Graduate Students Help Florida Prepare to Meet Water Policy Challenges

Florida State University

Nowhere in the eastern United States is water more the subject of controversy than in Florida. Exuberant population growth and economic development coupled with fragile groundwater stocks and delicate ecosystems make Florida the focus of tensions between the developer and the environmentalist. In 2003, six Florida State University graduate students prepared studies of seven Florida water conflicts that illustrated both the challenges of Florida water policy and the promise of pragmatic American problem-solving. These studies became the bases of a statewide water policy conference held in Tallahassee in November of that year, and are now set for publication in a book that aims to help water professionals improve institutions for water policy making.

Urban and Regional Planning Ph.D. student Aysin Dedekorkut and Political Science Ph.D. student Ramiro Berardo looked at water supply planning efforts in the Tampa Bay and East Central Florida regions, examining conflicts over water supply among competing municipal users. Dedekorkut, Law (J.D.) student Toni Sturdivant, and Public Administration Ph.D. student Simon Andrew studied conflicts over agricultural and industrial water pollution discharges on the Suwannee River, Fenholloway River and Rice Creek. Geography Ph.D. student Jeff Dickey and Urban and Regional Planning Ph.D. student Mellini Sloan explored conflicts that pitted human water use with habitat restoration or ecological preservation in the Apalachicola-Chattahoochee-Flint dispute among Georgia, Florida and Alabama, and the Ocklawaha River dam decommissioning controversy.

The students worked under the direction of John Scholz, Francis Eppes Professor of Political Science, and Bruce Stiftel, Professor of Urban and Regional Planning, with funds provided by FSU's DeVoe Moore Center for the Study of Economics and Governmental Policy. These case studies were subsequently reviewed by Florida water professionals and national environmental scholars as the basis of the conference on Adaptive Governance and Water Conflict attended by 100 Florida water professionals.

Later this month, the students' studies will be published in "Adaptive Governance and Water Conflict: New Institutions for Collaborative Planning" by Resources for the Future Press. The work calls for stronger collaboration in consensual processes, more realistic use of scientific information, and greater incorporation of market incentive structures in Florida water policy. ■

Preventing Erosion on Florida Shorelines

Brigitte Vlaswinkel
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The shorelines of Florida are an important feature in the tourism industry, attracting millions of visitors each year. It is important to know how shorelines are affected by their geology and environment so that erosion and other negative effects on shorelines can be prevented.

Tidal flats and low-energy shorelines represent dynamic systems that respond to a number of forcing mechanisms. Although it is well known that fluid forcing plays an important role in the evolution of muddy coasts and tidal flat deposits, there are still many unknown aspects of the sediment transport and depositional processes of such shorelines. Brigitte Vlaswinkel, a Ph.D. candidate in Marine Geology and Geophysics at the University of Miami, with assistance from Professor Harold Wanless and Assistant Professor Eugene Rankey, conducted a study focusing on a low-energy coastal setting of Cape Sable in the Everglades National Park.

"The results of this research illustrate the complex connectivity of processes and products on this coast. The dominance of day-to-day versus storm processes on sediment dynamics depends on shoreline orientation and availability of sediment. These observations and interpretations have led to a model for the evolution of muddy shorelines," said Harold Wanless. ■