

Water Institute

2007-2010 Strategic Plan

Executive Summary

Introduction

Florida's burgeoning human population and vulnerability to both climatological and anthropogenic changes in the water cycle makes 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 established a campus-wide interdisciplinary Water Institute in May 2006.

Mission

The UF Water Institute brings together talent from throughout the University to address complex water issues through innovative interdisciplinary research, education, and public outreach programs.

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.

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.

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.



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. Thrust areas are determined through an on-going process which reflects current interests of Water Institute Affiliate Faculty and Stakeholders.

Water Institute Thrust Areas (2007-2010)

- **Water Resources Sustainability**
 - Development of alternative water supplies and storage
 - Water treatment, wastewater treatment, groundwater remediation
 - Water quality protection, management of groundwater recharge areas
 - Water conservation, reuse, demand management
 - Impacts of alternative energy on water resources

- **Water, Land Use and Ecosystems**
 - Terrestrial and aquatic system linkages
 - Land use change impacts
 - Sustainable ecosystem thresholds
 - Ecosystem restoration

- **Water and Climate**
 - Extreme events (floods, droughts, hurricanes)
 - Climate variability (ENSO phase, MDO)
 - Climate forecasts
 - Climate change

- **Water and Society**
 - Water policy and law
 - Water marketing and pricing
 - Social impacts and implications
 - Public health

Photos courtesy of IFAS, SFWMD & USDA NRCS

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