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A university-wide program in ecology, environmental sciences, and sustainability, hosted by IFAS in collaboration with the colleges of Agricultural and Life Sciences; Business Administration; Design, Construction, and Planning; Engineering; Health and Human Performance; Liberal Arts and Sciences; Journalism and Communications; Law; Medicine; Veterinary Medicine; the Florida Museum of Natural History; and Center for Latin American Studies.

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Center then clockwise from left: Planet earth, NASA Goddard Space Flight Center: Image by Reto Stöckli (land surface, shallow water, clouds), enhancements by Robert Simmon (ocean color, compositing, 3D globes, animation), data and technical support by MODIS Land Group, MODIS Science Data Support Team, MODIS Atmosphere Group, MODIS Ocean Group. Additional data by USGS EROS Data Center (topography), USGS Terrestrial Remote Sensing Flagstaff Field Center (Antarctica), Defense Meteorological Satellite Program (city lights). Butterfly, credit unavailable; Miami skyline, Peter Turner, Trek Earth; Barred owl, Erik Eckles; Organic red oak lettuce farm, Eric Zamora; Deer, Carlton Ward, Jr.
ACTION PLAN

2006 - 2011

(Revised January 2009)

School of Natural Resources and Environment
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Revised Action Plan 2006-2011
School of Natural Resources and Environment
University of Florida

PURPOSE

The first strategic plan for the School of Natural Resources and Environment (SNRE) was published in 2005, and was designed to provide guidance for 2006-11. This is the first update of the plan and reflects changes occurring in 2008. It is written in brief style, called an “action plan,” and focuses on actions needed to achieve the goals laid out in the plan.

MISSION

SNRE provides interdisciplinary science through teaching, research and outreach to integrate sustainable environmental and human solutions for today’s complex challenges and tomorrow’s scientists, managers and industry leaders. The focus is on degree programs and teaching students who conduct research and some outreach as a part of their degree program.

VISION

Envision the bountiful natural resources of Florida and the world as a perpetual life support system, the foundation of the economy, and the matrix of civil society. Envision a vibrant institution that refreshes and adapts knowledge for using and managing this environment sustainably into the foreseeable future. The University of Florida hosts an elaborate faculty of experts in all the constituent natural sciences, social sciences, and professions. UF’s School of Natural Resources and Environment complements and integrates these people and programs, providing “whole knowledge” about complex environmental challenges as they emerge and shift. The SNRE strives to become a pre-eminent program producing a stream of interdisciplinary thinkers who are able to conduct integrative research and provide applications for the public to use in daily problem-solving.

VALUES

Excellence—Students who are admitted to undergraduate and graduate degree programs shall be of the highest quality possible. The education they receive will prepare them to provide science-based solutions to problems affecting natural resources and the environment.

Participation—SNRE places high value on involving a large number of faculty and academic disciplines to achieve interdisciplinary, integrative work that incorporates a wide range of topics from biophysical sciences to the social sciences and professions such as engineering, law, medicine, journalism, business, and architecture.

Creativity—SNRE places high value on development of integrative approaches to existing and emerging environmental problems.

Accountability—SNRE uses internal and external processes to measure its achievements. This includes tracking the success of students and requesting feedback from advisory groups.

Connectivity—SNRE leverages its numerous affiliate faculty and participating units to promote a partnership approach to educating students and conducting research. The added resources favor producing better graduates and scientific results. SNRE also seeks external partners who value this connectivity and can build public and private support for and benefit from SNRE and other University programs.

Transparency—SNRE places high value on operating with maximum transparency, so that all partners and participants are fully aware and will support or improve programs and activities.
HISTORY

The College of Natural Resources and Environment (CNRE) was created in 1994 based on the recommendation of a faculty task force. An undergraduate degree program in Environmental Science was created and the first students admitted in 1995-96. MS and PhD degrees in Interdisciplinary Ecology were added in 1999-2000. The College was “virtual,” with all faculty residing in existing academic units. The 2002 Strategic Plan of the University of Florida recommended strengthening programs relating to ecology and environment and relocated CNRE in the College of Agricultural and Life Sciences as a school. The purpose was to strengthen the commitment to teaching, add a research and outreach component and contribute to the university’s interdisciplinary initiative in ecology and environment. The University of Florida’s Board of Trustees approved the School of Natural Resources and Environment in June 2003. From mid-2003 to mid-2008 SNRE was very successful in expanding its research and outreach/Extension programs.

In 2008 the Advisory Board responded to reduced state appropriations to the university by eliminating most of SNRE’s research and outreach/Extension programs (the rest being phased out when completed) and transferring other programs to traditional discipline-oriented departments for administration. The highly successful mini-grants program was eliminated. Staffing reductions in mid-2008 and the retirement of the director in mid-2009 have eliminated the ability to assist faculty in assembling large interdisciplinary research proposals. Responsibility for administering the Cooperative Ecosystem Studies Unit has been transferred to another administrative unit. The Natural Resource Leadership Institute and the Natural Areas Trading Academy have been reassigned to discipline-oriented academic departments and the Program for Resource Efficient Communities is no longer affiliated with SNRE. The initial strategic plan for SNRE laid out several immediate strategic goals where SNRE was envisioned to play a lead campus-wide role in research and outreach/Extension. These included land use dynamics, coastal development and management, international programs in sustainability, and developing environmental managers. Longer term goals were to develop core programs in renewable energy and environmental health. These latter goals have been addressed in part by the University of Florida through the creation of an Institute for Sustainable Energy and an Emerging Pathogens Institute. There is still a critical need for a focused university effort on land use dynamics and SNRE continues to be involved in this effort through a large donor-funded project and in fund raising for this effort. SNRE will continue to be involved thorough its investment in graduate students and their research in land use issues, coastal development and management, international programs in sustainability, and developing environmental managers. There is still a “market” on campus and beyond for SNRE’s involvement in organized research and outreach/Extension activities. Perhaps future budget years will allow a return to this focus.

Thus, SNRE is now returning to its initial focus on its degree programs. SNRE Academic Programs also has had budget cuts in 2007-07 and 2008-09, and further cuts are anticipated in 2009-10 and possibly beyond.

PRESENT SITUATION

The University of Florida (UF) belongs to the Association of American Universities and is a public, land grant, sea grant, research university with approximately 50,000 students. SNRE is the programmatic home of interdisciplinary undergraduate and graduate programs in ecology and environmental science that prepare students to understand and address complex science, policy, management, social and economic issues. SNRE engages eleven academic colleges and units that participate through approximately 300 affiliated faculty. Most of the academic support is centered in three colleges: Liberal Arts and Sciences (CLAS), Engineering (COE), and Agricultural and Life Sciences (CALS). Other participating colleges include Business Administration; Design, Construction, and Planning; Health and Human Performance; Journalism and Communications; Law; Medicine; and Veterinary Medicine. The Florida Museum of Natural History and the Center for Latin American Studies are also participants.

An SNRE governance structure is in place and func-
An Advisory Board (AB) provides guidance to the campus-wide SNRE. The Senior Vice President for Agriculture and Natural Resources chairs the AB with the Vice President for Research and the deans of CLAS, COE, and CALS serving as members, along with the Provost (ex-officio). A Faculty Advisory Council (FAC) consists of 9 elected affiliate faculty, with three each from CLAS, COE, and CALS and two at-large appointed by the elected faculty from other units. An External Advisory Council (EAC) represents a cross-section of natural resource and environment related private sector groups, government agencies, non-governmental organizations, and academic institutions.

STRENGTHS, WEAKNESSES, OPPORTUNITIES, AND THREATS

The SNRE can address critical natural resource and environmental issues by building on its strengths, maximizing its opportunities, reversing its weaknesses and overcoming its threats. The strategic goals described later in this plan are designed to take appropriate actions based on this analysis.

STRENGTHS

1. SNRE attracts very high quality students and provides advanced interdisciplinary training for understanding ecosystem processes. This builds a solid foundation in fundamental science for its graduates that will create new knowledge and enable use of the main theories and methodologies of the natural and social sciences to foster integrative approaches to complex environmental problems.

2. SNRE has a dynamic affiliate faculty base and faculty from many disciplines train SNRE students. The faculty self-select to be approved through a formal process, which means that they place a priority on being affiliated with SNRE. As issues and needs change, the affiliate faculty utilized can usually change more quickly than in a traditional discipline-focused department, through course development across a wide array of departments and by individual faculty decisions to engage in advising graduate students. This interdisciplinary strength cannot be matched by a single-discipline unit.

3. SNRE provides students the opportunity to learn a variety of scientific perspectives and select those best adapted to their particular research problems and career objectives.

4. SNRE accesses the complete range of science related to natural resources and environmental issues, so it can serve a wide range of constituencies.

5. SNRE serves students interested in national and international issues, supporting the UF goal of “internationalizing” the curriculum and student body and extending the teaching arm of the university world-wide.

6. SNRE has an Advisory Board that represents the top level of university administration, a Faculty Advisory Council that represents faculty from cross-campus units and an External Advisory Council that represents the academic community and the non-governmental, agency, and private sectors.

WEAKNESSES

1. The current overall budget and School constitution does not allow hiring of core faculty dedicated to the SNRE curriculum, limiting the coherence of what is transmitted to the students. While the affiliate faculty provide excellent support in teaching and advising students, a few core faculty could create specific courses not available in other units, link with affiliate faculty in programs and projects, and provide a cohesive research identity to SNRE.

2. It is difficult to achieve budget priorities for new funds and state appropriations since “buy-in” to complex arrangements must be obtained from various colleges and departments. When this can be achieved, it takes more time, effort, and persuasive arguments. This may limit what SNRE can achieve.

3. SNRE may be perceived as a competitor by some traditional departments and colleges, especially in the recruiting and sponsoring of graduate students, if unit administrators perceive faculty engagement with SNRE as work subtracted from their units. This perception has diminished but still remains an occasional problem.
4. Lack of an endowment base within the UF Foundation creates a funding disadvantage compared to older, more established departments or schools. SNRE’s academic degree programs are relatively new and the SNRE graduates are early in their careers, thus limited in funding capabilities. Non-alumni donors must be approached using reasons other than allegiance to the school.

OPPORTUNITIES

1. SNRE can take a strong leadership role in helping Florida, the nation, and the world address critical natural resource and environmental issues.

2. SNRE can become a catalyst with other interdisciplinary units on campus to enhance the UF capability in delivering teaching and research programs to assist in the solution of natural resources and environmental problems.

3. SNRE already has an excellent reputation for attracting excellent students as they seek graduate education, and in producing quality graduates. The overall reputation for SNRE could be enhanced by achieving a “research identity.”

4. SNRE enjoys Florida’s internationally recognized set of resource issues as well as the University of Florida’s tradition of strong international education and research.

THREATS

1. SNRE has experienced rapid growth in its academic degree programs. Recent and anticipated cuts in state appropriations to higher education coincide with increased demand for SNRE’s degree programs. Growth will be limited or negative and SNRE will not be able to meet the demand for its programs.

2. A limited number of colleges and units may not fully agree to support SNRE programs due to competing interests or may reduce their support due to pressure from budget reductions.

3. University programs related to natural resource and environmental issues are sometimes viewed as controversial (for example, anti-growth) in contrast to contributing to a sustainable growing economy while also contributing to a sustainable environment. Political and other external forces could affect the growth of SNRE programs.

4. University administration may decide that interdisciplinary programs in other areas are a higher priority, making it more difficult to achieve additional funding. Some university administrators may favor competition among units as a way to achieve overall growth and improve program quality. SNRE in its cross-unit construct needs to operate in an environment that favors cooperation, rather than competition.

EXPECTATIONS AND MEASURABLE OUTCOMES

An action plan must have expectations and measurable goals and hence measurable outcomes. In each section of the SNRE Action Plan, goals are presented and actions identified to achieve the goal. Some performance indicators are implicit from the action item; for example, growth in the number of graduate students admitted and successful completion of degree programs. Other performance indicators will be added over time. Examples may include placement, recognition, and success of undergraduate and graduate students in their careers; contributions to the scientific literature and development of scientific findings by students and faculty that enhance economic and environmental sustainability. The 2006-11 plan contained 55 goals and 80 action items. During the first two years of the five-year plan, significant progress was made on a number of the action items. As of June, 2008, progress on the 80 action items is summarized as follows: completed (23); partially completed (6); always ongoing (37); no progress to date (7); no progress, since deemed not feasible (7). Some of the action items are no longer relevant due to the elimination of most research and outreach programs in mid-2008. They have been eliminated from this updated action plan and those listed in the updated plan will be those measured again in the future.
STRATEGIC GOALS

The long-term relevance and survival of SNRE is dependent upon providing our students the education that will prepare them to meet emerging environmental challenges throughout their careers. Population growth and the development of natural and semi-natural lands for human use are inevitable. Florida’s population is projected to grow 49 percent, to 25.9 million, by 2025. Almost 80% of the state’s population lives in the 35 coastal counties. By 2025, the population of Florida’s coastal counties is projected to be almost the same as the population of the entire state in 2000. This rate of development and associated loss of natural capital will result in progressive degradation of our environment and quality of life. It is essential that we bring the best available science and technology to bear on the problem of sustainable development and coastal management. Good science and technology are of little use in the face of intense economic demand without appropriate use of policy and management. Response to environmental challenges requires the transfer and integration of knowledge among academia, business and industry, and government. SNRE’s goal is to prepare students to participate in this process.

LEVERAGE OUR HUMAN CAPITAL

SNRE’s primary resources are its students and affiliate faculty, along with funding for graduate students allocated by the Provost and deans. Consequently our strategic focus must be on the people involved in our academic programs. SNRE’s students are very capable, have diverse backgrounds and interests, and tailor their programs of study to fit their individual needs and career goals. SNRE does not have line faculty who could develop “School” research programs, but the School nonetheless forms programmatic foci indirectly through the activities of students recruited and faculty mentoring them. The faculty advisors of Interdisciplinary Ecology graduate students from 1999 to mid-2008 were from 32 different academic departments, as shown in Table 1.

The research of SNRE students organically forms programmatic foci distributed across the advisors’ departmental disciplines. The focal areas that

<table>
<thead>
<tr>
<th>Department</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wildlife Ecology and Conservation</td>
<td>54</td>
</tr>
<tr>
<td>Forest Resources and Conservation</td>
<td>41</td>
</tr>
<tr>
<td>Food and Resource Economics</td>
<td>32</td>
</tr>
<tr>
<td>Geography</td>
<td>16</td>
</tr>
<tr>
<td>Botany</td>
<td>15</td>
</tr>
<tr>
<td>Environmental Engineering Sciences</td>
<td>15</td>
</tr>
<tr>
<td>Soil and Water Sciences</td>
<td>15</td>
</tr>
<tr>
<td>Anthropology</td>
<td>14</td>
</tr>
<tr>
<td>Family, Youth and Community Sciences</td>
<td>13</td>
</tr>
<tr>
<td>Florida Museum of Natural History</td>
<td>10</td>
</tr>
<tr>
<td>Fisheries and Aquatic Sciences</td>
<td>9</td>
</tr>
<tr>
<td>Latin American Studies</td>
<td>8</td>
</tr>
<tr>
<td>Political Science</td>
<td>7</td>
</tr>
<tr>
<td>Zoology</td>
<td>7</td>
</tr>
<tr>
<td>Environmental Horticulture</td>
<td>5</td>
</tr>
<tr>
<td>Agricultural and Biological Engineering</td>
<td>5</td>
</tr>
<tr>
<td>Geological Sciences</td>
<td>4</td>
</tr>
<tr>
<td>Sociology</td>
<td>4</td>
</tr>
<tr>
<td>Agronomy</td>
<td>3</td>
</tr>
<tr>
<td>Entomology and Nematology</td>
<td>3</td>
</tr>
<tr>
<td>Tourism, Recreation, and Sports Management</td>
<td>3</td>
</tr>
<tr>
<td>Agricultural Education and Communication</td>
<td>1</td>
</tr>
<tr>
<td>Horticultural Science</td>
<td>1</td>
</tr>
<tr>
<td>Statistics</td>
<td>1</td>
</tr>
<tr>
<td>Philosophy</td>
<td>1</td>
</tr>
<tr>
<td>Civil and Coastal Engineering</td>
<td>1</td>
</tr>
<tr>
<td>Landscape Architecture</td>
<td>1</td>
</tr>
<tr>
<td>Urban and Regional Planning</td>
<td>1</td>
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<tr>
<td>Building Construction</td>
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</tr>
<tr>
<td>Advertising</td>
<td>1</td>
</tr>
<tr>
<td>Journalism</td>
<td>1</td>
</tr>
<tr>
<td>Physiological Science</td>
<td>1</td>
</tr>
</tbody>
</table>
interest most students can be summarized as dynamics of linked ecological-social systems, land-use ecology, ecological restoration, growth management and sustainable practices, environmental education, international development, and environmental management.

**Goals:**

1. Maintain and strengthen the quality of the graduate students recruited.

2. Maintain and sharpen the focus on interdisciplinary study and research that differentiates SNRE from its partner programs and adds unique quality to the university.

**Actions:**

1. Work with the affiliate faculty during evaluation of individual applicants to interview them thoroughly, assess leadership qualities and social skills explicitly, and judge the applicant’s ability to “move the needle” during his or her postgraduate career.

2. Work with the affiliate faculty to carefully ascertain the individual applicant’s interest in genuinely interdisciplinary study and research.

**INTERDISCIPLINARY GRADUATE EDUCATION, RESEARCH, AND TRAINING GRANTS**

The interdisciplinary graduate degree programs of SNRE present natural partnerships for faculty in other administrative units seeking grants for interdisciplinary graduate education, research, and education. A program of the National Science Foundation exists to support such grants, and the University of Florida has received three IGERT grants in the past decade: Working Forests in the Tropics, Adaptive Management: Water, Wetlands, and Watersheds, and Quantitative Spatial Ecology, Evolution, and Environment. SNRE has participated in the first two of these initiatives, and is engaged in a new one in the formal proposal stage, on the subject of Building a Carbon-Neutral Energy Infrastructure: Sustainable Technologies Through Integrated Decision Making.

**Goals:**

1. Cooperate with faculty in other administrative units in designing, writing, and implementing NSF IGERT grants on subjects related to natural resources and the environment.

**Actions:**

1. Participate in preparation of grant proposals for interdisciplinary graduate training, by contributing to the ideas addressed in the proposals, networking among faculty across academic units, and writing portions of the proposals as needed.

2. Assist in recruiting graduate students, placing them with willing advisors in the most appropriate degree programs, and providing matching funds for grant-supported students placed in the Interdisciplinary Ecology doctoral program, to optimize the overall effort of the institution in leveraging the external funds.

**CRITICAL JOINT FACULTY HIRES**

The SNRE degrees were created as “virtual” programs on the assumption that existing disciplinary departments offered all the necessary coursework. Experience has shown this assumption to be false. In the undergraduate program, it was essential to create a foundation course in Environmental Science (EVS 3000) and a capstone course for the major (EVS 4120). It was also important to create courses to anchor three areas of the graduate curriculum: Principles of Natural Resource Management (EVR 6320), Theories of Community Development (FYC 6330), and Sustainability Science (tentative), as well as a critical-thinking course, Scientific Processes in Conservation and Development (EVR 5322).

SNRE has been provided two quarter-time lecturers, who have developed and taught most of these courses (EVS and EVR). Additionally, the School of Forest Resources and Conservation and SNRE have jointly hired an assistant professor in the area of fire ecology and forest management, who has developed new courses that are of value to both programs.

Inevitably, applicants for lecturer positions have newly received their doctoral degrees and treat the lec-
turer positions as stepping stones to full-time tenured faculty jobs. As a result, frequent turnover of lecturers disrupts teaching continuity and deters the School from delivering a course once it has been developed and refined. SNRE needs to hire three additional faculty (replacing the lecturers) to provide essential coursework not taught in other programs, maintaining a small core of courses required for the undergraduate and graduate majors.

Goals:

1. Teach the core courses necessary to the existing master’s and doctoral degree programs.

2. When university finances permit, obtain new state funds and hire joint faculty with partner departments to teach these courses each semester (undergraduate) or year (graduate).

Actions:

1. Plan course content, prepare course syllabi, and seek approval from the SNRE faculty, college curriculum committee, and Graduate Council.

2. Hire three joint faculty in partnership with other departments (or full-time faculty) and build the needed courses into the repertoire of these positions.

ACADEMIC PROGRAMS

CURRENT DEGREES

BS/BA in Environmental Science

Enrollment in the bachelor’s degree in Environmental Science grew rapidly from 29 in 1995 (the year of inception) to 179 in 1999, accompanied by a flurry of publicity. Thereafter enrollment declined to 81 in 2004, tracking the national trend as economic and geopolitical events pushed environmental issues lower on the public agenda. Another factor may have been the foundation course for the major, which initially served a heterogeneous audience of general-education students and Environmental Science majors. In 2004, SNRE hired its own part-time lecturer to revise and teach this course to our majors only. By 2008, enrollment had increased to 141 students.

Two opportunities are evident to maintain or grow undergraduate enrollment. One is to secure teaching of the revised foundation course of the major. The other is to convince Florida community colleges to convert their Environmental Science Associate of Science (AS) programs to Associate of Arts (AA) programs, as has occurred at Palm Beach Community College. This is desirable because two-year AS graduates are not admissible to four-year degree programs; they are hired as environmental technicians but are not well prepared for professional advancement. In contrast, the AA degree is nearly identical to the first two years of the UF degree, and AA transfer students from community colleges comprise 40 percent of UF undergraduates.

Because the UF Environmental Science degree is comprehensive and rigorous, SNRE graduates are well prepared, employers are satisfied, and normal career advancement occurs. However, employers are generally bewildered by the multiplicity of environmental degree programs among universities (and even among UF departments), and applicants have some difficulty distinguishing themselves from competitors who are less well prepared. Graduating students would have a big advantage if their program of study included an internship or other practical work experience. To routinely provide such experience, a staff person is needed to network among corporate, government, and non-profit organizations seeking interns and to place individual students. The internship opportunities would be relevant to students of other natural-resource programs (Forestry, Fisheries, Wildlife, Soils), and a career-development coordinator could jointly serve several units.

Goals:

1. Maintain or modestly grow the number of students enrolled in the undergraduate program.

2. Provide an experience-based internship program for undergraduates and a career development program for graduate students.

Actions:

1. Secure continued teaching of the Environmental Science foundation course by hiring a tenure-track faculty member.
2. Approach other community colleges to create an Environmental Science AA degree. Use CALS recruitment personnel to do this and focus on larger community colleges in major urban centers.

3. Seek state funds for a career development coordinator to serve undergraduate students in several natural-resource schools and departments.

**MS in Interdisciplinary Ecology**

The graduate program in Interdisciplinary Ecology is, in most respects, very successful. Enrollment in MS and PhD tracks grew from 21 in 1999 (the year of inception) to 145 in fall 2007. The program is based on ecology as the body of theory encompassing the “whole knowledge” needed to address complex environmental problems, and it explicitly connects the biophysical and social sciences. Students interested in the sustainability problem and wanting broader expertise than available in the traditional disciplines are drawn to this program from around the world.

SNRE offers a master’s-with-thesis degree and a non-thesis master’s program. The master’s program attracts generally high-quality students, and enrollment grew to 70 by fall 2007 before dropping to 36 a year later. This program is a source of excellent students for our doctoral program. The program could be improved by offering certain core courses and skills not available from the collaborating departments; for this to occur, either the departments or the SNRE will need to hire faculty. The program could also be improved if the SNRE were able to develop its own, distinctive research program; this cannot be done without hiring faculty who work for the SNRE.

**PhD in Interdisciplinary Ecology**

Enrollment in the PhD program in Interdisciplinary Ecology has grown to 96 in fall 2008. Of the 19 graduating through fall 2007, all but 1 are employed by universities, natural-resource management agencies, or non-government organizations. For both the thesis MS and the PhD in Interdisciplinary Ecology, more high-quality people are applying than can be accommodated due to limits of faculty capacity and financial assistance.

**Goals:**
1. Grow enrollment and quality of the PhD program. This is the top-priority issue for SNRE.

**Actions:**
1. Hire joint faculty in partnership with other departments and build the needed courses into the repertoire of these positions.
2. Seek private funds to support doctoral fellowships and assistantships.
3. Encourage faculty selection of high-quality applicants through the allocation of fellowship and assistantship funds.
4. Maintain an active dialog with the faculty to encourage selection of high-quality applicants, with due attention to interdisciplinary interests, leadership qualities, and intellectual credentials.
5. Work with partner departments and affiliate faculty to enhance the quality of the core graduate curriculum and develop core SNRE graduate courses.

**Evaluation of Academic Programs**

Current academic programs are evaluated continuously by the director of Academic Programs and adapted by adding and deleting courses as departmental curricula change, as well as modifying the requirements as appropriate. Telephone surveys of employers of BS/BA graduates in Environmental Science were conducted in the late 1990s. Employers are happy with these employees, and the bachelor’s curricular requirements have changed little since an initial period of adjustment. The graduate degrees are updated more frequently due to dynamism of departmental course offerings at the graduate level.

**Goals:**
1. Continue the ongoing evaluation and revision of the master’s and doctoral degree programs in In-
terdisciplinary Ecology.

2. Conduct a new survey of employment status of BS/BA graduates, to evaluate the success of their education, modify the curriculum as appropriate, and update advising of current undergraduate students on career choices.

**Actions:**

1. Continue the routine adaptation of the existing master’s and doctoral programs.

2. Complete the BS/BA graduate survey and post results on website.

**PARTNERSHIPS**

**CONSERVANCY OF SOUTHWEST FLORIDA**

In 2004 the Conservancy of Southwest Florida (CSWF) and UF entered into a joint venture to explore various opportunities that will lead to the development of collaborative research and public education related to sustainable development and resource conservation in southwest Florida.

**Goals:**

1. Increase collaborative research and public education related to sustainable development and resource conservation in southwest Florida.

2. Determine opportunities for CSWF staff to interact with faculty and students at UF and conversely, for UF faculty and staff to interact with CSWF staff at Conservancy headquarters.

**Actions:**

1. Work with UF and CSWF development staff to secure funding for partnership activities as outlined in the MOU.

2. Invite CSWF staff members to Gainesville to interact with faculty and students.

**NEW COLLEGE OF FLORIDA**

New College of Florida (NCF) is a public, selective undergraduate college for academically talented students in Sarasota. UF and NCF have proposed to pair the NCF Liberal Arts (Environmental Studies) degree and the UF Interdisciplinary Ecology master’s/doctoral degree program to recruit stellar NCF students to UF, using a combined-degree program already approved at UF.

**Goals:**

1. Develop a student and faculty exchange program with the Department of Environmental Studies at NCF as part of the joint graduate-degree program.

**Actions:**

1. Work with the University of Florida Foundation and the New College Foundation to raise private funds for fellowships to recruit NCF students to the UF Interdisciplinary Ecology program.

**COMMUNICATIONS**

**WEB SITE**

The SNRE Web site has become an effective medium for communicating with many audiences. High school students exploring potential colleges and universities use the Internet as a source of information about the Environmental Science degree program. The SNRE Web site shows them academic opportunities and potential career choices. Graduate students looking for degree programs learn about the Interdisciplinary Ecology program, use the online application materials, and use the faculty database to seek potential advisors. Current students use information on the SNRE Web site to plan their academic programs and to carry out necessary administrative procedures. Examples of other information available on the Web site include seminars and important events, funding and job opportunities, information about advisory councils, and electronic publications. Other audiences using the Web site to learn about SNRE include affiliate faculty, University administrators, professionals at other institutions and funding agencies, and the general public.
SNRE Action Plan

Goals:

1. Improve the effectiveness of the SNRE Web site.

Actions:

1. Maintain and update the large, multi-page SNRE Web site.

2. Maintain the affiliate faculty database.

NEWSLETTER

The SNRE Source newsletter demonstrates SNRE’s leadership role in addressing critical natural resource and environmental issues. Posting The SNRE Source on the Web site has proven an effective way to reach new and traditional audiences, because its articles are readily found in routine internet searches.

Goals:

1. Promote positive relations among UF faculty, staff, students, alumni, outside agencies, and other constituents by enhancing internal and external communications.

2. Highlight SNRE faculty and student activities to stakeholders.

3. Use the newsletter as a recruiting tool for future students.

4. Develop a donor base.

Actions:

1. Produce a biannual newsletter that will be posted on the SNRE Web site.

2. Maintain a newsletter listserv that allows readers to independently subscribe and unsubscribe to the list.

3. Maintain the Web page where friends of SNRE can make donations.

4. Write articles that help achieve the above newsletter goals.

ANNUAL REPORT

SNRE management will prepare an annual report in the fall term of each year. The report will be distributed to the faculty, students, Advisory Board, External Advisory Council, and Faculty Advisory Council and will be made available on the SNRE Web site.

TIMELINE AND IMPLEMENTATION PLAN

The strategic goals outlined in this document will be implemented over a 4 year period, 2008-2011.

APPROPRIATIONS AND DEVELOPMENT

SNRE has several options to pursue in order to increase the amount of funding available. This includes pursuing additional appropriations from the state legislature and obtaining private donor support through working with the University of Florida Foundation (UFF). SNRE does not have its own development officer but does work with UFF through the IFAS/SHARE office and directly with UFF senior management that has sought SNRE as a partner in ongoing and potential fund-raising efforts. What is attractive to UFF is that SNRE has a campus-wide “marketable” natural resource and environmental role and represents a coherent “entry-point” into the University of Florida’s many units active in this area.

Goals:

1. Increase the level of state appropriations in support of SNRE programs.

Actions:

1. Participate in the existing Legislative Budget Request (LBR) process of UF (when it resumes) to obtain priority and authority to request state appropriations.

2. Encourage colleges and departments that hire faculty members who work in natural resources and environment to give joint appointments in SNRE.
Goals:

1. Obtain private funding, donor gifts, and philanthropic foundation support to enhance SNRE’s existing programs.

Actions:

1. Continue to work with the UFF on the development of a student “feeder” system for NCF’s undergraduates into SNRE graduate program. The goal is to encourage donors to support this program through gifts that would benefit both UF and NCF.

2. Continue to work with the Conservancy of Southwest Florida (CSWF) in Naples to obtain private donor support that would link UF and CSWF programs. The idea is to generate private donor support to UFF with the designated use by UF faculty and students in cooperative programs with CSWF in the southwest Florida area.

3. Identify and pursue individual donors who have the capability to endow fellowships, assistantships, joint faculty, and other SNRE opportunities such as naming SNRE or programs within SNRE.

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Center then clockwise from left: Planet earth, see front cover credits; Turtle hatching, UF/IFAS; Hydroponic strawberries, Milt Putnam; Mangroves, Carlton Ward, Jr.; Fruit and vegetable stand, Thomas Wright; Alligator, UF/IFAS.