



Water Institute

2012-2017 Strategic Plan





UF UNIVERSITY of FLORIDA
Water Institute
2012– 2017 Strategic Plan

1. Introduction

Florida's burgeoning human population and vulnerability to both climatological and anthropogenic changes in the water cycle make the State a unique living laboratory to develop new knowledge and test solutions to global water problems. In recognition of the importance of water issues, and the need to address them in a new interdisciplinary manner, the University of Florida (UF) established a campus-wide interdisciplinary Water Institute in May 2006. Since its inception, the UF Water Institute has emerged on campus, and in the state, as a leader in coordinating interdisciplinary research, education and outreach programs.

Over the last five years, there has been growing scientific, public and political awareness of water issues emphasizing the need for locally relevant and nationally pertinent research, education and outreach. Understanding complex water issues in a new holistic manner and exploring integrated solutions to managing these issues requires a sustained high level effort. It calls for bold action to facilitate means to obtain, integrate and share new data; to design innovative, comprehensive large-scale experiments; and to develop new simulation tools to allow scientists, managers, citizens, and policy makers to explore alternative scenarios of the impacts of climate change, population growth, land use change, and water management and policy alternatives. This strategic plan outlines the Water Institute mission, vision, goals, objectives and activities designed to meet these challenges and opportunities for the next five years.

2. Mission

The UF Water Institute brings together talent from throughout the University and builds internal and external partnerships needed to address relevant and urgent research challenges, implement innovative interdisciplinary training programs for promising students, and provide state-of-the-art expert assistance and knowledge transfer programs for external stakeholders.

3. Vision

Interdisciplinary UF Water Institute Teams, comprised of leading water researchers, educators and students, develop new scientific breakthroughs; creative engineering; policy and legal solutions; and pioneering educational programs that are renowned for addressing state, national, and global water problems.

4. Values

Partnerships: The Water Institute recognizes the importance of developing strong inclusive partnerships among Water Institute Affiliate Faculty, and with external stakeholders, to identify and prioritize critical water issues requiring interdisciplinary expertise.

Expertise: The Water Institute is committed to developing the basic knowledge, practical experience, and infrastructure required to respond to stakeholders' emerging water issues.

Excellence: The Water Institute is committed to provide excellent interdisciplinary water-related research, education and outreach programs that are recognized within the state of Florida, the nation and the world.

Respect: The Water Institute provides services that acknowledge and respect the expertise of all Water Institute Affiliate Faculty; it also recognizes the personal values, cultures, and socioeconomic context of its diverse external stakeholders.

5. Goals

The overarching goals of Water Institute research, education and outreach programs are to:

- Improve basic knowledge of the physical, chemical, and biological processes in aquatic systems (rivers, lakes, oceans, estuaries, wetlands, soil and ground waters).
- Enhance understanding of the interactions and interrelationships between human attitudes and activities, and aquatic systems.
- Develop and promote the adoption of improved methodologies for water management and policy (including quantity, quality and ecosystem services) based on a foundation of science, engineering, management and law.

6. Thrust Areas

Research, Education and Outreach thrust areas are thematic cross-cutting initiatives around which the Water Institute Affiliate Faculty joins forces to achieve Water Institute goals. Thrust Areas provide broad outlines of emphasis areas rather than narrow definitions of the Institute, and represent areas in which interdisciplinary collaborations are likely to produce significant progress. The four overarching thrust areas and their goals are:



Water, Land Use and Ecosystems - Develop the basic understanding needed to develop programs and policies intended to reduce human impact on water quality and ecosystem function.



Water and Climate - Develop and improve predictive tools that will allow simultaneously manage water resources for multiple uses under the certainties of climate variability and the uncertainties of climate change.



Water and Society – Improve understanding of factors affecting real or perceived conflicts, decision making processes regarding complex water issues, and design of innovative educational, economic, or regulatory strategies to achieve long term water resource sustainability goal.



Water Resources Sustainability – Develop the understanding, technologies and management strategies that support the sustainable management of water resources and help inform management to economically meet current water use and water quality needs without restricting future water availability and quality

<http://waterinstitute.ufl.edu/FacultyExpertise/Expertise.aspx> for the searchable on-line database of Water Institute faculty members.

An internal Faculty Advisory Committee (FAC) for the Water Institute consists of 15 members of the Water Institute Affiliate Faculty. Ten members of the FAC are elected by members of the Water Institute Affiliate Faculty on staggered 3 year terms. Five members are appointed by the Water Institute director to ensure balance among disciplines. See Table 1 for a list of current FAC members. Over the past 5 years, a total of 20 faculty members, representing 15 departments and 6 colleges, have participated on the FAC, ensuring Water Institute programs reflect departmental programs and faculty strengths.

An ad-hoc External Council of Advisors consists of speakers who have participated in the Water Institute Distinguished Scholar Seminar Series. These individuals are representatives of leading academic institutions in a wide range of water-related fields, many of whom are National Academy members and two of whom are Stockholm Water Prize winners. For a list of Distinguished Scholar Seminar Series speakers see <http://waterinstitute.ufl.edu/seminars/seminars.asp>. A priority for this next year, is to establish an External Advisory Council.

9. Business Plan

The Water Institute is poised to address relevant and urgent research challenges, implement an innovative program of interdisciplinary training for promising young researchers, and build its growing partnerships both on campus and with external stakeholders. High priority will be placed on ensuring a sustainable Water Institute through externally funded research, education, knowledge transfer projects; obtaining private donations to build both intellectual capacity and facilities; and producing broad state, national and international impacts.

The following summarizes the business plan for funding Water Institute programs:

- Base funds from UF for Water Institute director and staff salaries
- Existing endowment funds for operating expenses
- Extramural Funding for interdisciplinary grants and service projects
- Indirect cost returns for re-investment in internal Program Initiation Fund Awards
- Pursue new gifts and endowments for:
 - Endowed chairs and named professorships
 - Named Water Institute Graduate Fellowship Program
 - Named undergraduate internships
 - Named buildings, labs, computational centers
- Pursue State Legislative Budget Requests and Congressional Budget Requests to build Water Institute faculty, staff, facilities