

## **Hydrological Connections Between Social and Ecological Systems in South Florida**

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This proposed session is designed as a working group to develop research strategies to address two key recommendations of the NSF panel's review of the FCE program. These recommendations were: 1) better integrate the Human Dimensions research into the ecological research program -- with a particular emphasis on using hydrology to make these connections, and 2) understand how regional water management affects hydrologic conditions within the FCE study site. Currently, the Human Dimensions group is focusing on understanding the spatial, temporal, social and political dynamics of land conversion within southern Miami-Dade County. The Hydrology group's focus has been on understanding the hydrologic patterns and interactions (fresh, sea, and ground) within the estuarine ecotone. Possible strategies for using regional hydrologic conditions as a means of integrating include, but are not limited to:

- a) Develop better maps that illustrate regional water flow patterns. After the FCE review, we realized that we need to have materials integrated into our presentations and website that tell the story of regional water flows better. This will be particularly important as we begin to understand how land use change within our study site alters (or not) water quality and water supply into Everglades National Park.
- b) Examine the Politics and Impacts of Canal Management.
- c) Map and Analyze Changes in Water Demand by Land Use over Time.
- d) Others?