative, there are several that deserve special attention.

1. **JCCC should create a Sustainability Coordinator.** Many campuses across the country (including community colleges) have created such positions to shepherd sustainability efforts. Exact responsibilities would be negotiated by JCCC stakeholders.
2. **JCCC should create a budget for sustainability.** While administrative support for this initiative has been exemplary thus far, funds will be required for release time, conference attendance, etc., to say nothing of many of the recommendations to follow in this report. While many sustainability programs will ultimately pay for themselves, the institution must be prepared to back up words like the Presidents Climate Commitment with actions and funds.
3. **JCCC's mission statement should be amended to include sustainability as a key value.**

Dining Services Overview and Recommendations:

The mission of JCCC Dining Services is to provide our students, the entire campus community and guests with progressive, diverse food services of high quality and exceptional value in a friendly and supportive environment while upholding the educational mission of the college.

Dining Services Vision Statement

- Measurably enhance customer satisfaction and department's image by providing excellent services and communicating effectively.
- Maintain an unwavering commitment to high quality food by offering a variety of food and beverage choices that take care of the customer's needs.
- Explore opportunities (branding, etc.) that will help expand retail, vending and catering sales.
- Upgrade the appearance, accessibility and functionality of the facilities.
- Ensure a safe work area for employees and promote food safety
- As part of the JCCC Sustainability effort, make decisions that preserve the values of environmental, economic and social responsibility.

Dining Services includes:

1. The Food Court which includes Pizza Hut, Chick-fil-A, Boulevard Burger, Quivira's, AFC Sushi, Salad Bar and Hot Bar. The Food Court averages between 1500 - 2500 transactions daily.
2. Espresso Bars which includes Encore! Espresso and javajazz@JCCC. The Espresso Bars average between 800 - 1200 transactions on a daily.
3. Dining Down Under which includes The Main Fare, Deli and Salad Bar. Dining Down Under averages between 400 - 800 transactions daily.
4. JCCC Catering caters refreshment orders, receptions, breakfast, lunch and dinner at different venues on campus. Catering does over 3000 events a year.
5. Vending includes 65 soft drink, coffee and snack machines throughout campus.
6. Café Tempo is a sit-down restaurant located in the Nerman Museum of Contemporary Art. Café Tempo averages between 150 - 200 transactions daily.

Ongoing Efforts:

Sustainability efforts are ongoing in dining services at JCCC under the direction of Jay Glatz with input from the Sustainability Committee. Such efforts include:

1. Dining Services initiated a refillable mug program in April of 2008.
2. A commitment to reduce Styrofoam where possible and replace it with biodegradable paper products.
3. A commitment to integrate locally produced food into all aspects of operations where possible and allowed under the current Sysco contract beginning in May 2008. Integration of locally-produced food will be paired with education about the importance of considering food miles when making dining choices.
4. A commitment to replace disposable plates/bowls with rewashable hard plastic plates/bowls during the summer of 2008.

Recommendations:

Short Term:

1. Continue ongoing efforts and expand them where possible.

2. Ensure proper staffing in order to bus the Food Court and shuttle bowls/plates to/from downstairs dishwasher.
3. Consider adopting ecofriendly takeout containers that can be exchanged for clean ones, washed, and then reused. While campus faculty/staff are envisioned as the market here, students might be able to put down a deposit on such an item through their campus accounts.
4. Revisit existing contracts to ensure that vendors supply more locally produced products and ecofriendly packaging.
5. Integrate prep food waste into a campus-wide composting system. Such a system would take prep food waste from Dining Services and Culinary Arts and lead to a supply of compost for Grounds to use on campus. Savings here can be gained both by reducing waste being hauled to landfill as well as less cost for fertilizer/soil improvement.

Recycling and Waste Minimization:

Recycling is a key element in any organizational sustainability effort. At JCCC, little is known campus-wide about recycling efforts and misinformation abounds. Consequently, this report contains a lengthy summary of ongoing efforts.

Ongoing Efforts:

Currently at JCCC, waste removal is contracted through Deffenbaugh (no recycling services are included in this contract). For waste removal, there is a 40-yard open container at the CSB dock; when it's full, Campus Services calls Deffenbaugh to pick it up. There are 20-yard compactors at the Commons, Carlsen Center, and OCB and a 6-yard compactor at the Nerman Museum; waste is removed from these on regularly scheduled pickup dates.

Batliner Paper Co. contracts with JCCC to collect recyclable paper, cardboard, plastic bottles and aluminum cans. The recyclables are purchased from the college at current rates. Proceeds from all forms of recycling go to the Foundation to support scholarships at JCCC. Since 1992, \$42,423.13 has been raised for scholarships from all of the college's recycling efforts.

Tan domed containers are placed in hallways for the collection of plastic bottles and aluminum cans. Custodians empty these as needed and take the contents to a large container in the Warehouse. Plastic bottles are not sorted from aluminum cans because of the labor costs; however, the college earns less money because the two are combined.

For paper recycling, there are pairs of gray containers in the hallways; one is for white computer and copier paper; the other is for color copies, encompassing printed material (color copies, fliers and postcards), magazines, phone books, newsprint, NCR forms, manila folders and binder covers.. Each container is labeled as to the type of paper to be

deposited there. Faculty and staff are responsible for recycling the paper they collect in their offices; custodial staff usually does not remove paper from the offices and place it in the bins (although there are anecdotal reports of custodians removing paper intended to be recycled and placing it in the trash) . If anything other than recyclable paper is placed in the bins (such as trash or food waste), the contents will not be recycled. If colored paper is placed in with white paper, all of it is recycled as colored paper, for which the college earns less. Shredded paper collected in Document Services (which provides shredding services for the campus) is also recycled. ***Many faculty/staff complain about the sometimes inconsistent placement of recycling containers for all materials across campus.***

Most of the paper used in college offices has a pre-consumer waste component; some also has a post-consumer waste component. The presses have difficulty handling paper with a high recycled content; color coverage and paper feed can be affected.

Cardboard is **not recycled** except in Document Services and the Warehouse. Document Services submits service requests to Campus Services to pick up the cardboard for recycling. Cardboard and boxes set outside offices are not collected for recycling (often people take the boxes for reuse).

The college also recycles these hazardous materials: light bulbs, solvents, recovered silver, tires, used oil from the automotive technology program, used vegetable oils, and mercury. No recycling of batteries is currently being done, although a new agreement with Interstate Battery should eventually provide for the collection and recycling of batteries.

Because of new printing technology, Document Services no longer uses chemistry to produce printing plates. The aluminum plates used in printing are recycled.

Purchasing now uses some digital imaging to reduce the number of paper records and advertises bids on the web to reduce paper and printing costs. They hope to eventually move to online bids and more imaging so they can be completely paperless. Office Max, the college's supplier, has a program to take back packaging used in shipping. The Warehouse also recycles the pallets they use. If they get too many, Warehouse staff contact companies who will collect the pallets so they don't have to be thrown out.

The Bookstore staff reuses shipping boxes and packing materials for vendor returns, online student textbook reservations and e-commerce shipping. The shopping bags the bookstore distributes contain at least 25 percent post-consumer recycled materials (PCRM), as do the retail products they stock.

The computers the college purchases from Dell are up to Energy Star standards. Last year, due to the college's significant exposure with potential environmental liability and data security issues, the college determined that the most responsible action to take was to recycle or remarket the college's surplus IT equipment. In 2007, the college contracted with Dell Marketing to perform these asset recovery services on the college's

behalf. The college pays a fee to have the equipment removed and recycled or remarketed. For any equipment that can be resold by Dell Marketing, the college receives 90% of the sale price. Equipment that cannot be resold is recycled and Dell Marketing provides the college with a certificate of destruction. Printer and copier toner cartridges are sent to the Warehouse for recycling, but Purchasing has had difficulty finding a company that will consistently accept toner. Purchasing is investigating the possibility of using re-manufactured toner cartridges, although there are issues with quality and company warranties. There is no toner cartridge recycling program for the Kyocera copiers.

Dumpster diving

Four brave subcommittee members, dressed in protective clothing and hard hats, climbed inside the dumpsters to see what could have been recycled and wasn't. Recyclable items found in the dumpsters include aluminum cans, glass bottles, plastic juice bottles, cardboard (lots of it), shredded paper, and even a television and a swing set (that last probably from off campus). Clearly, lots of education still needs to be done.

Information from other colleges

At KU, student staff collects recyclables from more than 200 locations on campus each week and transports the material to a west campus location for processing. KU employs 14 students and four full-time staff in recycling. Two of the full-time staff work at the west campus recycling location processing the recyclables for shipment to vendors. One full-time person coordinates the surplus furniture and e-waste collections.

KU Medical Center contracts with a company that provides large "totes" in which employees collect recyclables. These are hauled to the curb each week and emptied. This work is done by volunteers.

Recommendations:

The subcommittee offers the following recommendations for recycling and waste minimization at JCCC. Generally, JCCC needs an aggressive education program to increase recycling practices and promote sustainability goals of reuse, reduce and recycle.

Short-term:

1. Provide waste minimization/recycling education for faculty, staff and students, encouraging them to dispose of recyclables appropriately. This could be done through "eco-tips" on infolist.
2. Participate in Recycle Mania (<http://www.recyclemaniacs.org/Index.htm>). **The Presidents Climate Commitment requires us to participate. This would be a good time to complete the first campus-wide waste audit.**
3. Provide recycling bins in the BNSF portion of ITC and inside the seminar rooms in the Regnier Center. In the Regnier Center, label these containers so visitors to campus know what to do.

4. Consistent placement of recycling containers for all materials must be done across campus.
5. Purchase new containers for recycling paper. Improve the labeling on the containers to more clearly and consistently identify what should be placed therein and communicate that recycling contributes to scholarships.
6. Work with Office Max, the college's vendor for office supplies, to reduce or reuse packaging for order delivery and encourage faculty and staff to consolidate orders to reduce the number of boxes needed.
7. Expand paper recycling efforts in the Copy Center in LIB.
8. Have Document Services compile and print packets of class handouts to be sold through the Bookstore instead of having students download files in computer labs. This allows double-sided printing, saves toner, and is half as expensive to produce.
9. Stop using multi-part NCR forms.
10. Update with departments the number of copies needed for college distribution so fewer copies are printed and wasted.
11. In the Bookstore, reduce the number of plastic shopping bags distributed by at least 30 percent and increase the number of reusable, non-woven fabric shopping bags used.
12. In the Bookstore, explore a print cartridge refilling system for personal consumer print ink cartridges.
13. In the Bookstore, explore consumer technology recycling opportunities with technology vendors (such as cell phones and computers).
14. When custodians collect paper from office recycling bins, have them recycle it.
15. Set all copiers on campus to default to double-sided printing.
16. Begin purchasing printers with double-sided printing capabilities.
17. Separate containers for plastic/aluminum cans should replace the current one container system.
18. Hold a student art contest to make the recycling containers more attractive and obvious.
19. Develop more cooperation between departments in recycling cardboard.
20. Continue discussions between Chemistry, Automotive Technology, Dining Services, and the Motorpool regarding JCCC students turning waste vegetable oil into biodiesel for college vehicles.

Long-term:

1. Hire additional staff in Campus Services to coordinate the college's recycling efforts. A minimum of two additional staff members would be needed to support collection and sorting. As an alternative, volunteers could sort plastic bottles and aluminum cans and perform other recycling tasks. Possibly a recycling coordinator position could be created to take the coordination burden off of housekeeping. Lane Community College estimates that its recycling program saves it \$120,000 per year which more than covers the cost for its coordinator.
2. Create a centralized recycling location where the campus community can take packing materials, cardboard, boxes, batteries, etc. (We can't offer this to the

- community as a whole because of liability issues.) Such a location might be combined with the warehouse/surplus property operation. In other words, everything leaving campus would leave through this facility provided centralized measuring, sorting, and oversight.
3. Develop a process for campus-wide recycling of cardboard. Purchase a cardboard recycling compactor or binder to handle cardboard recycling on campus.
 4. Identify areas where batteries could be collected and recycled.
 5. Become a community recycling center for Compact Fluorescent Lightbulbs (CFLs)
 6. Investigate the do-not-mail list for catalogs coming into the college (remembering that some people may still want these catalogs). As an extreme example of what is possible, Idaho State University's mail service returns all bulk mailings without question.
 7. Explore new promotional avenues for college programming other than mass mailing of paper documents.
 8. Investigate whether the use of Kyocera equipment instead of laser printers reduces costs per page and whether the need to replace expensive laser toner cartridges outweighs the lack of a toner cartridge recycling program.
 9. Have the Bookstore become a collection point for recycling plastic shopping bags and consumer electronic batteries.
 10. Provide all forms online in such a way that they can be completed and submitted electronically, eliminating the need for paper copies.

Grounds and Water:

Recommendations:

Short-Term:

1. Reduce fertilizer, herbicide, and pesticide use. Replace with more person hours.
2. Eliminate use of sodium chloride as a deicer and reduce use of calcium chloride as a deicer. Switch to environmentally acceptable snow and ice removal products to reduce contamination of local surface water and groundwater. MDOT and many cities had good results with beet juice additive on roads this winter. It costs \$2.60 per gallon which is more expensive than salt brine but it is less harmful to the environment, pavement, and vehicles and does not stain. It does require a tanker truck with a cost of about \$180,000 but as more cities start to use it, perhaps we could contract the application of the beet juice mixture. Use alternatives for sidewalk deicers such as Calcium magnesium acetate. This is made from a dolomite-rich limestone and acetic acid. It is less harmful to vegetation, does not damage concrete and brick as much, and does not stain carpeting as sodium chloride or calcium chloride do. Two alternatives to investigate for sidewalk deicers are products called Bare Ground and Storm Team. Testing on the use of sugar/corn carbohydrates for sidewalk deicers is also

being done by the Departments of Transportation of various states. One concern for this method on sidewalks is that it is most effective at temperatures below 35 F. The calcium chloride is stored in plastic bags. The current pile of sodium chloride and sand is uncovered and out in the open. The sodium chloride must have impermeable ground cloth and tarp covering as the concrete pad it is stored on is right next to a creek.

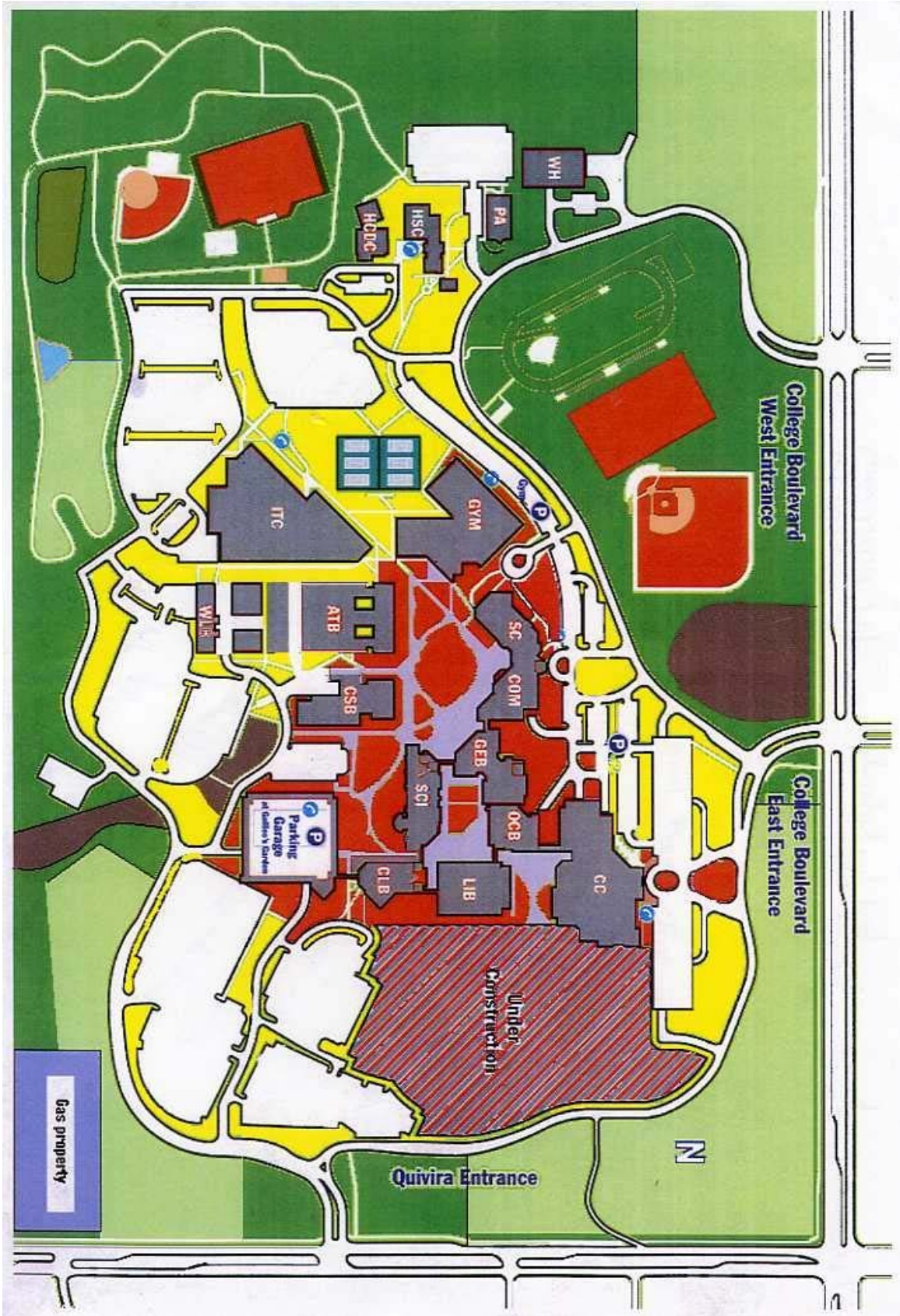
3. Measure concentration of nitrates and salts, and eventually other pollutants in the creeks draining campus. This will be done through student lab exercises and honors projects in geoscience and bioscience classes repeatedly to establish and maintain a chemical profile of our runoff. The first measurements for the creek on the south side of campus took place during spring 2008. Preliminary results obtained in an Environmental Science lab indicate that our phosphate measurements taken from pipes draining into the creek = 2.52 mg/L; for drainage from the Parking Garage and Faculty Lot = 0.84 mg/L and for the downstream portion of the creek = 0.22 mg/L. **These values are above EPA recommendations for drainage from parking lots.** Phosphate was chosen because of the implications to eutrophication of water sources such as creeks and ponds downstream. Nitrate and other measurements will also be included. Long term measurement sites need to be determined using gps so that monitoring can take place at the same sites throughout the year. This project would benefit from release time or summer stipends to complete the gps location and mapping.
4. Reduce use of fescue for lawn and replace with buffalo grass in appropriate areas. Cost will include drilling the seed in during June at the latest so that it can get rooted before fall dormancy. Addition of buffalo grass will reduce mowing costs and fuel usage for the mowers as well as irrigation expense. See the attached map and legend showing the dark green and light green areas.
5. Spot spray rather than blanket spraying the "JCCC Prairie" to decrease invasive lespedeza. This goes against our use of herbicides goal but the lespedeza has to be knocked back to allow native prairie plants to have a chance at competition. Seek permission, once again from Overland Park, to burn the prairie as this will also cut back on invasive species.
6. Landscaping for all new buildings should emphasize native plants and drought tolerant plants (xeriscaping) that do not need irrigation systems.
7. Re-sign the "JCCC Marsh" area as it is not a marsh. Paul Decelles will investigate the renaming of this as a "Riparian Habitat".

Long term:

1. Switch to automatic irrigation systems with a central control and access through a computer system that can be turned off remotely to avoid unnecessary watering

when a rainfall occurs. The approximate cost is \$40,000. Currently, the irrigation systems have to be turned off manually at 24 locations. This is not practical during evening or weekend storm events. See the attached map and legend showing the red areas.

2. Census campus biodiversity. Re-establish the Tree Trail with species identification and map. Lynne Beatty and Lekha Sreedhar have located and identified about 160 species and cultivars. Mark LaBarge will also assist with the Tree Trail. The benefit will be in knowing what species we have and providing a nature trail guide that could be used by classes and the community. Purchase Malaise Traps to determine insect biodiversity and include planting choices that are appropriate to encourage wanted insects. Paul Decelles and other Bioscience professors would use these in classes. Malaise traps are 24 hour collectors of insects that fly. These would be installed on campus at various locations. Traps cost \$260 each and 6 traps would cover the various habitats on campus. In addition to determining biodiversity for sustainability planning purposes, these projects could also be used as lab exercises for students in environmental science and other biology courses. These projects would benefit from release time or summer stipends to complete the gps location, identification, mapping, and installation of traps.
3. Reforestation as a border along the boundary with the neighborhood to the south. This could be a student project with approximately a 2 year payback from the costs of the planting to the reduced mowing. See attached map and legend showing the dark green areas on the south side.



JCCC Map Attachment Explanation provided by Dave Kriegh

Red: Areas that are irrigated are mostly around the innermost campus from GYM to CC to CLB. That includes 8 acres of bluegrass/fescue, shrubs, and flowers. These areas get first priority in mowing and are sprayed every year.

Yellow: Areas forming an inner corridor around the main body of campus and the exterior roads amount to 19 acres.

Dark Green: The outer campus on the west and south edges but also extending to the entrances at College Boulevard and Quivira is 57 acres of mostly fescue. This area is to be planted to buffalo grass.

Light Green: Outer campus especially at the NW, NE, and SE corners totaling almost 40 acres is planted in buffalo grass that was first proposed upon the recommendation of Dr. Jerry Baird.

Energy/New Buildings:

Ongoing Efforts:

The JCCC Campus has 1.7 million square feet of conditioned space. Upgrades to mechanical systems use energy efficient models. Room occupancy sensors are being added whenever an area is remodeled, which turns lights on/off automatically.

Current energy bills are \$1.8 million annually for electricity and \$116,000 for 33 million gallons of water per year.

Recommendations:

Short Term:

1. Achieve immediate energy savings by establishing a campus awareness campaign to encourage conservation of energy. There is a need to encourage personal responsibility for saving energy at work. Include sustainability policies/procedures in new staff orientation and In-Service forums.
2. Computers and associated hardware are big users of electricity. Personnel should turn off computers when not in use, in addition to turning off office and classroom lights when not in use. Utilize appropriate technology and/or software to automatically turn off computers and associated peripherals when not in use. The Presidents Climate Commitment requires us to use Energy Star compliant machinery, and that functionality should be fully utilized.

3. Install auto cutoff switches for lights around campus, including in the Regnier Center. Reduce light levels as appropriate during non-business hours, in cooperation with Public Safety (to ensure safety/security of all on campus)
4. Better coordination needs to be established with Scheduling to more efficiently meet air handling, heating and cooling needs in rooms and other scheduled areas.
5. Purchase a new building automation system, approx. cost \$1.5 million. The current system has a number of limitations. A new system would provide significantly more efficient energy management of campus facilities that would eventually payback the cost of installation.
6. Establish a policy that all new campus construction be LEED (Leadership in Energy and Environmental Design) certified, starting with the Library. Levels of certification are: Certified, Silver, Gold, and Platinum. In the New Buildings Institute recent study, results indicate new buildings certified under the U.S. Green Building Council's (USGBC) LEED certification system are, on average, performing 25-30% better than non-LEED certified buildings in terms of energy use. The study also demonstrates that there is a correlation between increasing levels of LEED certification and increased energy savings. Other studies have suggested that an initial up-front investment of 2% will yield over ten times the initial investment over the life cycle of the building
7. Contract with an energy service group to conduct a campus energy audit and investigate potential for energy savings, including on-site renewable energy sources such as wind, photovoltaic and geothermal.
8. Consider performance contracting to identify and evaluate energy-saving opportunities and then recommend improvements to be paid for through savings.
9. Identify and implement ways to firewall energy savings gained by recommendations above into a fund for infrastructure improvements. In this way, this effort can be partially self-funding.
10. Continue to take advantage of the energy efficiency provided by moving to fluorescent bulbs and eventually LEDs.

Long Term:

1. Partner with an energy provider to install a small wind turbine, photovoltaic and other renewable energy sources that could be used as teaching aids in certificate programs.
2. Research feasibility of installing green roofs on existing/new campus buildings. In addition to energy savings, they could be linked to curriculum and students/faculty could assist with maintenance.

3. Integrate sustainability in campus landscaping: climate appropriate plantings that require less water; more efficient/reduced irrigation; less dependence on chemicals (for weed/insect control).
4. Apply for energy efficiency /environmental grants from the government and other sources.
5. Pursue incentives offered at state/county/local levels associated with LEED certification.
6. Establish certificate programs in renewable energy fields; such as one for servicing wind turbines.
7. Pursue increasing on-campus power generation through renewable means with self-sufficiency being a lofty goal. Los Angeles Community College District (another Presidents Climate Commitment signee) intends to take their campuses off of the electric grid entirely within several years through of renewable energy. Such a strategy will allow them to become carbon neutral and at times this power generation can provide a revenue stream for the college. Such an initiative would require JCCC to become an advocate for net metering before the Kansas Legislature.

Curriculum:

Ongoing Efforts:

Prior to and separate from the sustainability committee, a collaborative effort among faculty from Kansas State University and staff from the JCCC Science, Hospitality Management, and Entrepreneurship secured a grant from the U.S. Department of Agriculture to develop a sustainable agriculture entrepreneurship certificate program at JCCC. Several new courses were developed and existing courses were modified to meet the needs of the program. Pending approval by the Kansas Board of Regents, students will begin to enroll in the program starting in the Fall semester, 2008. As additional JCCC faculty become involved in the program, coordination with the sustainability committee will improve.

Early discussions on the committee centered around the need to assess who was doing what with regard to sustainability at JCCC. It was clear that there was a need to develop an institutional survey of **faculty** to determine what sustainability themes are currently being taught in existing courses and whether faculty were interested in developing new sustainability courses. Several committee members expressed interest in new course development. It was clear that the assessment and course development process should include both credit and continuing education (non-credit) courses. Committee members researched programs available at other Kansas community colleges including Fort Scott

Community College and Cloud County Community College which both offer sustainability certificates and A.S. degrees similar to those we are proposing.

The committee decided that we should first assess **student** interest in taking sustainability and/or environmental science courses and in pursuing degree or certificate options at JCCC. The committee prioritized the development of a student institutional research survey. We also discussed surveying potential **employers** to determine what skills they desired in graduates with a interdisciplinary Sustainability Certificate or a Associates of Applied Science in Environmental Science. After consulting with Gina Brewer from the Office of Institutional Research (OIR), committee members continued to develop survey questions in preparation of student, faculty and employer surveys to be administered this semester and summer. Our original student survey was designed to investigate student interest in completing either an interdisciplinary Sustainability Certificate or an Associates of Applied Science in Environmental Science. We were advised by OIR to administer these separately to avoid potential confusion because of an existing Sustainable Agriculture survey. Our Sustainability student interest survey will now be distributed with the Sustainable Agriculture survey this fall. The Environmental Science A.S. degree student survey is being administered this week and results are expected back by the end of May. Employer and faculty surveys are being developed by the committee and the OIR and will tentatively be distributed this summer and fall, respectively. It is likely that the faculty survey will be online for ease of access.

Center for Teaching and Learning Associate:

Kami Day suggested that a CTL Sustainability Associate position be created to serve as a faculty resource person in matters related to sustainability curriculum development. This position has been tentatively approved for 2008-2009. The CTL Sustainability Associate will initiate and shepherd curriculum through the approval process as well as recruit/support faculty campus-wide to do the same.

Recommendations:

Short-Term:

1. Complete surveys and continue to periodically monitor course development interests, needs and trends at JCCC
2. Prioritize course development in response to student interest, faculty, and employer surveys
3. Develop a A.S. degree in Environmental Science
4. Develop an interdisciplinary Sustainability Certificate Program
5. Promote the inclusion of a sustainability clause in the JCCC mission statement
6. Promote a sustainability course requirement at JCCC
7. Seek corporate sponsors to fund speakers addressing the subject of sustainability
8. Secure a permanent CTL Sustainability Associate position
9. Secure funding for a Center for Sustainability and a Full-time Sustainability Coordinator

10. Secure funding to hire new part-time and full-time faculty to develop and teach environmental science and sustainability courses
11. Secure grant funding for faculty development opportunities including workshop and conference attendance
12. Secure funding to inspire faculty to engage in new course development via stipends, release time, etc...
13. Collaborate with continuing education to ensure sustainability educational opportunities are available to non-certificate or non-degree seekers (i.e. promote weekend workshops in greening the home, sustainable gardening, etc...)

Transportation:

A substantial part of JCCC's environmental impact comes from vehicle emissions given that JCCC is a commuter campus. While JCCC can make substantial efforts to reduce vehicle traffic to campus, **regional transportation solutions will have to be part of the equation** here and JCCC should encourage/participate in these solutions. A full subcommittee to investigate these issues will be formed in 2008-2009.

Recommendations:

Short Term:

1. Find ways to make the campus more bike-friendly. Cooperation with Overland Park should be sought to connect JCCC to area bike paths. A campus survey should be conducted to see how many faculty/staff/students would ride bikes to campus if bike racks/bike boxes were available.
2. JCCC should encourage/facilitate carpooling of faculty/staff. Preliminary discussions are underway to this effect with the eventual hope of creating a map interface program where prospective carpooling partners can find each other in a JCCC-only online environment. Student inclusion may be problematic due to liability issues but these should be investigated.
3. Preferential parking spaces should be reserved by permit to carpoolers and those who drive hybrid vehicles.
4. JCCC should encourage work-from-home and flex-time where appropriate to reduce the need all faculty/staff to come to campus every day.
5. Encourage and support mass transit including the K-10 Connector.
6. Purchase hybrid/electric vehicles for the college fleet.

Presidents Climate Commitment:

The College and University Presidents Climate Commitment requires JCCC to take a variety of specific actions as numerated below:

Recommendations:

Short Term:

1. Within one year of signing this document, complete a comprehensive inventory of all greenhouse gas emissions (including emissions from electricity, heating, commuting, and air travel) and update the inventory every other year thereafter.
2. Within two years of signing this document, develop an institutional action plan for becoming climate neutral.
3. As part of this process JCCC should use the new Sustainability Tracking, Assessment, and Rating System (STARS) developed by the Association for the Advancement of Sustainability in Higher Education (AASHE). Students could pursue service-learning credits while helping JCCC introduce this system.
4. The Commitment requires us to take at least short-term steps while the long-term plan is being implemented. JCCC has chosen to pursue three steps:
 - a) Purchase only Energy-Star certified appliances/computers.
 - b) Ensure that all new construction is LEED (Leadership in Energy and Environmental Design) certified
 - c) Participate in the Recyclemania competition.

Long Term:

1. Make the rhetoric of the commitment and the actions in the institutional action plan reality.

Purchasing:**Ongoing Efforts:**

Conversations are ongoing between the Sustainability Committee and Purchasing regarding developing a green purchasing code. A new contract with Dell specifies that discarded computers are to be refurbished or recycled rather than sent to landfills.

Recommendations:**Short Term:**

1. Finalize a green purchasing code and revisit it frequently as technologies change.
2. Ensure that vendors are aware of the importance of sustainability to JCCC so that they can offer appropriate products to the institution.

Community Outreach:

As a community college, JCCC has an obligation not only to serve students, but the larger community in which it resides. JCCC should develop a variety of programs dealing with sustainability for that community.

Recommendations:

Short Term:

1. Continue to offer public forums dealing with environmental/energy issues that not only inform but also offer chances for dialogue.
2. Find ways to include service-learning options for JCCC students in community sustainability activities. Civic engagement is a JCCC goal, and here is an important realm for that engagement to happen.
3. Assess community interest in continuing education programs in this area and offer programs accordingly.
4. Cooperate with local/regional entities (Mid-America Regional Council, the City of Overland Park, Burns and McDonnell, Climate and Energy Project, Sierra Club) that have made sustainability important to their organizations.
5. Be a host institution for an intensive survey of Kansans and their attitudes on sustainability-related issues. Such information would help focus JCCC's efforts as well as be useful for policy-makers and local businesses.
6. Partner with a local community and assist them achieve a certain community sustainability-related goal (like reducing energy usage by 2% over a year).

Submitted by the JCCC Sustainability Committee

Chair: Jay Antle

Subcommittee Chairs:

Curriculum: Deborah Williams

Dining Services: Jay Antle

Energy/New Buildings: Rick Monk

Recycling/Waste Minimization: Julie Haas

Water/Grounds: Lynne Beatty

Members: In no particular order

Tim Gelvin

Ben Leary

Marilyn Rhinehart

Annette Stoerman

Chris Worthington

Janie Thacker

David Kriegh

Kelly Gernhart

Leslie Quillen

Lindy Robinson

Mark LaBarge

Jay Glatz

Robyn Albano

Marcia Shideler

Courtney Haddock

David Belt

Debbie Rulo

Jan Cummings

Dennis Kuder

Doug Patterson

Heather Shuey

Janette Funaro

Jean Keating

Jo Randolph

John Webber

Judy Follo

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Michael Rea

Mitch Borchers

Nancy Whedon

Steven Giambrone

Stu Shafer

Vincent Miller

Wendy Farwell

Bob Brannan

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Tina Farris

Laura Johannesmeyer

Ray Kenny
Robert Smith

Sally Gordon
Shawn Broderick