Strategic Plan:
Path Forward to Maintain Preeminence

University of Florida’s Soil and Water Sciences Department (SWSD) ranks among the largest and most prestigious departments in the nation. With a distinguished record of accomplishments in teaching, research, and extension, the department has made a remarkable impact on the soil and water science discipline. The department has been the leader in graduate education with innovative programs that reach a wide range of students. The department has an outstanding record of meeting the needs of clientele through teaching, research, extension and outreach programs. Overall, accomplishments of faculty, staff, and students in the past decade have continued to elevate the department’s stature at national and international levels. We are not satisfied to reflect on the past, however, and strive for higher goals to maintain excellence in the field of soil, water, and environmental sciences.

The SWSD at the University of Florida offers one of the strongest and most prestigious programs in soil, water, and environmental sciences in the nation. To build on the reputation of its faculty and programs, the Department must pay particular attention to future needs/opportunities, while maintaining current strengths. The road map presented in the Strategic Plan functions as a guide to accomplish the Department’s goals in the coming years. The plan includes 6 goals with defined action steps to maintain excellence and function at full potential. For the plan to be successful, the faculty must be prepared to think innovatively and to be open to change, especially to capture unexpected opportunities and address future challenges. Because the Department is committed to the strategic process, the plan will be reviewed regularly and changed as needed to respond to future challenges and opportunities, and to provide vision and guidance for the growth and improvement of the Department.

To accomplish these goals, the department must take advantage of opportunities that enhance the effectiveness of its academic programs, while maintaining the relevance and impact of research, teaching, and extension/outreach programs. The department must have a vision to address the critical future needs of our clientele. The SWSD is organized as an academic unit within the University of Florida’s Institute of Food and Agricultural Sciences (UF/IFAS). Responsibilities of this unit include academic programs, research, extension education, and scientific, professional, and community service. Soil and Water Sciences programs are located on the main campus in Gainesville as well as at 11 RECs located throughout the State. The department has developed an adaptive road map to preeminence as presented in the following pages. The Department is committed to follow the strategies presented in this road map to maintain excellence. The five year strategic plan is adaptive in nature, and will continuously change to
ensure that the department’s vision, core values, and goals remain relevant to meet the changing needs of our clientele.

**Vision & Mission**

The vision of the SWS Department is to be a global leader in advancing the understanding and stewardship of soil and water resources.

The mission of the SWS Department is to provide knowledge and science-based solutions for addressing food security, public health, and protection of natural resources and environment in Florida, the nation, and the world.

**Core Values**

- **Excellence:** The Department is committed to individual and collective excellence in every facet of its research, teaching, extension, and service functions.
- **Productivity:** The Department is committed to establishing and maintaining high productivity in all its programs, while maintaining high quality and relevance.
- **Creativity:** The Department is committed to be innovatively capturing new opportunities and developing new integrative programs, while maintaining strong foundations in current programs.
- **Accountability:** The Department places high value on accountability of its programs. This includes relevance of our programs to meet the needs of students, governmental agencies and industry.
- **Flexibility and Viability:** The Department shall be adaptive to the changing needs of our clientele. This includes optimization of departmental efforts and resources by engaging in collaborative, synergistic work and programs at every opportunity.
- **Partnerships:** The Department is committed to developing strong partnerships with our clientele through research and extension/outreach programs. The Department is committed to respond to the needs of the clientele.
- **Transparency:** The Department is committed to fostering and maintaining an open, honest, healthy, and fulfilling environment for its students, staff, faculty, and clientele.

**Strategic Goals**

- Improve the national and international visibility and recognition of the department.
- Deliver highly visible teaching programs that have deep, lasting impacts.
- Deliver highly visible research programs that have deep, lasting impacts.
- Deliver highly visible extension programs that have deep, lasting impacts.
- Increase the emphasis on internationalization across all departmental programs.
- Strengthen the position of the department as a leader in distance education (DE).
Goal 1: Improve the national and international visibility and recognition of the department.

Action Steps:
- Based on current faculty strength and future needs, revise departmental program thrust areas to address the state, national, and international agenda to protect soil and water resources.
- Promote high impact activities and achievements by enhanced solicitation of funding from federal agencies and service on national panels and science advisory boards.
- Strive for high impact programs and publications.
- Assess the current departmental achievements in relation to its peers, and develop strategies to attain pre-eminence.
- Seek opportunities to engage with other universities at national and international level to develop joint programs or interdisciplinary centers.
- Improve science communication at state, national, and international levels using various methods including social media.
- Encourage faculty participation and leadership activities in their professional societies.
- Nominate faculty and students for selected awards.
- Encourage faculty to organize thematic research conferences, symposia, and workshops at national and international levels.

Measures of Success:
- Increased proposal submission and funding
- Increased collaboration and networking with other universities
- Increased number of publications high impact journals
- Increased number of synthesis documents and books
- Increased social media interaction and recognition
- Increased participation in professional societies in leadership roles
- Increased participation in national levels panels and review boards
- Develop and support national programs or centers aimed at large grant funding.

Academic Programs

Goal 2: Deliver highly visible teaching programs that have deep, lasting impacts.

Action Steps
- Review and identify the significant contributions department teaching programs made in producing highly employable students.
- Develop and implement strategies to improve the quality and diversity of students enrolled in the department.
- Review curriculum regularly and adjust course offerings accordingly to assure content breadth, depth and quality.
- Strengthen the academic programs by focusing on the skills and credentials that students will need when they graduate.
• Improve evaluation strategy for doctoral students to become “independent scientists” when they graduate.
• Present certificates that recognize student credentials in a capstone class.
• Track the awards and career placement of students. Survey graduates as to what courses and activities have proven more valuable to them.
• Reach out to potential employers and seek their input to improve our teaching programs
• Encourage faculty members to pursue extramural funding aggressively and continuously in support of graduate programs
• Foster fundraising for scholarships and fellowships, including submission of grant proposals to support teaching programs.
• Encourage faculty to attend workshops and training programs on innovative teaching methods.
• Provide resources to increase student’s hands-on experience and out-of-class room projects.

Measures of Success:
• Increased marketing of our teaching programs
• Increase enrollment in department courses
• Increased enrollment in the major
• Placement of undergraduate students
• Increased funding for teaching programs

Research Programs

Goal 3: Deliver highly visible research programs that have deep, lasting impacts.

Action Steps
• Review current research program areas and faculty strengths and develop research agenda for the department.
• Align research agenda with the departmental program thrust areas
• Based on statewide faculty strength, identify key research initiatives that have potential for large scale funding. Provide seed funds to these groups to develop preliminary data.
• Focus on high quality, scholarly, high impact, and relevant research.
• Improve the involvement of undergraduate students in research programs
• Encourage faculty to take leadership roles in developing interdisciplinary research programs/grant proposals at state, national, and international levels.
• Encourage technology transfer and identification of discoveries and inventions for commercial applications.
• Foster stronger linkages between research and extension faculty to better compete for grants requiring integrated extension/outreach component as a part of the research proposals.
Measures of Success:
- Increased external funding of research programs
- Increased number of high impact refereed journal articles
- Increased recognition of department research at the national or international level
- All faculty with major research appointment should have a robust and fully funded research program.
- Increased leadership roles by faculty in developing large-scale interdisciplinary project funding.
- Increased collaboration between faculty with research and extension appointments

Extension Programs

Goal 4: Deliver highly visible extension programs that have deep, lasting impacts.

Action Steps

- Improve how the department’s research and extension value is communicated.
- Provide leadership to Extension Roadmap initiative teams.
- Align extension programs with priority issues to achieve stakeholder impacts, and promote these accomplishments within the department.
- Increase coordination among statewide extension programs. Develop new materials while avoiding redundancy.
- Improve involvement of undergraduate and graduate students in extension programs.
- Create opportunities to “tell the world” about departmental contributions in addressing key issues related to protection and conservation of soil and water resources.
- Link current EDIS publications with a two-minute videos that show significance of the SWS faculty work and projects. Share these videos with various media outlets.
- Increase the department’s social media footprint. Encourage/require faculty to provide the content.
- Modify existing teaching materials for application in extension programs.
- Each faculty member with extension responsibilities will establish mechanisms for determining and quantifying impacts of his or her programs on targeted audiences and on the state.
- Foster stronger linkage between extension and research faculty. Many state and federal agencies now require extension/outreach component as a part of the proposals.

Measures of Success:
- Increased impact of our extension programs.
- Increased number of in-service training programs
- Increase the number of fee-based training courses (both on-site and online).
- Increased grant and private funding.
- Improved educational products to current and future needs of clientele.
International Programs

Goal 5: Increase the emphasis on internationalization across all departmental programs.

Action Steps:
- Review current international programs and strengths where SWS has made/can make a global impact, consistent with departmental research, teaching, and extension priorities.
- Encourage broader linkages between the department and existing opportunities within the department, IFAS Global, and the UF International Center.
- Seek grant funding from federal agencies, private/foundations to support international programs.
- Encourage faculty to take leadership in developing high impact international programs.
- Strengthen connections with international centers (e.g., Zamarano, Earth University, ICRISAT, and others.) through intern placements.
- Develop an international programs working group within the department.
- Take advantage of our physical location as a gateway to tropical systems research.
- Establish international hubs in select countries to promote SWS programs.

Measures of Success:
- Expanded geographical presence to increase the impact.
- Increased diversity and level of funding.
- Increased international courses (both on-site and online) taught.

Distance Education Programs

Goal 6: Strengthen the position of the department as a leader in distance education (DE).

Action Steps:
- Develop specific growth strategies and include resources assessment.
- Conduct a marketing study to identify promising ways to promote our DE programs internationally.
- Utilize UF resources for DE development and support.
- Increase professional development on-line short courses in select topical areas.
- Increase demand driven online certificate programs.
- Develop online courses for wide audiences.

Measures of Success:
- All SWS DE courses meet the DE markers of excellence.
- Increase student enrollment in DE courses.
- Increase faculty engagement in distance education.