



LSC Sustainability

Lake Superior College

Spring 2011, Volume 2

LSC's Sustainability Plan of Action

The final draft of Lake Superior College's Sustainability Plan of Action (SPA) is available for public comment! This Plan outlines the campus' 30 year intent to reduce carbon emissions by 50% covering everything from mitigation strategies to educational and community outreach plans to initial financing goals.

The ACUPCC In 2008, LSC signed the [American College & University Presidents' Climate Commitment](#) (ACUPCC). A large part of this commitment requires signatories to write a comprehensive plan to reduce

carbon emissions based on annual greenhouse gas inventories (GGIs).

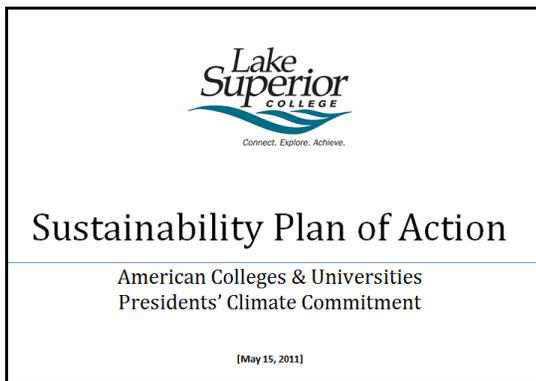
The GGI In 2009, LSC's Environmental Council completed its first GGI and has based projections and goals in this Plan on the results of that inventory.

Did You Know 54% of our

carbon footprint is related to commuting.

The SPA Since May 2010, the Environmental Council has been meeting with members of the LSC's students and employees to create the SPA. The Plan has been reviewed by the President's Executive Committee and is now available on the [EC blog](#)

and waiting for your input. The Plan will be submitted to the ACUPCC website on May 6th. The Environmental Council is committed to, and responsible for, a bi-annual review of the SPA and annual GGI submissions.



Inside this issue:

<i>Disc Golf Course Re-Vegetation Project</i>	2
<i>Miller Creek Disc Golf Course Crew</i>	2
<i>Interpretive Trail and Annual Tree Planting</i>	2
<i>LSC Rain Gardens</i>	3
<i>LSC's 2011 Earth Day</i>	3
<i>Rain Barrel Sale & Watershed Festival</i>	3
<i>LSC Shreds Landfill Load</i>	4

Did you know?...

- According to a 2010 survey, 85% of our campus community gets here via single passenger vehicle.
- Our main campus emits about 4,700 metric tons of carbon dioxide from natural gas and purchased electricity. Compare that to other Minnesota 2-year colleges at [ACUPCC](#).

Annual Plant Sale

The annual plant sale is just around the corner. Get yourself some great herbs, vegetable seedlings, geraniums, and various other small plants! They make great mother's day gifts too. You can also buy nutrient rich compost from LSC's compost

bin; the very same material those seedlings are started in. Theresa Hornstein, Biology instructor and resident vermiculture expert, will be on hand to answer your spring planting questions! Money raised from the sale goes to the International Education Scholarship Fund.



The sale runs April 27th and 28th 9:00-3:00 in the main concourse.

Disc Golf Course Re-vegetation Project

If you've used the Miller Creek Disc Golf Course in the last few years, you may have noticed the landscape and its sharp decline in quality. Contrary to public opinion, this course does not belong to LSC, it is city property.

The City of Duluth has taken notice of the course's disrepair, and because of its location adjacent to Miller Creek, a protected trout stream, the City is committed to improving the course to mitigate some of the compaction, erosion, and de-vegetation that has occurred over the years.



Because of the tremendous use this course gets *all year-round*, much of the vegetation on the course never gets a chance to establish itself in the spring, and this problem has been compounded year after year.

The City, along with LSC, has planned a [Public Meeting](#) to discuss the future of this course. Discussions include, potentially moving or removing some baskets, long term maintenance and trash collection, and creating better playing conditions. Your input is needed, **April 29th, 11:00-noon** in the LSC Atrium!

Miller Creek Disc Golf Course Crew

How do you feel about the condition of the Miller Creek Disc Golf Course? Last spring, a small group of LSC students organized a trash collection on the course and collected over 15 huge bags of trash in just one afternoon! This prompted the Duluth Parks Department to place 2 garbage cans on the course, which they empty weekly. Two cans on a course this size really isn't enough, and the evidence of that is very clear, again, this spring.

There are many dedicated individuals

willing to put in time to clean it up. LSC would like to help organize these efforts by creating a Miller Creek Course Crew. The crew can take on many projects related to the course. Ideas include: setting up "adopt-a-hole" with local businesses, organizing volunteer efforts to help with the re-vegetation project mentioned above, organizing regular trash clean-ups, hosting and organizing tournaments, or anything else you can think of!

Contact sustainability@lsc.edu if you're



interested in joining the crew, and you don't have to be a disc golfer to join!

Interpretive Trail and Annual Tree Planting



Have you had a chance to walk the LSC Interpretive Trail lately? Huge improvements have been made recently, and thanks to a team of students in Roger Reinert's Civic Leadership class, a new trail-head sign off of the LSC driveway and directional signs throughout the trail, make the trail easier to follow.

Biology and Environmental Science

instructor, Glenn Merrick, has been organizing annual tree plantings for the past 10 years too, planting over 300 trees and maintaining deer exclosures around those young trees every year.

As a collaborative effort, the Geology, Biology, and Environmental Science Departments put together an [Interpretive Trail Guide](#) to help you through the trail.

LSC Rain Gardens

Question: LSC has two rain gardens, so what do they have to do with stormwater?

Answer: Rain gardens are a natural way to mitigate the negative effects of stormwater runoff; an alternative to typical curb and gutter management systems. Without rain gardens, unfiltered stormwater would rush into Miller Creek increasing sediment and salt levels.

The first and smaller rain garden runs under the S Building and catches excess runoff and sediment from the hillside while the deeply rooted perennial native grasses planted in it aid water infiltration. This helps to reduce

the amount of direct runoff that eventually reaches Miller Creek, a protected trout stream. This rain garden needs minimal maintenance and is part of LSC's larger Stormwater Management Plan.

The larger rain garden is near the day care and is a bit more technical in design. This 2,500 -square-foot rain garden first receives



and filters water, sand and salt from the parking lot in a fore-bay. The salt and sand settle then water passes the rock check dam into the adjacent rain garden to be taken up by over 20 varieties of native plants or filtered through the soil. With heavy rains and snow melt, excess water is discharged through an underdrain system at the foot of the garden and eventually reaches Miller Creek.

Our Manufacturing Technology Program is currently working on informational signs for each of these gardens.

LSC's 2011 Earth Day

This year's Earth Day celebration was, again, a huge success. A big thanks goes to Heather Grillo and numerous students in Student Life and to Patty Dorn and her team of dedicated music students and the LSC choir!

Student Life gave out 250 aluminum earth friendly water bottles and made "tons" of worm dirt snacks in compostable corn cups. Thanks to the Skills Technology club for directing students to the compost bins.

Thanks, too, to all the students that

made posters and displays for the educational tables.

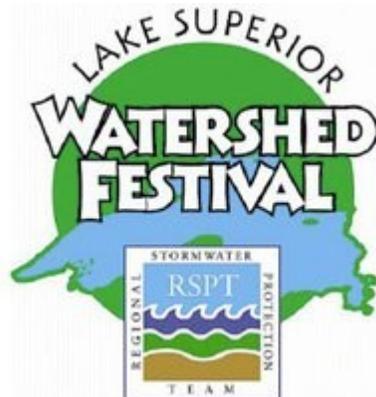
Patty brought in North Shore native and ecological musician Michael Monroe to do workshops throughout the week, culminating in two concerts for LSC and the public during our April 14th Earth Day Celebration.

Thanks to everyone that made it another memorable event!



Rain Barrel Sale & Watershed Festival

On June 4th, Lake Superior College will host this year's Lake Superior Watershed Festival in conjunction with WLSSD's annual Rain Barrel and Compost Bin Sale. You can expect to see businesses showcasing watershed-friendly products, various organizations sharing educational materials related to watersheds and natural water resources, and various workshops and children's activities.



Festivities will be in the parking lot under a canopy tent, rain or shine, and runs from 10:00-4:00. For info on 2009's Watershed Festival, check out lakesuperiorstreams.org. This project is hosted by RSPT and funded in part by NOAA and Minnesota's Lake Superior Coastal Program.

The [WLSSD sale](#) runs from 9:00-3:00. Rain barrels are \$50 each, and compost bins are \$40 each.

Questions? Contact your
Environmental Sustainability Coordinator: Kristi Heintz

Phone: 733-7731
E-mail: sustainability@lsc.edu

We're looking for STUDENTS!

Check out the NEW [Student Environmental Club page on facebook](#) and leave us a message for more info on upcoming projects and activities!

<http://www.lsc.edu/sustainability>

LSC Environmental Mission Statement

We, the Lake Superior College community, believe our campus has an opportunity and responsibility to provide leadership to our college and local communities by conducting education and business as responsible stewards of the physical environment. To this end, we are committed to:

- conserve natural resources and support their sustainable use.
- conduct college activities in a manner that safeguards the environmental health and safety of students, faculty, staff, and our surrounding communities.
- promote environmental awareness, local action, and global thinking.

LSC Shreds Landfill Load: shredder takes gold

What do you do with large chunks of unavoidable styrofoam that ships along with fragile equipment as packaging? It can't be recycled, it isn't biodegradable, its combusted bi-product is toxic to respiratory systems and the atmosphere, and it stays in landfills for centuries taking up almost 30% of landfill space in the United States. LSC's Integrated Manufacturing Program has created a solution that that will make this product reusable to community members and businesses alike.

This year's Integrated Manufacturing Team, including students Nathan Zobel, Pete Alms and David Hauff, took their styrofoam shredder to the two-day SkillsUSA competition in Bloomington, Minnesota. The project competed in the Community Service category and won a gold medal, advancing them to the Na-

tional SkillsUSA competition in Kansas City, Missouri this June. The machine, designed as a prototype for a new and improved machine already in production, has been in service at LSC for four years. Designing and building the shredder, though, is only half the story. The machine has shredded over 8,000 cubic feet of large styrofoam packing material over its life and the team has spent over 160 hours shredding campus styro and also material dropped off by the public.

But they didn't stop there! Throughout the four years of service, the Integrated Manufacturing team has been taking notes on design shortfalls of the current machine. The team is utilizing their CAD/CAM design knowledge, machine skills, previous experience, and is also adapting and developing trouble-

shooting skills to produce a machine that will give them a more usable end-product with consistent-sized pieces, and, "with the new design the shredded pieces will be more uniform and have less static..." says team member Zobel. This will make the material more appealing to commercial businesses and the more efficient machine design will mean they can take in more from the community; thereby diverting even more of this nuisance material from the landfill. Besides the shredded material's obvious use as packing material, individuals have found use for it as filler for bean bag chairs, dog beds and outdoor planters.

To read the full story, check out the [Environmental Council blog](#).

Good luck at the National Competition, guys!