

EVERGREEN – Implementing A Sustainability Program

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ABSTRACT

This proposal, submitted to CACUBO for consideration in the Best Practices Award Program, will demonstrate the implementation of Delta College's Office of Business and Finance sustainability program. It is a unique venture in that it found its roots in the Facilities Management, Business Services, and Finance areas.

Long before *greening* and *sustainability* were buzzwords, conservation, efficiency of operations, growth by substitution, and recycling were employed as routine departmental measures. More recently, with the support of President Jean Goodnow, *EverGreen* was formalized as the department's environmental sustainability program. Our goal is to systematically incorporate sustainable practices and decision processes throughout our operations and to serve as a catalyst for awareness and education throughout the College community.

This proposal will outline the process by which the department was able to apply its past initiatives and its successful environmentally-conscious ventures into a full fledged sustainability program that has since gained momentum as a college-wide priority. It will illustrate how standard operating procedures based on efficiency, cost savings, and environmental awareness have become a respected model of best practice on the campus of Delta College, as well as within the college and university educational environment.

INTRODUCTION TO THE ORGANIZATION

Delta College is a comprehensive community college located on a 640 acre campus in Bay County, Michigan. Since opening in 1961, Delta College has provided educational opportunity to residents primarily located in three counties, Saginaw, Midland and Bay. This tri-county area is one of the major concentrations of population within the state. The most recent census reports indicate an area population of approximately 400,000.

Delta College is centrally located within the district and the main campus lies midway between the three counties' major cities. This triangle forms the heart of the Saginaw Valley area and is adjacent to the Saginaw Bay. In addition to the main campus, Delta College also has a major center in each county, including the Delta College Planetarium and Learning Center in Bay City. The main campus is noted for its miles of nature trails, tennis courts, running and fitness trails, Fitness and Recreation Center and beautifully landscaped courtyard garden.

Under the marketing slogan, "The Delta Difference: Quality, Affordability and Personal Attention," over 10,000 students attend classes each year, producing over 205,000 credit hours. There is no typical Delta College student. Students differ considerably in their ethnic, social, and economic backgrounds and their educational goals. Most students (83.9%) reside in the tri-county district and they typically work full or part time and attend college on a part time basis. Approximately two-thirds of students enrolled for six or more academic credits receive some form of financial aid. Over the years, students have been asked about their reasons for choosing and attending Delta and the five major reasons given have been: location of Delta (close to home and/or work); curriculum or programs offered; low costs; course work relevant to goals; quality of instruction. Surveys also indicate that 90% of Delta career occupational graduates find jobs locally and within the State of Michigan. Hundreds more continue their education by successfully transferring to senior universities.

Delta College is a charter member of the National League for Innovation in Community Colleges. Delta's membership in the League of Innovation affirms that it is devoted to the improvement of learning

through experimentation and innovation. Participation in League activities enables the College to adapt and adopt those innovative practices which have proved effective elsewhere, while sharing the results of its own innovations with colleges in other districts.

Delta College is accredited by The Higher Learning Commission and is a member of the North Central Association of Colleges and Schools (NCA). Initial accreditation was granted the College in October 1962 by the Michigan Commission on College Accreditation. Under the leadership of President Jean Goodnow, Delta College has been accepted as a member of the Academic Quality Improvement Program (AQIP) sponsored by our regional accrediting agency, the Higher Learning Commission. The College is committed to becoming an institution dedicated to continuous quality improvement. As part of AQIP application process and moving the college towards continuous quality improvement, a college-wide Summit was held in March 2006. Over 450 people participated, including members of the Board of Trustees, faculty, staff, students and community members. A second summit, to address the College's investment in environmental sustainability, is scheduled for March, 2008.

Delta College has sufficient financial resources to fulfill its mission, due largely to a long-standing philosophy of sound financial management with a focus on fiscal integrity and planning for future generations. Despite cuts in state funding for the past five years, the College remains financially strong and well situated for future financial sustainability. With a budget of approximately \$55 million, the sources of revenue include property tax (41%), state aid (23%), tuition and fees (34%) and other (2%).

The College developed a comprehensive facility master plan in the early 1990's to address its aging facilities originally constructed in the early 1960's. Major project investment since 1996 total over \$90 million, including a new Library and Learning Information Center, science classrooms and labs; health, wellness and aquatics facilities; expanded Manufacturing and Technical Trades Complex; a Digital Television Broadcasting Center, a Corporate, Small Business, Technology and Workforce Development Center; renovated Bookstore and Food Service; and student spaces as well as general

upgrades throughout the campus and grounds. The Delta College Planetarium Science Learning Center, completed in 1996, is a destination landmark campus center in downtown Bay City, MI.

Delta College has a staff of over 500 full time employees including 212 full time faculty and 302 part time faculty. The average years of service for a Delta College employee is 14. Over 50% of employee turnover is due to retirements. The College has enjoyed 40 years of shared governance. The Delta College Senate is the internal governance structure of faculty and administrative/professional staff whose purpose is to initiate, recommend and facilitate college governance matters. It provides an avenue of communication and involvement for college faculty, staff and students.

STATEMENT / RESTATEMENT of Problem / Initiative

Delta College is proud of its heritage and progress toward the development of an environmentally sustainable campus. Delta's path towards a sustainable campus is unique in that it found its roots in the Facilities Management and Business areas. Although not historically coined 'green', Delta College has consistently initiated practices to encourage reduction, the cornerstone of any environmental initiative. We adopt proactive rather than reactive approaches.

Long before 'greening' and 'sustainability' were buzzwords, conservation, efficiency of operations, growth by substitution, and recycling were employed as routine measures. The Facilities Management, Business Services, and Finance departments have an impressive record of responsible environmental compliance and safety regulations, promotion of environmental practices, renovations that address energy conservation, and our "best practices" recycling program.

Because of the nature of our department's role in campus operations, we recognized our responsibility to provide an opportunity to consider, develop, and implement processes and practices intended to improve the quality of our campus environment. A viable sustainability program would tie directly to all five of Delta College's Strategic Focus areas: Student Success, People Focus, Program & Service Excellence, Financial Stability, and Community Relationships.

The challenge was to assess our history and bring past projects and benchmarks under one umbrella called sustainability. Our task would be to develop a program that would systematically incorporate sustainable practices and decision processes throughout our operations and to serve as a catalyst for awareness and education throughout the College community. We would need to build consensus and buy-in by setting an example to the college community that, not only was it economically sound, but the 'the right thing to do'.

Because new programs (ie, change) can be met with resistance, it was important to market and present sustainability in such a way that departmental staff, as well as the campus community, would recognize it as a mode of operation we had already been following. This would just be a more all-

inclusive and better defined program. It would provide education, direction, and a distinct role for the individual. Additionally, it was essential to create and present a viable program to ensure it would be accepted as legitimate and not a just a 'hop on the bandwagon' endeavor.

DESIGN

In late 2006, by suggestion of the Director of Business & Finance, we began to discuss the trend towards formalized campus sustainability programs. It was unanimously acknowledged that, although we had been incorporating green practices into our operations for many years, we hadn't been using the new buzzwords *sustainability*, *greening*, or *LEEDs*. We also had not coordinated or marketed our ventures as sustainability. Instead, we called our projects recycling, energy management, conservation, paying attention to the bottom line, efficiency, and substitution by design; essentially it was an efficient and cost effective, '*right thing to do*', way of operating.

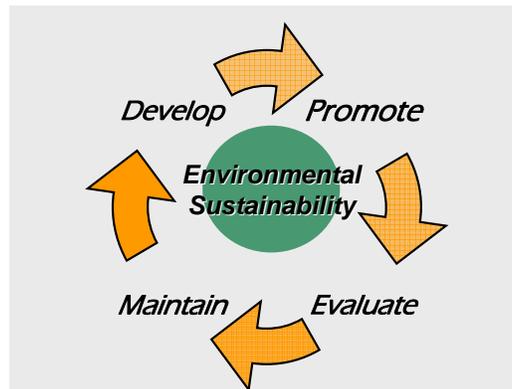
Working within the structure of our already existing framework of personnel and job functions, a program outline was developed. The project required a couple of months dedicated to the gathering and documentation of historical data with focuses on energy and cost savings, conservation, efficiency, and recycling efforts. (Although not employed in the discussion and planning stages, faculty, students, and staff outside of the immediate department were utilized later in the construction of the webpage, marketing, graphic design, and broadcast production.)

We relied heavily on databases, archival documentation including meeting summaries, newsletters, program flyers, project files, and staff memory banks. A series of meetings conducted with each of the departments under the Business and Finance reporting structure were especially helpful. Department supervisors conducted brainstorming sessions with staff. They recalled and documented any cost saving initiatives that addressed the environment, efficiency, or conservation such as building renovations, grounds management, paper use, print materials, office practices, parking lot and walk maintenance, cleaning products, communication methods, food products. Also solicited were ideas for future projects regardless of size, potential cost, or reach.

Past projects were entered into a spreadsheet under broad categories including Business Services, Building & Construction, Energy Management, Furniture & Fixtures, Ground Maintenance, Operations &

Maintenance, and Recycling. The spreadsheet entries would eventually become the body of the EverGreen website.

After the initial planning phase, we were surprised to find we had the basis for a viable departmental sustainability program. Moving on to the implementation phase, we realized the sustainability program would be similar to other initiatives and projects; it would require development, promotion, evaluation, and maintenance. The process would be a continually evolving; so, we patterned our model after the familiar recycling chasing arrow--a constant circle and continuation of effort with one phase dependent on the other.



IMPLEMENTATION

Early on, we conceded that a well-developed philosophy and a statement of intention would be important to the acceptance and success of our program. We also focused on building a marketing campaign that would present a consistent message across the college community. It would need to address our past initiatives, establish a heritage of conservation and environmental progress, and promote future growth. The marketing campaign would have to prove capable of encompassing our hope that the program would eventually expand college-wide. Also imperative to a successful program, would be the component of individual action and a return of benefit to the individual for that action.

Our first order of business was to develop a program outline. During this process, our meetings were not conducted as an informed group but rather as a question and answer session. What would our foundation be? What did we hope to and intend to accomplish? How could we apply practices of sustainability that would invite action by the individual? How would we begin to establish initiatives? The final Sustainability Program Outline provided our planning group with a systematic approach from which move forward ([Appendix A](#)).

(Note: Please refer to **Phase I – Development: Establish Past Initiatives** addressed in the Design Category of this proposal.). During this phase, we gathered and recorded past initiatives that addressed the environment, efficiency, or conservation, as well as solicited ideas for future projects regardless of size, potential cost, or reach.

Phase I – Development: Program Philosophy / Process was not as labor intensive as the data gathering phase, but required a careful thought process. It was two fold—it needed to address our core principles and values as well as presenting methods of measuring and evaluating the ideas and initiatives we hoped to generate as the program gained momentum.

It entailed the development of a philosophy statement that, on a broad level, would address the college mission and value statements and link directly to all five of Delta College's Strategic Focus areas: Student Success, People Focus, Program & Service Excellence, Financial Stability, and Community

Relationships. On a departmental level, it would present action statements upon which Facilities Management, Business Services and Finance could identify their role as change-makers in creating a sustainable future.

Again, it became a question and answer session. Would the program, as presented by the department and interpreted by the college community, be more readily accepted if we were perceived as a catalyst versus a leader? What administrative and operational activities could readily, and in the future, incorporate sustainability into its functions? Would it be more beneficial to present the documents as guiding principles or as a policy?

We carefully scrutinized the phrases used to convey the program intentions—not only to the department but to the college community. We chose sustainability ‘philosophy’ over ‘policy’ or ‘principle’ because we felt it would better demonstrate a commitment to the initial program as well expressing an openness to change and grow as campus sustainability evolved. From the archival list of projects, we were able to further define those areas within each department where sustainability could find a niche and have plenty of room to grow.

The final draft, a product of several meetings, was presented to the College President for review. The Environmental Sustainability Philosophy Statement (**Appendix B**) allowed a foundation from which all other pieces of the program would find foothold. It proved indispensable in the phases to follow -- developing a web template, creating marketing pieces, and determining criteria for evaluation and measurement. Now that we had an archival list of projects, a statement of intent, and a plan, we were ready to introduce sustainability to the college. Thus began the implementation/promotion phase.

Phase II – Implementation: Introduction and **Phase II – Implementation: Promotion** were rolled out simultaneously. On the introduction side, key players from each service area were identified and introduced to the broader concept of sustainability. In turn, they educated their immediate reporting area. Department supervisors were asked to begin an initial review of existing policy, procedure, and marketing publications to determine where sustainability might be incorporated. This review would

eventually feed into the development of service area sustainability standards and action statements.

Schedules of periodic meetings were set during which time service areas would have opportunity to report progress and generate initiatives.

On the promotion side, two sets of announcements were created which would be distributed via the college electronic mass mail system (**APPENDIX C**). The first set would serve as reminders of past initiatives and would establish a heritage of campus conservation measures. A message of introduction and support by the college president was drafted (**APPENDIX D**) which would also introduce our departmental sustainability website. A hardcopy flyer would be distributed in the same time frame.

Brochure

We approached the development of the hardcopy brochure (**APPENDIX E**) with the goal of incorporating the color green, emphasizing program longevity, and eliciting enthusiasm for individual participation. The brochure would need to address our heritage of conservation, efficiency, cost effectiveness, and eco-conscious approaches to managing our facility. As it was, we were fortunate on a couple of accounts.

Green and white are the official Delta College school colors. So, we capitalized on the longevity of the color, tied it to the fact that ‘green’ had been incorporated into the fiber of our choices for many years. The cover copy was titled ‘Delta College, Where Our Color Will Always Be Green’. Also to our advantage, the evergreen is part of the official college seal. To reinforce that sustainability is a viable part of our operation and is here to stay (ie, official), the evergreen was replicated and built into the design graphics. It would eventually be utilized as a program branding piece.

It was important for the campus community to understand that we were not hopping on the now mainstreamed sustainability bandwagon, but that our intentions for greening were always a priority. As a result, we integrated the theme, ‘Yesterday’s Projects, Today’s Initiatives, & Tomorrow’s Ideas’ to reflect

sustain and our *ability* to progress through the years. (This theme would be carried over as a website template.)

Understanding that a successful program would only occur with the component of individual action, we debated an appropriate tag line that could be repeated in other promotional materials, on-line communication, and on the website. ‘There is power in a single action...Yours’ became the final culminating statement on the brochure.

The brochure cover announces ‘*EverGreen: Environmental Sustainability – Yesterday, Today, Tomorrow*’. It unfolds to the campus signature courtyard and the copy ‘*Delta College, Where Our Color Will Always Be Green*’. On the inside, the side bars ‘*Sustain*’ and ‘*Ability*’ border the statement of intent overlaid among evergreens. To familiarize the campus community with the broad realm of sustainability, a short list of sustainability projects is included. The reverse copy invites the reader to learn more the program and introduces ‘*The Power of a Single Action*’.

Website

The brochure copy ‘*Yesterday’s Projects, Today’s Initiatives, & Tomorrow’s Ideas*’ was applied as the website template. Using the database listing, projects were divided into broad categories such as Business Services, Building & Construction, Energy Management, Furniture & Fixtures, Ground Maintenance, Operations & Maintenance, and Recycling. Each broad category was divided into past, current, and future projects.

The side bar offers the user the choice to view particular projects or, by clicking on ‘Power of Single Action’, ways in which their actions can make a difference. The website menu offers choices of interest to the individual user, specific departments, and other colleges and organizations. It offers opportunity for involvement by the student, staff, visitor, and surrounding communities. It provides a definition of sustainability and also lists news and events. We invite you to access the EverGreen website at www.delta.edu/evergreen.

Announcements

Online communication is the farthest reaching method employed to share our department's sustainability program within the institution. Creating a consistent and comprehensive communication system encourages the campus community to become part of the process. As the program unfolded, the second series of announcements was developed (**APPENDIX F**) and are periodically distributed via the college electronic mass mail system.

Each announcement is formatted to introduce an environmental problem/situation (ie, 'did you know this has been happening?'). The problem is followed by cause and effect which may not always be readily apparent to the reader (ie, organic coffee / migratory birds or cell phones / ground water contamination). Each message explains our department's effort toward a sustainable solution and offers the reader an opportunity to participate, as well. And last, to promote familiarity and to expose the reader to the breadth of the program, the announcement makes referral to the website. The EverGreen program relies heavily on the '*Power of a Single Action*' and, as you can see from sample documents, it is incorporated in many communication pieces and on our website.

Another group of announcements have since been developed to provide follow up on past projects and challenges. Reporting collection results and measurements reinforces the proof of the single action. It also captures the momentum that comes about with tangible results and paves the way for introducing new challenges such as increasing collection rates or decreasing consumption.

Broadcasts

To reach audiences beyond the campus boundaries, we took advantage of the College's Quality Public Broadcasting TV, which serves a population of approximately 1.2 million viewers and listeners. They collaborate to produce a segment about campus sustainability as part of the 'Dateline Delta' series. Dateline Delta communicates the educational efforts of Delta College. The segment focused on Facilities Management projects which have impact the campus operations such as white roofs, solar array,

recycling, and solar signage. We later broke the broadcast into smaller vignettes to be used in orientation sessions, group presentations, professional development, and as a rolling video during student events.

Visual Displays

Display tables, managed by student employees, are periodically stationed in the main corridors to provide information to students. They offer brochures, rolling video, give-a-ways, and plenty of one-on-one dialogue. Suggestions are always welcomed.

A series of posters has been created each highlighting a single initiative such as the use barley straw as a pond algaeicide, argon windows, and automated lighting. They focus on quick facts about the college public areas that incorporate natural or energy saving devices. The posters are periodically installed in student/visitor occupied areas and are used during special events.

Phase III – Evaluation During the evaluation phase, we focused on developing sound criteria and measurements against which we could benchmark a broad range of sustainable projects—from tabulating junk mail reduction and managing storm water to assessing the efficiency of white roofs.

The criteria would serve a dual purpose. Not only would it be used to evaluate whether an existing project had met its proposed goal, but it would also help to determine up front whether an idea was a sound candidate in relationship to sustainability. The ultimate goal would be to satisfy the ‘triple bottom line’ approach which considers the financial, environmental, and social progress of each project.

There are many methods of measurement; the criteria would have to employ some degree of flexibility or ‘weighted range’. Not all projects can be quantified in numbers or dollars and others might employ several methods. To monitor the success of a project, or the need for improvement, it would be important to gauge all of its benchmarks. For example, what may look good as dollar savings may actually represent a need for material reduction. Or, when measuring community involvement, the immediate impact may not be readily known -- it may only be that a dialogue has been opened. There is also the aspect of cost vs. far reaching benefit such as the social implications of organic / fair trade purchases.

We recognized the need to look at all the methods of measurement (as listed below) to determine whether process improvement might be necessary and to what degree.

- Energy Conservation
- Natural Resource Impact
- Process Improvement
- Rebates & Cost Avoidance
- Productivity
- Life Cycle Extension
- Safety Enhancements
- Closed Loop Containment
- Community Involvement
- Employee / Student Response
- Materials Reduction / Recovery

During the implementation / promotional phase, several new initiatives were introduced including green cleaning, printing service ink choices, mercury reduction, junk mail reduction, and storm water treatment. Also, additional materials (cell phones, ink cartridges, transparencies) were rerouted from the waste stream to the recycling collection. We evaluated these initiatives, as well as several past projects. Updates were communicated and new goals were introduced for many on-going initiatives.

Phase IV – Maintenance included instituting and communicating changes identified in the evaluation phase. Our group developed several maintenance techniques to help sustain the program’s momentum:

- Revisit Triple Bottom Line – strive to satisfy the financial, environmental, and social aspects
- Suggestion – solicit suggestions for change or improvement
- Investigate New Avenues – update processes for collection, conservation, efficiency
- Raise the Bar - create greater challenge to existing programs
- Adjust the Process – Streamline a current process for ease or collection efficiency

For those processes and projects requiring little or no change, feedback on progress is important to sustain enthusiasm and continued participation. Feedback is communicated through a variety of avenues:

- EverGreen Website
- Mass Email Distribution
- Student Bulletins
- Employee Online Notices
- Campus Newspaper
- Posters / Photo & Information Displays
- Student Environmental Club
- Campus Events
- Student Presentations

Most importantly, we advocated dialogue. In an effort to create collaborative departmental relations, to become eco-literate, to offer suggestions for improvement, and to generate new ideas, conversations about sustainability are highly encouraged.

BENEFITS

Building a positive image for the college is always a priority. Over the years, local newspapers and television broadcasts have provided outstanding coverage of the college's energy and conservation efforts. The recycling program has been recognized as a 'best practice' by the Michigan Recycling Coalition and the Recycling Newsletter has been awarded the Admissions Advertising Award. (Refer to: **APPENDIX G - History of Environmental Initiatives**)

Department Specific

The endorsements, benefits, and enthusiasm for the Facilities Management, Business Office and Finance Environmental Sustainability Program have far exceeded the department's expectations. Below is a listing our accomplishments in less than one year since its initial implementation.

Green Cleaning Award

Delta College Facilities Management custodial team was recently chosen as the recipient of the Green Cleaning Award for Schools and Universities (college category/grand prize) sponsored by American School & University (AS&U), the Green Cleaning Network and the Healthy Schools Campaign. The proud 'Green Team' was featured in the December issue of AS&U.

AS&U's Green Cleaning Award recognizes educational institutions for exemplary green cleaning programs defined as one that "goes beyond chemical and equipment choices. It includes policies, procedures, training and shared responsibility efforts that minimize the impact of cleaning on the health of building occupants and staff, and that protect the environment as a whole."

Green cleaning and indoor air quality programs have created a safer environment for workers. To date, the college has a record of zero worker compensation claims for injury with cleaning products. Also, products and materials requiring a Material Data Safety Sheet MSDS have decreased as multiple products are replaced with single multi-use products. The labor to conduct the inventory of their storage

and use and the management of MSDS has diminished.

The next step is to complete the process to gain certification as an in-house green cleaning team. Acquisition of this certification will be applied to LEED's certification of future campus renovations and new building projects.

Facilities Management Projects

- Green Trail Development to connect Delta College with neighboring Saginaw Valley State University and eventually the tri-country area. Titled "University Center Trail", the project was recently awarded a grant by the Saginaw Bay Watershed Initiative
- Mercury Reduction Program
- Solar Array Installation
- Junk Mail Reduction
- Storm Water Management and Water Course Treatment

New Materials Introduced for Recycling Collection

- Cell phones, print cartridges, transparencies, license plates, metal
- Classroom paper collection, "It's Not Just a Brown Box" was kicked off for the Winter 2008
- Office paper recycling milestone goal of \$200,000 cost avoidance and 1000 tons

E-Mail Tag Line

We are currently in the process of developing a college-specific e-mail tag line that can be dropped into automatic signature lines to prompt readers to consider their use of paper and excess printed copy. The tag line will present a unified appearance as a campus and would underline the College's environmental commitment especially with off campus communication. It incorporates the evergreen from the official college seal and replicates the graphic from the EverGreen brochure.

Presentations

- MiAPPA, March 2007
- MCCBOA, July 2007
- League for Innovation Sustainability Symposium, Lane Community College, Oct 2007

Professional Development

- Campus professional development session “The Power of the Single Action” to be offered beginning in February 2008
- Sustainability for Community Colleges, Cornell University, July 2007
- Greening of the Campus VII, Ball State University, Sept 2007
- League for Innovation Sustainability Symposium; Lane Community College, Oct 2007
- Lane CC National Sustainability Conference – Speakers Committee 2008
- Bay Area Coastal Initiatives Liaison

Campus-Wide

Since the introduction of our department’s program, a movement towards campus-wide sustainability has taken place. The Facilities Management team plays a key role. With the support and vision of Delta College President Jean Goodnow, we’re looking forward to an partnership with the color green and sustainability across the campus.

Areas and initiatives will overlap. What we plan as conservation and methods of efficiency will affect the learning environment of our students and the office environment for our staff. What we practice in the classroom will affect our students and how they think about their actions. The vision has expanded to bring sustainability into the academic curriculum. How the graduate applies that knowledge and experience to world in which we live, work, and play will impact future generations.

President’s Climate Commitment

In November 2007, the College signed on as a Charter Signatory of the President’s Climate Commitment. To date, as part of this commitment, we have established an institutional structure to guide a campus-wide sustainability plan, documented tangible action commitments by developing both an Energy Star Procurement Policy and a Green Building Policy.

STARS

The College has applied for and only recently been accepted to participate as a pilot campus in the STARS (Sustainability Tracking, Assessment & Rating System for Colleges & Universities) system. The majority of the ratings, nearly 50%, pertain to Facilities Management functions. We recognize STARS as a mechanism which will aid in establishing goals, benchmarking current initiatives, and helping to plot a course for our sustainable future. By becoming involved at the groundwork level, we will be able to establish measurements that will allow for consistency throughout our processes.

Sustainability Task Force

Delta College President, Dr. Jean Goodnow has established an Environmental Sustainability Task Force whose charge is to advise the President on matters pertaining to the environment and sustainability and more specifically:

- To engage the College in an ongoing dialogue about environmental sustainability
- To integrate sustainability with campus programs in education, operations, and community services
- To instill a culture of sustainable long-range planning & forward thinking design

Membership includes Facilities Management, executive, faculty, student service, and student representation.

Sustainability Summit

On March 14, 2008, Delta College is hosting a campus-wide Sustainability Summit to announcement sustainability a priority in our college goals. The Summit is open to all faculty and staff to create collaborative departmental relationships and as an learning experience.

RETROSPECT

We encourage other colleges/organizations to spend the greater time in the development stage.

From our experience, the three essential components to implementing a successful program are:

- a well-thought out philosophy and statement of intention. They were key to the acceptance and success of our program. We would like to stress the importance of developing intention prior to moving forward with other elements of the process.
- determining the marketing campaign to ensure follow through with a consistent message that has the capability of encompassing an expanding program. It is essential to consider its short-term intention and its applicability to a long-term process.
- the component of individual action and a benefit to the individual for that action. Sustainability is broad and far-reaching and its meaning can be confusing; so it is important to build awareness and educate in increments by using examples that are familiar to the individual.

In retrospect, several pieces of the Facilities Management, Business Services and Finance Sustainability Program Outline should have been relegated to a second phase implementation. They are pieces that are dependent on the program being in practice before they can be developed and researched properly.

APPENDIX A

Facilities Management, Business Services and Finance

Sustainability Program Outline

Development

Establish Past Initiatives

- 1) Gather and record past sustainability projects from service areas
- 2) Create / update tracking tools for past sustainability projects
 - a) Energy conserved, dollars saved, materials/labor reduced, etc.
- 3) Research recognition opportunity for past initiatives

Program Philosophy / Process

- 1) Develop philosophy statement linked to college mission and value statements
- 2) Develop action statement tied to service areas
- 3) Develop criteria, measurement, and process to evaluate past & proposed initiatives
 - a) lower life-cycle costs, improved productivity, lower operating costs, decreased environmental impact, enhanced learning opportunity, increased individual awareness, influence future generations

Implementation

Introduction

- 1) Determine & meet with key players to introduce program to service areas
- 2) Program announcement to college
- 3) Integrate into administrative and operational decision making and processes
 - a) review existing policy, procedure, marketing publications, web pages, etc. for inclusion of sustainability
- 4) Schedule periodic meetings w/service areas to report progress & generate initiatives
- 5) Develop service area standards & goals (purchasing and procurement, life-cycle of materials, equipment infrastructure, energy conservation)
- 6) Research recognition opportunity for proposed & future initiatives
- 7) Develop initiatives for community partnership
- 8) Research and determine how local, state, and national requirements may affect Delta's program

Promotion

- 1) Delta-L announcements of past initiatives (relate to sustainability, include tips for college support)
- 2) Develop marketing plan
 - a) website & front page announcement
 - b) visual displays / display cases
- 3) Research membership w/higher education and other sustainability organizations
- 4) Communicate new initiatives

Evaluation

Evaluate Progress

- 1) Benefit to department and service areas
- 2) Have initial goals been met?
- 2) Use evaluative process to determine future steps

Communicate progress

- 1) To campus, community, partnerships, membership organizations, etc.

APPENDIX B

DELTA COLLEGE FACILITIES MANAGEMENT, BUSINESS SERVICES and FINANCE ENVIRONMENTAL SUSTAINABILITY PHILOSOPHY STATEMENT

Delta College has made significant progress toward the development of an environmentally sustainable campus. The role of Facilities Management, Business Services and Finance in campus operations imparts responsibility and provides opportunity to consider, develop, and implement processes and practices intended to improve the quality of our environment. By incorporating sustainability practices throughout operations, it is the intention of Facilities Management, Business Services, and Finance to serve as an example and a catalyst of environmental awareness to the College community.

With this goal in mind, Delta College Facilities Management, Business Services and Finance adopts sustainability as an evolving practice and is committed to:

- Adopting a ‘triple bottom line’ approach that incorporates financial, environmental, and social benefits as major components in departmental decision-making.
- Incorporating environmentally-conscious choices into purchasing and procurement processes.
- Engaging in and demonstrating sustainability practices that enhance the life-cycle of our materials, equipment, and infrastructure.
- Promoting health, productivity, and safety of the campus community through the planning, design, construction, and maintenance of its buildings and grounds.
- Encouraging environmental inquiry and collaborative departmental relations across all levels to recognize and implement changes designed to decrease or eliminate the environmental impact of our actions.
- Engaging in departmental practices and programs that provide learning opportunities for staff and foster individual environmental awareness.
- Establishing indicators and measurements of departmental environmental practices and programs to aid in realizing our intentions for sustainability.

Furthermore, Delta College Facilities Management, Business Services, and Finance Department including Bookstore, Custodial, Operations & Maintenance, Fitness & Recreation, Food Services, Grounds, Post Office, Printing Services, Purchasing, Shipping & Receiving is dedicated to incorporating sustainability in all of its administrative and operational activities including:

Energy Conservation	Food Selection & Service	Furniture & Fixtures
Grounds Management & Land Use	Health & Safety	Life-Cycle Management
Maintenance & Cleaning	Operating Costs	Purchasing & Procurement
Recycling & Waste Reduction	Transportation & Travel	Materials Receipt & Shipment
Building Planning, Design & Construction		

to ultimately build, benefit, and enhance:

Community Partnerships	Collaborative Departmental Relations
Positive Environmental Impact	Health, Safety & Productivity
Individual Awareness	

APPENDIX C – Sample Announcements

RECYCLING RIDDLE - What's **green**, weighs **1000 tons**, and takes 16 years to **grow**?

The campus mixed paper recycling program! In 1991 when the program was introduced, campus recyclers enthusiastically collected eight tons of recyclables while the college realized cost avoidance of \$650 in trash fees. As we approach the end of this fiscal year, we are excited to be nearing a record 1,000 tons in collection and \$200,000 cost avoidance. (Savings are realized through a combination of lengthening intervals between trash removal and reducing tip fees.)

We only need 14 ½ tons to meet the 1000 ton goal; but, with monthly collection averaging six tons and only two months left, we'll need to increase our efforts. Follow these quick tips for power recycling and let's get ready to weigh in!

- Transfer recyclable materials like paper, magazines, catalogs, boxboard, newspaper, junk mail, and phone books from the wastebasket to your recycling tote.
- Spring clean your office, lab, or classroom! Recycle past semester brochures, past year catalogs, and dated materials.
- Avoid contaminants: food products & packaging, beverage containers, paper bags/lunch sacks, plastics & plastic wrap, foam core, and polystyrene. Contaminants in a few bins can be cause for refusal of an entire shipment.
- Recycle shipping boxes! Cardboard constitutes the college's largest volume of recyclable material.
- Avoid including non-paper materials such CD's, DVD's, and credit cards in office shredders. Combining materials during the shredding process poses potential contamination to the recycling stream.

Together we can make a difference! The countdown starts.....NOW! For more information on campus recycling, visit www.delta.edu/evergreen.

AT DELTA COLLEGE, WE WON'T LEAVE THE LIGHTS ON

In the past couple of years, several energy saving initiatives were incorporated into the classroom, office, and campus open space as part of building renovations. Sustainable practices save energy while upgrading both the work and learning environments. Reduced energy consumption takes sustained effort by everyone. New technology measures and individual behavior are equally important when addressing environmental impact. You can make the switch to off by reducing your personal energy use on campus:

- Turn off unnecessary lighting. Use natural light or energy efficient task lighting instead of overhead lighting whenever possible. Turn off the lights when you leave a room.
- Computer screens are the biggest consumer of energy in your computer. Minimize the use of screen savers and instead enable power-saving features so your computer will go in a lower power, blank screen 'sleep mode' when not actively in use. Turn off your monitor whenever you'll be away from it for an extended period.
- Turn off your computer, monitor, speakers and other office or classroom equipment when you leave for the day.
- Unless you are handicapped, refrain from using automatic handicap door devices. This also extends the life of the equipment.
- Replace incandescent light bulbs in desk lamps with compact fluorescent bulbs. They use 75% less energy and last 10-13 times longer than standard bulbs.
- Turn off smart classroom projectors and other equipment when not in use.

There is power in a single action. Interested in how you can make a difference? Visit www.delta.edu/evergreen.

GREEN INSIDE & OUT

Inside or out, at Delta College our color will always be green. Grounds Manager, Kevin Bublitz sees to it that Delta's defining color reaches beyond the building and into the outdoor space. The grounds crew has increasingly incorporated natural products and processes to maintain our green lawns, green courtyards, green trees, and green foliage.

- Milorganite, a natural fertilizer produced from Milwaukee wastewater sludge, is used to green the lawns. Manufactured in Michigan, this slow-release fertilizer contains virtually no chemical salts, so it never burns. Milorganite will not leach from the root-zone with frequent watering--that means no groundwater contamination.
- Fallen leaves and grass clippings are mulched back into the soil to provide up to an additional 25% of fertilization needs.
- Excess grass clippings are composted and serve as a food source for the bacteria in the soil while decomposing. Later, the composted material is returned to landscape beds as humus.
- Insecticide application is limited only to spot treatments and not used as a broadband for preventative maintenance.
- Shrub trimmings and tree limbs are ground through a chipper to produce valuable plant bedding. The organic material eventually composts naturally back into the landscape.
- Campus phone books were ground to produce hydro seed mulch for use on newly landscaped areas. The recycled paper weighs down the seed to prevent it from blowing away.

To learn more about greening of the campus, visit www.delta.edu/EverGreen!

APPENDIX D – Message of Introduction & Support by Delta College President

Dear Delta College faculty and staff:

Delta College is proud of its heritage and progress towards the development of an environmentally sustainable campus. As we embrace this transition toward even greater environmental awareness, I am pleased to announce my support for the Environmental Sustainability Philosophy Statement adopted by Facilities Management, Business Services and Finance.

“EverGreen” - Environmental Sustainability in Facilities, Business & Finance

It is the goal of these departments to systematically incorporate environmentally sustainable practices and decision processes throughout their operations and serve as a catalyst for environmental awareness and education throughout the College community.

Delta has an impressive record of responsible compliance with environmental and safety regulations, academic work toward creating environmental awareness in the classroom, service area support and promotion of sound environmental practices, renovations that address energy conservation, and our “best practices” recycling program.

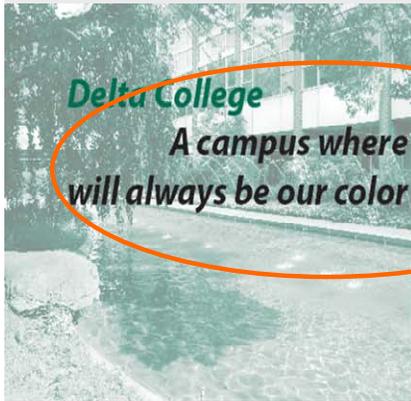
Did you know Delta practices energy conservation through use of a unique ice storage chilled water plant for cooling, has installed energy saving light fixtures and ballasts, uses light sensors and low flow toilets? Grounds Maintenance uses natural environmentally friendly fertilizer products and barley straw as a substitute for chemical chlorines in courtyard pond maintenance. The installation of “white” roofs as a “green” solution during renovation projects reduces peak cooling demand by 15% and saves energy. Printing Services uses soy inks and recycled content paper. Food Services buys and uses unbleached, dioxin free paper napkins and free trade coffee.

I encourage you to visit the website ‘Environmental Sustainability - Facilities Management, Business Services, and Finance’ for more information on past projects and practices, exciting new initiatives, participation, and processes at www.delta.edu/evergreen

Achieving environmental sustainability will be an evolving challenge, and I encourage everyone to develop an increased awareness of social, economic and environmentally friendly practices both within the college and throughout the communities in which we live.

Dr. Jean Goodnow
President
Delta College
(989) 686-9200
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jeangoodnow@delta.edu

APPENDIX E – EverGreen Brochure



Green

Environmental Sustainability
Yesterday, Today, Tomorrow

What Can I Do?

Facilities Management, Business Services and Finance Department

Bookstore, Custodial, Operations & Maintenance, Fitness & Recreation, Food Services, Grounds, Post Office, Printing Services, Purchasing, Shipping & Receiving

There is power in a single action - Yours!

Learn more about **YESTERDAY'S** projects, **TODAY'S** exciting initiatives, and **TOMMOROW'S** ideas...

Visit www.delta.edu/evergreen



Sustain
to continue without interruption

Environmental Sustainability
Delta College has made significant progress toward the development of an environmentally sustainable campus. The role of Facilities Management, Business Services and Finance in campus operations imparts responsibility and provides opportunity to consider, develop, and implement processes and practices intended to improve the quality of our environment and to serve as a catalyst of environmental awareness to the College community.

- Efforts include:**
- Solar powered pedestrian signs
 - Copper, steel, aluminum melted for reuse
 - Furniture direct shipment eliminates packaging
 - Low energy argon windows boost energy efficiency
 - Batteries, lamps, computer media, & electronics recycled
 - Award winning paper recycling program • Asset salvage and sales
 - Barley straw substituted for chlorine to prevent courtyard pond algaeicide
 - Recycled toner cartridges • Surplus food redistribution • Non-motorized greenway trails
 - Low flush toilets • Recycled phonebooks mixed with hydroseed mulch to seed campus grounds
 - Heat recovery systems reintroduce warm air back into building • Unbleached, chlorine-free paper napkins
 - Low mercury fluorescent bulbs & electronic ballast lighting demand 75% less energy • Cell phone recycling
 - Copiers use chlorine-free paper • Recycled content paper & soy ink • Tires ground for reuse as paving materials
 - White roofs reduce peak cooling demand by 15% • Fair-trade & organic coffee • Solar array electric power generation
 - Leaf and grass clippings mulched providing 25% of fertilization needs • Chilled water system produces ice for comfort cooling
 - Lawns fed with natural fertilizer produced from wastewater sludge • Printer cartridges refilled at 20% less cost than new • Cooking oil reuse
 - Lights, air & temperature regulated by occupancy sensors • Soft starter motors & variable frequency drives reduce voltage • Packing materials reuse
 - Renewable fuel source studies • Food service materials recycling • Biomass boiler research • Air travel carbon credits • Storm water treatment investigation

Ability
state of having power, skill, or resources to accomplish an objective

APPENDIX F - Sample Announcements

CALLING ALL CELL PHONES

According to the EPA, an estimated 130 million cell phones will become obsolete and discarded every year for the next 3 years--creating an estimated 195,000 tons of electronic garbage. Out of this number, approximately 75% will be stashed in drawers and closets, only 5% will be recycled, and the final 20% will simply be trashed.

Cell phones contain many toxic materials such as arsenic, mercury, lead copper, and zinc which can create threats to human and animal health and the environment. By properly disposing of used cell phones, they can be reconditioned to extend their useful life, donated to shelters and law enforcement agencies to provide emergency communications, or recycled to extract useful materials. All of these measures help to keep hazardous chemicals out of landfills where they potentially reduce air quality and release harmful chemicals into ground water.

Campus collection makes it easy!

- 1) Locate a 'Retrieve, Refresh, Reuse' dispenser (Library, Commons, S132, F Wing Lobby Post Office)
- 2) Take a plastic envelope from the dispenser.
- 3) Place your cell phone into the FREE postage paid envelope.
- 4) Place the envelope into the mailbox.

Visit <http://www.delta.edu/evergreen> for more information on campus sustainability!

CLEAN & GREEN

Understanding that a fresh, healthy environment is essential in attracting visitors and retaining students, Facilities Management custodial team is adopting a clean, green approach. **Green cleaning** aims to protect our health without harming the environment while maintaining the same quality performance as traditional, chemical-intensive methods. Improved air quality, recyclable packaging, decreased water use, and the elimination of hazardous disposal costs are all benefits of **cleaning green**.

Custodians are stocking their shelves with environmentally-preferred cleaners for glass, grout, floor, carpet, and surfaces from H₂Orange₂ and Green Earth. Packaged in recyclable containers, Green Earth biodegradable products contain no alkaline builders, heavy metals, ozone-depleting, or carcinogenic ingredients. H₂Orange₂ significantly reduces product toxicity by eliminating chemicals such as acids, ammonia, caustics, bleach, ethers, phosphates, dyes or fragrances. Even the vacuum cleaners boast the green seal certification!

Eco-products and individual behavior are equally important when addressing environmental impact. You can help to promote health, safety, and environmental consciousness!

- Focus on quick clean up of spills. Fewer and milder cleaning products can be used when carpet stains and floor spills are reported as soon as they are noticed.
- Many pollutants enter the building on our shoes, so remember to use the entryway mats which will help to trap and remove dirt before it enters the building.
- Take notice of campus rooms which restrict food and beverage.
- Visit www.delta.edu/evergreen to learn more about campus sustainability!

GREENHOUSE GAS REDUCTION – Just a Phone Call Away

It's true! You can reduce greenhouse gas emissions by just dialing the Business Services/Purchasing **Runner Service**. Coordinated by geographical area, **Runner Service** provides a reliable, efficient, cost effective, and environmentally conscious way to move packages and documents to and from main campus, campus centers, and Tri-City locations.

Runner Service coordinates delivery and collection destinations efficiently, thereby:

- reducing travel time of individual errands and their associated costs
- reducing fuel use and vehicle emissions
- managing risk and liability

Services are available at 10:00am, Monday through Friday. Although same day service and special arrangements are accommodated, pre-arrangement is encouraged to make the most efficient use of the program. To request services, phone x9231 (same-day service call by 9:00am).

Delivery items must be labeled with address, contact person, and phone--small items should be dropped at Purchasing (B116) and large items at Shipping & Receiving (P108). For materials being picked up from tri-city locations, please provide address, contact person, phone, and package description.

Adopting sustainable business practices requires an understanding of the interaction and balance of our actions and the process of the natural environment. To learn more, visit www.delta.edu/EverGreen.

APPENDIX G - History of Environmental Initiatives

► Building Planning, Design & Construction

- RetroPlate, highly abrasive and dust resistant flooring, installed in maintenance shops and corridors. Cost effective, it cleans with water, eliminates moisture vapor problems, the need for all topical sealers, replacement flooring, stripping, or waxing.
- Open office design requires less material to create space thus eliminating the construction materials required of for fixed wall construction. Design requires less lighting, VAV boxes, piping, and fire protection heads.
- Construction materials reclaimed and reused during renovation demolition. Concrete and brick were crushed and asphalt ground as an aggregate material base for driveways and parking lots. Copper, steel, and aluminum were melted for reuse.
- Traditional dark roofs were replaced by energy efficient 'white roofs'.
- Vestibules, a standard campus building entrance design, create a secondary air space at a doorway and reduce air inflow while the primary door is open.
- Argon low-energy panel insulated windows have replaced single-glazed, operable windows.

► Energy Conservation

- Auto-flush toilets conserve water while promoting health and safety.
- Chilled water system provides load-shifting method which significantly lowers demand charges and operating and energy costs. (1993)
- Energy Management System programmed to automatically turn off HVAC systems and lighting during unoccupied hours.
- Heat Recovery Systems built into building wings to allow discharged warm air to be recaptured into the make-up air units through heat recovery coils.
- Energy saving initiatives incorporated into the classroom, office, and campus open space as part of building renovations.
 - Former hazardous content office ceiling lighting replaced with low mercury fluorescents
 - 100 watt incandescent lighting replaced with 23 watt fluorescent bulbs in utility tunnels
 - General area light fixtures switched from T12 fluorescents to T8's with electronic ballasts.
 - Light sensors and occupancy sensors installed
- Energy management system automatically timed to turn lighting off during unoccupied hours.
- Induction motors fitted with soft starters motors
- Constant-volume reheat systems upgraded to VAV systems
- Motor-driven systems fitted with variable frequency drives VFD.
- Large scale solar photo-voltaic demonstration project installed in 2006

► Food Service & Selection

- Fair Trade Certified coffee served
- Redistribution of food from catering and special events to local food shelters
- Cooking oil recycling investigated as alternative fuel to power grounds maintenance equipment, as an academic learning opportunity, or for sale for recycling to an outside vendor.

► Furniture & Fixtures

- Used assets are first redistributed among employees. At the limit of their useful life they are made available to the public through the college asset sale. Items not sold after a series of sales are disposed or parts are salvaged.

► **Grounds Management**

- Lawns fertilized with natural fertilizer produced from Milwaukee wastewater sludge
- Grass clippings mulched back into soil or composted
- Insecticide application limited to problem spot treatment and not used as broadband preventative
- Barley straw substituted for chemical chlorines to prevent algaecide in the courtyard pond
- Retention ponds allow surface water to collect and dissipate at eco-recommended rate
- Softball field tracks use crushed red clay brick, an organic and natural material, to improve drainage, reduce compaction, improve safety, and withstand weather conditions.
- Courtyard development between building wings and parking lots help reduce cooling loads in the summer and improve indoor air quality.
- Grounds Maintenance employs more environmentally sound approach to snow removal

► **Health & Safety**

- 2006 Solar powered crosswalk warning signs rely on clean, renewable energy and will operate for up to a month without sunlight.

► **Maintenance & Cleaning**

- Green cleaning products replace traditional, chemical-intensive methods and cleaning equipment that boasts the green seal.

► **Shipping & Receiving**

- Furniture transported by truck and delivered directly to campus from the factory by common carrier eliminating the need to box or crate product.
- Packing materials available for reused by employees for college business or personal packages

► **Print Services**

- Offers up to 20% post-consumer recycled content and processed chlorine-free paper paper
- Campus convenience copiers are stocked with processed-chlorine free paper
- Soy ink and vegetable inks available for certain types of press orders

► **Purchasing & Procurement**

- PO's faxed and items are ordered on online reduces paper consumption and the cost of mailing
- Runner service reduces travel time of individual errands and their associated costs
- E-commerce program allows cost centers to directly order office supplies for their area

► **Recycling & Waste Management**

- Mixed paper introduced in 1991 with materials phased in throughout the years (paper, cardboard, phone books, boxboard, magazines, newspaper)
 - 1994 Recycler of the Year Award - Michigan Recycling Coalition
 - 1995 Admissions Marketing Report for Recycling Newsletter
 - 1998 ECAPS Outstanding Teamwork Award - Delta College Recycling Team
 - 2000 ECAPS Outstanding Teamwork Award - Earth Day Celebration
- Automotive batteries & tires
- Telephone books ground to produce hydroseed mulch for campus landscaped areas
- Universal waste (electronics, lamps, batteries, mercury, printer cartridges, computer hardware/software)

► **Community Involvement**

- 1991 - Rehabilitation Center joint venture to provided paper collecting, sorting and shredding services at no cost to the college.
- 1995 - *Hey Buddy, Ken-ya Spare a Book?* Campaign; used books donated to local prisons and Nakuru, Kenya
- 1995 - Elementary school students use track-fed paper holes from computer paper collected for recycling to learn to count to 1 million
- 1996 - Dow Corning, Tri-County Solid Waste Advisory Council, and WHNN Radio Station donate desk-side collection totes
- 1997 - Delta adopts 30 acres of Bolivian rainforest through The Nature Conservancy
- 1997 - Fashion Merchandising students assemble educational fashion show for community