

# CURRENT ENVIRONMENTAL INITIATIVES AT OAKLAND UNIVERSITY

#### Simon Ren and Donna Folland

The purpose of this article is to present some of the ways in which Oakland University is responding, both as an institution and through the actions of individual faculty and staff, to a call for leadership in environmental stewardship. Responses range from efforts to work with both public and private entities on a regional basis to promote 'green' business approaches, to present professional forums, public lectures and academic programs specializing in environmental issues, to plan and manage the physical campus and, finally, to include Oakland University in watershed-wide conservation plans and actions.

On the ground, the University is a physical entity with natural resources to steward and human needs and desires that are sometimes in conflict with those resources. The University is a huge physical plant, which, for both economic and environmental reasons, must strive to maximize the efficiency of resource consumption and minimize output of waste products. How the University manages its 1,441 acres of open space, streams, wetlands, woods, golf courses, sidewalks, roads, parking lots and roofs has a tremendous impact on the quality

of life. The impact is felt on the university campus, in the surrounding communities, and as far away as Lake St. Clair.

Responsible management of the physical campus is an enormous challenge. In addition, a regional academic institution like Oakland University has an inherent responsibility to set an example for others to follow. With responsibility comes the opportunity to demonstrate leadership. Here are some of the opportunities (and challenges) for leadership in environmental stewardship on the Oakland University campus today.

### GreenConnect: Linking Economy, Ecology, Community and Ethics

A disconnect often exists between grass roots organizations who promote environmentally sensitive approaches and corporations who are perceived as indifferent to such approaches. The members of GreenConnect, an initiative of United Ministries in Higher Education Campus Ministries at OU, believe that this disconnect can be resolved by identifying common ground between conflicting forces and creating a network that brings together corporations, small businesses, non-profits, and educational institutions to mutually promote 'green' initiatives. GreenConnect proposes to be the umbrella that brings all these sectors of the community to the table by "improving the flow of information, networking, mentoring, and helping make green choices more attractive and economically feasible for both businesses and communities." The proposed service area for the first developmental stage of Green-Connect is southeast Michigan and southwestern Ontario.

Mentoring is an important element of GreenConnect's plan. GreenConnect will be targeting groups that are at different levels of organizational planning for ethical behavior. Organizations that openly profess environmentally ethical principles in their mission statement and actively incorporate associated strategies in their practices may be interested in sharing information and resources with other organizations.

They may be good candidates to serve as mentors for other groups seeking guidance, such as organizations who are looking to expand and/or improve their level of participation in environmentally ethical initiatives or who are facing obstacles in developing environmental strategies.

GreenConnect's efforts to reduce mistrust between businesses and environmental groups and to form a network to work together towards sustaining both economic interests and natural resources will initially focus on a two-day conference planned for April 2005. Presenters at the conference will come from the nonprofit, for-profit, academic and faith-based sectors of the community and will speak on issues of ethics, social justice and economic responsibility as they relate to environmental sustainability.

Charles Mabee is co-director of GreenConnect. He can be reached at *cmabee@oakland.edu*.

## Students Participating in Natural Preservation (SPIN)

Oakland University students launched SPIN on campus in October of this year with the mission to "create change and awareness in the university and community, so to improve upon the environment around us." Many of the planned activities revolve around making an environmentally friendly campus by encouraging individual actions, such as recycling. Awareness is a major goal, which they plan to build by hosting an Oakland University Earth Day dedicated to environmental awareness and action on campus. The outlook of SPIN's potential activities reaches beyond the university campus, such as sponsoring the conservation of a piece of land in the community.

Their first task, however, is to build their membership among OU students and faculty. SPIN president Jessica Henry is asking professors to announce the group's formation to their classes and to invite them to their biweekly meeting. For details, contact Jessica Henry at *jmhenry@oakland.edu*.

#### Physical Master Plan 2001 to 2020

The Physical Master Plan completed in 2001 offers a plan for the development of Oakland University's campus over the next 20 years. The master planning task force, in consultation with the campus community, developed the Plan through a two-year process. It identifies future sites for facilities construction or expansion and identifies areas that will remain undeveloped.

The predicted 33% growth of the university community in the next ten years (from 2001) brings with it a challenge to balance this growth with retaining the open feel of the campus and environmental sustainability. The Physical Master Planning and Design Principles address this need for balance with the following principles:

- Single academic core with parking and roads on the periphery to encourage pedestrian traffic;
- Allowing natural features to influence placement of facilities;
- Maintaining rural/green belt edge, uniform image of the periphery of campus from the outside community;
- Recommendation of a minimum height of three stories to make the building more visible from offcampus and use less land;
- Consideration of linking the campus to county trail systems;
- Creation of facilities for bicycles to supplement both vehicle and pedestrian traffic.

The plan acknowledges that open space and natural areas are features that distinguish the Oakland University campus. These features become even more important as surrounding areas become completely built out. The plan identifies undevelopable land and developable land as the two types of open space on campus. Mainly wetlands comprise the undevelopable land on campus. These occur primarily in the southern half of campus and east of Adams Road, behind the faculty/staff subdivision.

Developable open space on campus breaks into three different categories: 1) areas identified as possible sites for future buildings and facilities and areas, 2) areas designated for preservation, and 3) areas not identified as either preservation or future development areas.

The University Senate recommended preservation of certain developable areas in the southwest portion of campus, due to the ecological significance of these areas and their importance as academic and recreational resources to the university and community. The Physical Master Plan proposes that these approximately 110 acres remain undeveloped as two University Preserves. The Western and Eastern University Preserves are in the southern half of campus, separated by several holes of the golf course. The primary use of the Eastern and Western University Preserves will be primarily for teaching and research, but would also be open to the university community and public for passive recreational uses, such as hiking, birding and nature study.

An additional 30-acre natural area on campus is not included in the University preserve system, but neither is it specifically planned for development. This area is a strip of land between the Western University Preserve and Squirrel Road and is also ecologically significant. Many individuals and groups, such as the Student Congress and the University Senate, expressed strong opposition to development of this area during the writing of the Physical Master Plan. The Plan recommends that discussion of uses for this area consider its significance as a natural area and recommends that "the university should act as a steward of one of the few remaining large natural undeveloped tracts of land in the region, and preserve it for future generations."

Another significant area of open space surrounds the university faculty/staff subdivision east of Adams Road and is not specifically addressed in the plan. The wetlands on the property are included as part of the undevelopable regions of campus. According to the plan, the task force "did not foresee any significant alternative use for this portion of the campus over the life of this master plan".

For a copy of the master plan, contact Fran Cutler at cutler@oakland.edu

#### Energy Conservation Initiatives

The opportunity for Oakland University to serve as an on-the-ground example to the larger community is clearly demonstrated by the university's energy conservation initiatives. A visit to the web page created and maintained by Energy Manager Jim Leidel (www.oakland.edu/energy/) provides information that goes well beyond reporting on the status of the university's energy management to connecting with globally important issues of energy and sustainability.

Oakland University's entry into an energy saving performance contract with Chevron Energy Services in 1998 helped fund over \$8 million in upgrades to reduce campus energy consumption and replace some aging infrastructure. Estimated annual energy cost savings of \$400,000 is being used to pay off the initial project funding. Currently, the university is kicking off a campus-wide energy audit for a potential phase 2 performance contract, similar to the one undertaken in 1998.

A 10kW photovoltaic solar electric roof was recently installed on the roof of the student apartment Community Building. This is a public demonstration project funded by a grant from the State of Michigan and by Oakland University. The system uses 586 Uni-Solar PV shingles that produce electricity. The electricity produced is delivered directly to the university's electrical grid, not stored in batteries.

How are these initiatives affecting the university's

consumption of energy? Visit the Energy Management web page to learn about current and historical energy usages on campus. For questions or comments on energy conservation initiatives contact Jim Leidel at leidel@oakland.edu.

### Oakland University in the Watershed: Clinton River Review 2004

Oakland University hosted the first annual Clinton River Review in October 2004. The event was sponsored by the Oakland County Drain Commissioner's Office and was intended to showcase some of the significant projects being implemented throughout the Clinton River watershed in Oakland and Macomb Counties, such as the George W. Kuhn Drain improvements and Macomb County's Lake St. Clair assessment and monitoring projects. The Clinton River Watershed Council reported on projects to study and to restore the ability of the river to support trout and other aquatic life, including the tributary Galloway Creek on the university campus. Oakland University Professor Linda Schweitzer reported on the remediation of contaminated sediments in the Clinton River and Professor Doug Hunter on the occurrence and distribution of freshwater mussels in the river. Oakland University will host the Clinton River Review again in August 2005.

## Oakland University in the Clinton River Greenway

The Clinton River in Rochester and Rochester Hills is a dramatic landscape of steep bluffs, deep ravines, and broad flood-plains caused by the regions glacial past. Combined with the newly acquired Clinton River Trail that is being developed from an abandoned railroad bed, the area around the Clinton River is a community resource for recreation and natural beauty and a connected corridor for wildlife to inhabit. The

corridor is anchored on both ends by large areas of open space; Bloomer Park at the eastern end and on the western end, Oakland University containing the tributary Galloway Creek and Oakland Land Conservancy's Clinton River Rookery Preserve along the Clinton River.

In 2001, the Rochester Hills City Council appointed several community leaders to the Rochester Hills Land Preservation Task Force to study the opportunities for land preservation in the city. Oakland University President Gary Russi served as chair of the task force. From this original task force developed the Clinton River Greenway Steering Committee, which is a partnership of the Clinton River Watershed Council, Friends of the Clinton River Trail, Oakland Land Conservancy, and Rochester/Avon Historical Society. The group conducted two public visioning sessions and produced an "Opportunities Map" that shows the natural, historic, recreational, and water resources in the greenway and gives ideas for enjoying those resources and becoming engaged in their protection.

The Clinton River Corridor Opportunities Map and information about the river and greenway is available from the Oakland Land Conservancy (Executive Director, Donna Folland at *folland@wwnet.net*) or the Clinton River Watershed Council (Executive Director Jessica Pitelka Opfer at *jessica@crwc.org*).

### Looking Ahead

The natural resources on campus are cherished by many, but are also essential to the health of the greater natural systems. Balancing the projected future enrollment of the university with the conservation of these resources has begun to be addressed by the Physical Master Plan. The planned transition to a more resident campus could also bring to students experiences that encourage a lifelong dedication to resource conservation. The university could foster this dedication as they meet

students' recreational needs by hooking them into regional trail network, providing access to public transportation, and keeping nature always within reach. Clearly, Oakland University must manage its own resources well. But it also needs to be a guiding force in the region, by setting examples of stewardship and conservation and by preparing the next generation of leaders in environmental stewardship.