A Report to the President and Faculty Senate by the Committee on Sustainability

Final revision: December 14, 2004

This is a report of the University of Florida Committee on Sustainability, an ad hoc joint committee of the President and Faculty Senate first convened in September 2004. This committee is composed of 16 members, including faculty, staff, administrators, and students. Its responsibility, among others, is to implement, where appropriate, the recommendations of the July 2002 Final Report of the University of Florida Sustainability Task Force. A resolution in support of the Final Report was adopted by the Faculty Senate in October 2002. In April of this year, the Student Senate adopted a similar resolution.

What is sustainability and why does it matter?

Climate change, acid rain, deforestation, species extinction, fisheries depletion, soil erosion, water, land and air pollution, ozone depletion, and growing human populations outstripping their resources bases are some of environmental problems we face today. Most of us are familiar with this litany of problems. Environmental degradation and resource consumption, in many cases, are progressing geometrically. Our students sense the danger. A Gallup poll revealed that over two-thirds of college-age youth believe the world was a better place when their parents were their age, and over half believe things are getting worse. The challenge of living sustainably faces us squarely.

Sustainability can be defined simply as meeting contemporary needs without compromising the ability of future stakeholders to satisfy their needs. It has both individual and institutional applicability. Individual and institutional practices that are sustainable are generally understood to attend to three interdependent areas of concern: ecological preservation, economic viability, and social justice. Though there are exceptions, environmental degradation disproportionately impacts the most economically challenged and underprivileged populations. Concern for the environment and social justice go hand in hand. To be sustainable, therefore, a practice must preserve rather than destroy its ecological base, ensure rather than undermine long-term economic benefits, and advance rather than retard matters of fairness, equity and diversity.

Beginning in the late 1980s, with a global awakening to the environmental and socio-economic crises that were occurring in contemporary nations, the systematic thinking and practices of sustainable stewardship were developed. While its emergence as a global issue has occurred relatively recently, sustainability in its most basic form is simply the retrieval of ancient wisdom dictating that you do not eat your seed corn. In academia, this mixture of conservation and innovation go hand in hand, as we practice conserving our resources to the greatest extent feasible while maximizing the production and refinement of the knowledge, skills, and technology that will allow us to live better without causing future generations to live worse.

Sustainability at UF

The University of Florida has a special obligation to meet the challenges of sustainability for three interrelated reasons. First, as educators we play a leading role in training the scientific, social, political and cultural leaders, professionals and policy-makers who will make a difference in the world. Second, we consume significant resources here on campus. Third, the students we educate and socialize at UF will have major environmental impacts as consumers and conservers when they leave campus with the knowledge and skills we impart. Whether the world is a better or worse place when our students become its citizens, parents, and leaders will be, in no small part, a function of the values, knowledge and skills they receive here.

The challenge before us is to make the University of Florida, in its operations, pedagogy, research, and service, serve as a model laboratory for sustainability. There is an adage that the "hand teaches the heart." It also teaches the mind. Here at UF we have the opportunity to foster experiential, inquiry-based learning that actively engages students to develop the knowledge-base, technological know-how, and socio-economic skills and practices that further sustainability. This is also a grand opportunity to form partnerships with local and regional stakeholders, as well as provide international leadership.

Embracing sustainability is a matter of ensuring that UF stands at the cutting edge in generating the knowledge and technology that will be in the greatest demand for the foreseeable future. Embracing sustainability is not simply a matter of practicing what we preach, though it is that. The University of Florida has the responsibility, and vested interest, to impart the values, generate the knowledge, and develop the skills that will prepare students to contribute to a high quality of life in this country, and around the globe. We are responsible to prepare our students for the future. By addressing the environmental and socio-economic impact of

our operations as well developing our teaching and research mandates, we can enhance rather than undermine that future while ensuring the best education for our students.

With great foresight, President Young and the Faculty Senate convened the University of Florida Sustainability Task Force in December 2000 with a mandate to determine what was needed for UF to become a "global leader in sustainability."

That task force built on the work of a UF ad hoc group of faculty, staff and students, Greening UF, which organized in 1997 to advance campus greening. These efforts led to the creation of an Office of Sustainability in the College of Design Construction and Planning (DCP). That office was charged with staffing the Sustainability Task Force and publishing its report. The report offered over 45 recommendations designed to map a course towards global leadership in sustainability.

Concurrently, the DCP Office of Sustainability assisted Greening UF with the compilation of the first set of university sustainability metrics published in accord with international business reporting guidelines, the "University of Florida Sustainability Indicators, August 2001." UF has since continued to lead international efforts aimed at uniform sustainability reporting among institutes of higher education. Following this path, universities can become transparent and credible in their operational practices and educational modeling.

UF has made significant strides towards the goal of leadership in sustainability. It has a great many physical and administrative operations, academic programs, research projects, and other efforts that address various features of sustainability beyond those carried out by Greening UF and the DCP Office of Sustainability.

Many activities focus on the environmental leg of sustainability. UF, for example, has adopted the LEED (Leadership in Energy and Environmental Design) system for design and construction of campus buildings. The University is leading the state in building more sustainable buildings since 2001, and we have the first GOLD-certified LEED building in Florida. The University is also currently developing a campus-wide program to preserve and enhance the natural environment including participation in the Audubon International Certification process. As a model program for university campuses, the Audubon International project encapsulates our 2000-acre campus in an ecological preserve and makes us the first university in the nation to take this important step toward ecological sustainability. Similarly, our university is one of few with a large, nationally registered historic district, reflecting a commitment to the reuse of building materials and the development of historical and community connections. In turn, bus ridership has grown exponentially and new bicycle trails have also been developed.

Other units on campus contribute to sustainability through their efforts to address aspects of social equity. Certainly this figures in much of our teaching and research. Moreover, Florida Museum of Natural History, the Harn Museum, the Phillips Center for Performing, the Divsion of Student Affairs and the Office of Community Service affirm the benefits of diversity through varied programming. All of these extracurricular factors contribute to our efforts to promote social equity.

Saving green by going green

Sustainability appeals to our moral and professional responsibilities and duties as educators. It is also fiscally responsible. We need only look at the economic facts, as they have been generated by the leaders in campus sustainability.

At Harvard University, the Green Campus Initiative, which has a Director and 5 staff members, goes by the motto of "Saving Harvard Green \$ by Going Green." Through its innovative efforts in sustainability, the initiative has reaped over a \$1 million in annual savings since 2000. A Green Campus Loan Fund, which gives interest free loans to conservation-oriented projects, has provided \$2.8 million to 32 projects that now save the University \$750,000 per year, while reducing its annual output of carbon dioxide by over 11 million pounds, its annual use of water by over 5 million gallons, and its production of solid waste by 200,000 pounds per year. On average, these projects have generated enough financial savings to pay back their loans in three years.

At the University of British Columbia in Canada, a Sustainability Office created in 1998 has achieved comparable savings, while reducing paper use by 15%, water use by 30%, energy use by 8%, and greenhouse gases by 7%, notwithstanding a 19% increase in the number of students that attend the university.

Some of the efforts sustainability-oriented universities engage in are very simple. Tufts replaced incandescent with compact fluorescent bulbs on campus and cut lighting energy costs in half. Penn State conducted a study that demonstrated that over \$100,000 per year could be saved in purchase and disposal costs of paper if the default margins on university computers were

simply reduced to 3/4 of an inch. The Committee on Sustainability is not advocating these specific changes. They simply serve as examples. In any case, not every opportunity to get more green bang from our resource bucks needs to be exploited. Certainly, it is not a question of stoic self-denial at an institutional level. But there are so many opportunities currently available that make sense, dollars and cents, and plain good sense. The economic benefits are there for the reaping, not only from savings in operational costs, but in securing the research funding and philanthropic support that will accrue to UF when it assumes a position of national and international leadership in sustainability efforts. We note in this regard the recent donation of \$15 million to Arizona State University for the creation of an international institute of sustainability.

With this in mind, the Committee on Sustainability will work with the appropriate offices to facilitate the creation of an endowment fund for sustainability. The creation of this fund will allow alumni and other supporters to contribute directly to the sustainability of the University and the promotion of its sustainability efforts. This endowment fund is expected to be focused not only or even primarily on operations, but also on curricular development, research, outreach opportunities, and efforts to make UF a model laboratory in sustainability.

The task ahead

Incorporating sustainability into the fabric of this university serves the interests of UF's faculty, students, staff and other stakeholders. The Committee on Sustainability firmly believes that taking on this forward-looking challenge will aid UF's efforts to rise into the ranks of the top 10 public universities in the country. Unfortunately, UF's varied and numerous projects and achievements in the environmental, economic, and social aspects of sustainability are currently operating without the benefit of a clearinghouse for ideas, opportunities for coordination, a forum for the sharing of best practices, or the stimulation of interdisciplinarity in teaching, research and service.

President Machen and the current Faculty Senate have asked the Committee on Sustainability to set forward the concrete steps required to make the goal of global leadership in sustainability a reality. The time has come to secure a commitment in principle that can be translated into practice, putting UF on a path of leadership in the eyes of our peer institutes, as well as other public and private institutions and communities, both here and abroad.

The creation of a campus-wide Office of Sustainability, working in conjunction with the Committee on Sustainability and a larger network of UF and community stakeholders, will allow us to make the most of our diverse efforts, to develop innovative new approaches to sustainability, and to gain a position of global leadership. As this office works to coordinate sustainability efforts across disciplines and units, UF will be able to enhance its operations and outreach, advance its teaching and scholarship, while gaining the competitive edge for research funding and curricular development within the growing field of sustainability studies. While the DCP office has served well in developing a foundation for the university's role in sustainability, we concur with a key recommendation of the Sustainability Task Force that a campus-wide Office of Sustainability is required to take us to the next level and facilitate our leadership efforts.

For the Office of Sustainability to succeed, it is crucial that the Committee serve as a key resource in its efforts to reach the broader UF community. In turn, its success will depend on the endorsement of the Faculty Senate and administrative support at the Presidential and Vice-Presidential levels. Only in this way, can sustainability concerns be integrated into the fabric of the university's mission.

As can be seen from Appendices C, D, and E, UF is well poised for this initiative. Of 17 peer institutions examined, 6 have funded offices of sustainability. All 6 of these institutions include sustainability in their curriculum, research, and operational policies pertaining to the use of natural resources. Of the other 11 institutions, 7 have ongoing efforts to establish an office of sustainability, 6 have a university-wide committee on sustainability, 6 integrate sustainability concerns into their curricula, 4 into their research missions, and 8 into operational policies.

Compared to our peer institutes, the University of Florida has some of the greatest resources in terms of curricular development, research efforts, and operational achievements and initiatives in sustainability. In this sense, are already near the front of the pack. Were an Office of Sustainability established at UF, it could immediately build upon the very extensive but largely uncoordinated academic and administrative interests, achievements, and resources in sustainability, and in so doing, place the University of Florida into a position of leadership.

While the Committee on Sustainability will periodically make reports to the Faculty Senate, we submit today a particular resolution for your consideration. This resolution comes in two parts.

First, and in keeping with the recommendations of the Task Force Report, we ask that the Senate approve the creation of an Office of Sustainability to serve the entire campus. Nationally, the institutional leaders in sustainability already have such an office place. The mandate of the UF Office of Sustainability will be to initiate new, as well as translate existing sustainability-related practices in campus operations, teaching, research, and service into a coordinated effort to launch the university into a position of global leadership in sustainability.

In this respect, the Office will serve as a facilitator and clearinghouse for sustainability-related programs and projects. Of equal importance, the Office will foster innovation and collaboration in sustainability-related teaching, research and service while working to implement cost-effective resource conservation in operations. In turn, it will serve as the public face to the broader community, and the contact point for outreach regarding UF's sustainability efforts.

The Office of Sustainability will initially have a Director, hired after a national search, a Chief Academic Officer, who will be selected from internal applicants, an office assistant, and a graduate research assistant. Staffing will grow with the Office's success in securing student interns and external funding for specific projects. The Director will report to the Vice-President of Finance and Administration. The Chief Academic Office will report to the Provost. The Committee on Sustainability will serve as an Advisory Board to the Office of Sustainability, and its link to the broader community of interest at UF. The suggested objectives and responsibilities of the Office of Sustainability, its staffing and reporting structure, are outlined in Appendix A.

Second, we recommend that the Committee on Sustainability be made a Joint Standing Committee, with appropriate amendments to its mission and constitution. The Committee will provide policy advice to the Office of Sustainability as well as serving as its point of contact to stakeholders within and beyond the UF community. The proposed mission and constitution of the Committee on Sustainability are outlined in Appendix B.

A formal resolution, appearing below, is submitted for your consideration.

The Ad Hoc Committee on Sustainability

Matt Armstrong, Student Government Mark Brown, Environmental Engineering Eva Czarnecka-Verner, Microbiology Linda Dixon, Facilities Planning & Construction Division Paula Fussel, Finance and Administration Lisa Hall. Environmental Horticulture Mark Hostetler, Wildlife, Ecology and Conservation Marc Hoit, Academic Affairs Donna Isaacs, Student Government Charles Kibert, Design, Construction and Planning Chris Machen Ramachandran Nair, Forest Resources and Conservation Rich Segal, Pharmacy Kim Tanzer, Architecture (ex officio) Colette Taylor, Division of Student Affairs Les Thiele, Political Science, (chair)

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