# Suwannee Basin Workshop 2004

Final Session Summary
Friday, September 24, 2004
Cedar Key, Florida



E. Raabe

# Information Management

- Presentations on information management, new techniques and models
  - watershed assessment
  - watershed atlas,
  - remote sensing,
  - GIS toolbox,
  - and USGS Earth Explorer
- Next, final priority topic discussion and What's Next?



## Top Three Workshop Priorities

- 1<sup>st</sup> Clearing house for data resources, data management and integration
- 2<sup>nd</sup> Full Watershed Study and Data Collection across FL & GA
- 3<sup>rd</sup> Integrated models: model water quality, water supply (MFL's), and basin ecology



# 1st Priority: Clearing house

Clearing house for data resources, data management, data integration, links, and GIS

- Availability and access
- Real-time tracking
- List of scientists and research
- Know the usercommunity
- Annual updates

- Value, not hindrance, to scientists
- Portal architecture (links)
  - Develop database architecture first
- Need IT gurus
- GIS database



## 2nd Priority: Full Watershed Study

# Full Watershed Study and Data Collection across FL & GA

- Need consistent data collection effort
- Full integration across Florida & Georgia
- Suwannee is largest unregulated basin
- Chance to do things right
- Go to Georgia. Bring them in. How?
- Boundary effort



# 3rd Priority: Integrated models

Integrated models: model water quality, water supply (MFL's), and basin ecology

- Model changes to water supply, water quality, and ecological responses
- Define MFL's on scientific basis!
  - Do good science first (currently political)
- Include variability in system
  - Event effects
  - Seasonal range
  - Late autumn flow is important to sturgeon
- Need middle & upper basin data



# Additional priorities

#### Water Quantity and Quality Issues

- Hydrologic Observatory
- Water use and availability; land use, change and diversions
- Surface/GW interactions; recharge, flow, residence time
- Spring-shed delineation and protection
- GW age-dating
- Microbial and geochemical source tracking
- Geologic control of permeability
- Riverine impacts to estuary; quality, quantity, salinity dynamics
- Full basin model include GA in water flow and water quality
- Standardized and basin-wide water quality monitoring



#### Additional Priorities continued

#### Ecosystem and Habitat Issues

- Link: biota, hydrogeology, and water quality
- Link: Extreme events and ecology
- Habitat mapping
- Riverine impacts to estuary
- Biotic/Abiotic baseline data
- Adequate biotic monitoring basin-wide
- Benthic habitats in estuary
- Process-oriented research
- Define species interaction with habitat
- Habitat monitoring
- Habitat and river stage



#### Additional Priorities continued

#### Management and Modeling

- Land use and environmental affects
- Develop BMP's and verify effectiveness
- Research and management master plan
- Human Health: contaminants and protection
- Ecosystem Restoration Plan
- Discuss/define "significant harm"
- Review existing models
- Integrated model for water quality, water supply and biota
- Develop management practices
- Timeline: natural and human history in basin
- GW protection: educate and enforce



#### Discussion: What's next?

- Basin-wide effort needs further development via science plan
  - focus groups for subtopics
  - Immediate need
  - Volunteers requested
- Need to Address Big Questions:
  - How to implement Basin-wide effort with Georgia
  - Interdisciplinary, Inter-agency Collaboration and Funding
  - A Watershed Model with Broad application
    - Vision: Suwannee as a model for other river basins



# What IS Next?

- CD-ROM of workshop proceedings
  - Workshop discussion summary in slideshows
  - Presentations and posters
  - List of participants
- Science Plan
  - Volunteer Steering Committee
     Request volunteers for subtopics
  - SBIA and Beyond!
  - To plan, activate, and implement
- Next meeting proposed: June 2005 in Georgia



# Science Plan Volunteer Steering Committee

Subcommittees will be formed to address main science topics Tentative Members:

- Rodney DeHan, Florida Geological Survey
- Paul Lee, Florida Dept. Environmental Protection
- Lia Chasar, FAMU
- Randy Edwards, USF
- Bill Hu, FSU
- Willie Harris, UF,
- Robin Hallbourgh, Alachua County DEP
- Richard Lowrance, USDA-ARS
- Sam Upchurch, SDII-Global
- Kirk Webster, Suwannee River Water Management District
- Need reps from Georgia EPD, USGS in Georgia, and EPA
- Florida USGS: Brian Katz, Ellen Raabe



# Note of Appreciation to Participants

 Thank you for attending and participating in open discussions.
 Current and future accomplishments reflect our combined efforts!

