

THE FOURTH TAMPA BAY AREA SCIENTIFIC AND INFORMATION SYMPOSIUM
BASIS 4

Monday, October 27 – Thursday, October 30, 2003
Sunspreet Resort Conference Center, St. Petersburg

- Monday:** 9 AM to noon Registration & Poster Set-up (Sessions 1–3)
- 1:00 SYMPOSIUM KEYNOTE ADDRESS, Dr. Ernie Estevez, Mote Marine Laboratory
- 1:30 Session 1: FISH & WILDLIFE
- 3:30 Session 2: INVASIVE SPECIES
- 5:30 RECEPTION hosted by Mote Marine Laboratory
Poster Viewing (posters for Sessions 1–3 will remain on display through Tuesday evening)
- Tuesday:** 8:15 Session 3: WATER & SEDIMENT QUALITY, WATER QUANTITY, and ATMOSPHERIC DEPOSITION
- 12:30 Lunch (on site)
- 1:30 Session 3 continues
- 6:00 “JOURNEY THROUGH TIME” (opening of a sediment core from Tampa Bay). Refreshments, sponsored by USGS
Poster Viewing
- Wednesday:** 7:30 Poster Set-up (Sessions 4–7)
- 8:30 Session 4: HABITAT
Keynote Address: Kent Smith, Fla. Fish & Wildlife Conservation Commission
- 12:30 Lunch (on site)
- 1:30 Session 4 continues
- 3:10 Session 5: DREDGING & DREDGED MATERIAL MANAGEMENT
- 4:10 Session 6: SPILL PREVENTION & RESPONSE
- 6:00 RECEPTION and Slide Show, sponsored by USF College of Marine Science Alliance for Coastal Technology
Poster Viewing (posters for sessions 4–7 will remain on display through Thursday mid-day)
- Thursday:** 8:30 Session 7: WATERSHED MANAGEMENT
- 11:50 BASIS 4 CONFERENCE OVERVIEW, Dr. Fred Holland, NOAA
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TAMPA BAY ESTUARY PROGRAM
US GEOLOGICAL SURVEY
TAMPA BAY REGIONAL PLANNING COUNCIL
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PROGRAM CONTENTS

SCHEDULE of Presentations:

Session 1	1
Session 2	1
Session 3	2
Session 4	3
Session 5	4
Session 6	4
Session 7	5

ABSTRACTS (including posters in each session):

Session 1	7
Session 2	11
Session 3	12
Session 4	29
Session 5	41
Session 6	43
Session 7	45

SCHEDULE

Monday, October 27th

9:00 AM **Registration** and poster set up
to noon

1:00 **Welcome.** Holly Greening (Tampa Bay Estuary Program), Program Chair

Keynote Address:

Generations of Science and Management in Tampa Bay. Dr. Ernie Estevez (Mote Marine Laboratory)

Session 1: FISH AND WILDLIFE

P. Carlson, Session Chair

1:30 **Overview of Manatee and Turtle Population Status in Tampa Bay.** E. Haubold (FWC Fla. Marine Research Inst.)

1:45 **Community-based Manatee Protection in Tampa Bay.** P. Leasure (Pinellas Co.), N. Holland (Tampa Bay Estuary Program)

2:00 **Status of Coastal Bird Populations of the Tampa Bay System.** R. Paul, A. Paul (National Audubon Society)

2:15 **Comparison of Fish and Macroinvertebrate Communities in Six Tampa Bay Tributaries.** T. MacDonald, T.S. Tsou, R.H. McMichael (FWC Fla. Marine Research Inst.)

2:45 **Populations of Juvenile and Small-adult Fishes in Tampa Bay: a Decadal Perspective.** E. Matheson, R.H. McMichael, Jr., D.L. Leffler, T.C. MacDonald (FWC Fla. Marine Research Inst.)

3:00 **Acoustic Telemetry: its Application to Assess the Feasibility of Stock Enhancement of Red Drum in Tampa Bay.** C. Neidig (Mote Marine Laboratory)

3:15 **BREAK**

Session 2: INVASIVE SPECIES

N. Holland, Session Chair

3:30 **Survey of Non-indigenous Species in Tampa Bay.** P. Baker (Univ. of Fla. Dept. of Fisheries and Aquatic Sciences)

4:00 **The Effect of the Asian Green Mussel *Perna viridis* on a Shallow Estuarine Environment: Preliminary Assessment.** R. Johansson, W. Avery (City of Tampa Bay Study Group).

4:30 **The Exotic Armored Catfishes (Loricariidae) and *Hoplosternum littorale* (Callichthyidae) in Florida, Particularly the Hillsborough River.** R. Ruiz-Carus, H. J. Grier (FWC Fla. Marine Research Inst.)

5:30 to **EVENING RECEPTION AND POSTER VIEWING**
7:00 PM sponsored by Mote Marine Laboratory

Tuesday, October 28th

**Session 3: WATER AND SEDIMENT QUALITY, WATER QUANTITY,
and ATMOSPHERIC DEPOSITION**

A. Janicki, Session Chair

- 8:15 **Introduction.** A. Janicki (Janicki Environmental, Inc.)
- 8:30 **A Comparison of Water Quality and the Factors That Influence Water Quality in the Segments That Comprise Tampa Bay.** A. Janicki (Janicki Environmental, Inc), J.O.R. Johansson (City of Tampa Bay Study Group), A. Squires (Pinellas Co. Dept. of Environmental Mgt.), R. Boler (Environmental Protection Commission of Hillsborough Co.), R. Brown (Dept. of Environmental Mgt., Manatee Co.)
- 9:00 **Biomass Shifts in Phytoplankton, Macroalgae, and Seagrass with Reduced Nitrogen Loading Rates to Hillsborough Bay, Tampa Bay, Florida.** J.O.R. Johansson (City of Tampa Bay Study Group)
- 9:20 **Water Quality in the Tidal Reaches of Hillsborough County Rivers and Streams.** G. Morrison, R. Boler (Environmental Protection Commission of Hillsborough Co.)
- 9:40 **Effects of Entrainment and Temperature Increase on Phytoplankton: a Novel Use of HPLC Pigment Analyses and Particle Size Analysis.** J. Culter, J. M. Sprinkle, G. Kirkpatrick (Mote Marine Laboratory)
- 10:20 **BREAK**
- 10:40 **Assessing Pinellas County Surface Water Quality Using a Probabilistic Design.** K. H. Levy, A. Squires, M. Flock (Pinellas Co. Dept. of Environmental Mgt.), D. Wade, A. Janicki (Janicki Environmental, Inc.)
- 11:00 **Developing Nutrient Loading Limits for Bishop Harbor from the Former Piney Point Phosphate Facility.** K. Hackett, A. Janicki, J. R. Pribble, D. Wade (Janicki Environmental, Inc.)
- 11:20 **Sediment Quality Issues in Tampa Bay.** S. Grabe (Environmental Protection Commission of Hillsborough Co.), D. Wade (Janicki Environmental, Inc), D. McDonald (McDonald Environmental, LLD)
- 11:50 **Development of a Benthic Quality Index For Use as a Management Tool in Establishing and Monitoring Sediment Quality Targets for the Tampa Bay Estuary.** K. J. Malloy, D. Wade, A. Janicki (Janicki Environmental, Inc), S. Grabe (Environmental Protection Commission of Hillsborough Co.)
- 12:10 **Benthic Nutrient Fluxes in Tampa Bay.** P. Carlson, L. Yarbrow, D. Saindon, A. Ketron, H. Arnold (FWC Fla. Marine Research Inst.)
- 12:30 **LUNCH** on site
- 1:30 **Views on Some of the Key Hydrodynamic and Hydrologic Characteristics of Tampa Bay.** M. Luther (USF College of Marine Science), S. Flannery (SW Fla. Water Mgt. District)
- 2:00 **Tampa Bay Water's Hydrobiological Monitoring Program.** R. McConnell (Tampa Bay Water), D. Robison (PBS&J), A. Janicki (Janicki Environmental, Inc.)
- 2:20 **A Hydrobiological Comparison of the Alafia River, Hillsborough River, and Tampa Bypass Canal.** D. Robison (PBS&J), R. McConnell (Tampa Bay Water)

- 2:40 **A Revised Integrated Hydrologic Model for Water Supply Management in the Tampa Bay Region.** E.Z. Hosseinipour, J.Geurink (Tampa Bay Water)
- 3:00 **Near-term Forecasting of Surface Water Supplies from the Hillsborough River and Tampa Bypass Canal System.** J. Lantrip (Tampa Bay Water), M. Griffin (CH2M Hill), A. Aly (INERA Inc.)
- 3:20 **BREAK**
- 3:50 **An Integrated Observing and Modeling System for Tampa Bay.** M. Luther, B. Galperin, S.D. Meyers, S.A. Gilbert, V. Subramanian, L. Wetzell (Univ. of South Florida College of Marine Science), M. Vincent (NOAA National Ocean Service), M. Hansen (USGS)
- 4:10 **Ecological Criteria for the Determination of Minimum Freshwater Inflows for the Alafia River Estuary.** M.S. Flannery, X. Chen, (SW Fla. Water Mgt. District), E.Peebles (USF College of Marine Science), D. Wade (Janicki Environmental, Inc), E. Estevez (Mote Marine Laboratory, A Janicki (Janicki Environmental, Inc), J. Culter (Mote Marine Laboratory)
- 4:30 **Summary of Atmospheric Deposition Studies and Loading Results in Tampa Bay, Florida.** R. Pribble (Janicki Environmental, Inc.), N. Poor (USF College of Public Health)
- 4:50 **Export of Atmospherically Derived Nitrogen in the Tampa Bay Watershed.** C. D. Pollman, N.D. Poor (USF College of Public Health), V. Bhethanabotla (USF Dept. of Chemical Engineering)
- 5:10 **Source Attribution for the Atmospheric Deposition of Polycyclic Hydrocarbons (PAHs) to Tampa Bay.** N. Poor (USF College of Public Health), S. Campbell (USF Dept. of Chemical Engineering), H. Kay (USF College of Public Health)
- 6:00 to 7:30 PM **“JOURNEY THROUGH TIME”**— opening of a sediment core from Tampa Bay
Sponsored by the US Geological Survey
Refreshments

Wednesday, October 29th

Session 4: HABITAT

B. Henningsen, Session Chair

- 8:30 **Keynote Address:**
A Perspective of the Future of Marine Habitat Management in Florida. Kent Smith (Florida Fish and Wildlife Conservation Commission)
- 9:00 **The Maturation and Future of Habitat Restoration Programs for the Tampa Bay (Florida) Estuarine Ecosystem.** B.F. Henningsen (SW Fla. Water Mgt. District)
- 9:23 **Management Implications of Spatial and Temporal Patterns of Seagrass Change in Tampa Bay, 1950 to 2002.** D. Tomasko (SW Fla. Water Mgt. District)
- 9:46 **Hard Bottom Habitats: an Overview of Mapping and Monitoring Needs of Epibenthic Communities in Tampa Bay, Florida.** T. Ash (Environmental Protection Commission of Hillsborough Co.), R. Runnels (FDEP Aquatic Preserves)
- 10:09 **Freshwater Wetlands in the Tampa Bay Watershed.** B. Stetler, G. Morrison, G. Kelly (Environmental Protection Commission of Hillsborough Co.)

- 10:32 **BREAK**
- 11:00 **Coastal Upland Habitats of the Tampa Bay Ecosystem: Status, Trends and Management Perspectives.** R. Whitman, Jr. (Peninsula Design, Inc.)
- 11:23 **Sea Level Variations in Tampa Bay.** T. Edgar, M. Crane (USGS)
- 11:46 **The Coastal Conservation Corridor Plan for the Tampa Bay Estuarine Ecosystem.** J. Beever III (FWC), M. Bryant (The Nature Conservancy, Sarasota)
- 12:09 **Synthesis and Panel Discussion**
- 12:30 **LUNCH** on site
- 1:30 **Tampa Bay Interactive Mapping System and Digital Library: Providing Accessible Data and Information for Mgt. and Research.** J. Johnston, K. Smith (USGS), A. Martucci, C. Cretini (Johnson Controls World Services, Inc.)
- 1:50 **Synthesizing Seagrass Models: Application to Ecological Forecasting.** B. Robbins (Mote Marine Laboratory), M. S. Fonseca (NOAA/NOS/CCFHR), E.W. Koch (Univ. of Maryland), A. Malhotra (NOAA/NOS/CCFHR)
- 2:10 **Habitat Mapping and Habitat Suitability Modeling: Linking Fisheries-Independent Data to Habitats in Tampa Bay.** P. Rubec, S. Whaley, J.Lewis, G.Henderson, C. Westergren (FWC Fla. Marine Research Inst.)
- 2:30 **Tampa Bay Historic and Current Aerial Imagery Website.** T. Udouj, K. Madley (FWC Fla. Marine Research Inst.), H. Greening (Tampa Bay Estuary Program)
- 2:50 **BREAK**
- Session 5: DREDGING AND DREDGED MATERIAL MANAGEMENT**
H. Greening, Session Chair
- 3:10 **Implementing the Tampa Bay Dredged Material Management Strategy.** T. Leeser (US Army Corps of Eng.), H. Greening (Tampa Bay Estuary Program), B. McMichael, E. Sherwood (FWC Fla. Marine Research Inst.), S. Grabe (Environmental Protection Commission of Hillsborough Co.)
- 3:30 **Challenges of Beach Nourishment in Pinellas County, Florida.** N. Elko (Pinellas Co. Public Works)
- 3:50 **Lake-dredged Material for Beef Cattle Pasture Establishment.** G. Sigua (USDA, Subtropical Agricultural Research Station), M. Holtkamp, (Southwest Fla. Water Mgt. District), J. Linton (Pinellas Co. Public Works), S. Coleman (USDA)
- Session 6: SPILL PREVENTION AND RESPONSE**
G. Henderson, Session Chair
- 4:10 **Introduction.** G. Henderson (FWC Fla. Marine Research Inst.)
- 4:15 **Implementation of VTS and PORTS in Tampa Bay.** S. Fiedler (Tampa Port Authority), M. Luther (Univ. of So. Fla. College of Marine Science)
- 4:35 **The FMSAS, Coastal Area Contingency Plans, ArcIMS and ArcPAD Digital Integration for Spill Prevention and Response.** R. Knudsen (FWC), E. Lesnett (Environmental Protection Commission of Hillsborough Co.)

- 4:55 **A Summary of Restoration Projects for Natural Resource Injuries and Lost Human Use from the 1993 Tampa Bay Oil Spill.** J. Iliff (NOAA Restoration Center), B. Pridgeon, P. Wieczynski, D. LetoBarone, G. Henderson, S. Fluke, M. Malvern, L. Craig (FWC Fla. Marine Research Inst.)
- 5:15 **Tampa Bay Pre-spill Natural Resource Damage Assessment (NRDA) Planning: Developing Cooperative Ephemeral Data Collection Plans.** J. Jeansonne (NOAA Damage Assessment Center)
- 6:00 to 7:30 PM **RECEPTION AND SLIDE SHOW**
Hosted by USF College of Marine Science Alliance for Coastal Technology

Thursday, October 30th

Session 7: WATERSHED MANAGEMENT

Session Chairs: A. Squires, R. McConnell, R. Brown, M. Hammond

- 8:30 **Introduction.** A. Squires (Pinellas Co. Dept. of Environmental Mgt.)
- 8:35 **Reaching Tampa Bay Restoration Goals Through Watershed Management.** R. Eckenrod (Tampa Bay Estuary Program)
- 8:45 **EPA Watershed Management, TMDLS and Tampa Bay.** J. Giattina (US Environmental Protection Agency Region 4)
- 9:05 **Florida's TMDL/Watershed Management Program: A Status Report.** D. Joynor (Florida Dept. of Environmental Protection)
- 9:25 **Comprehensive Watershed Management at the Southwest Florida Water Management District-Tampa Bay.** B. Wirth (SW Fla. Water Mgt. District)
- 9:45 **Watershed Management and Implementation from a Local Government Perspective.** J. Stowers (Pinellas Co.)
- 10:05 **A Water Utility's Role in Watershed Protection.** R. McConnell, D. Jones (Tampa Bay Water)
- 10:25 **BREAK**
- 11:00 **From Pushing Paper to Moving Dirt: Local Implementation of Watershed Management Plans.** H. Zarbock, E. Araj. (Berryman and Henigar, Inc), R. Brown (Manatee Co. Dept. of Environmental Mgt.), J. Merriam (Hillsborough Co. Stormwater Mgt.), A. Squires (Pinellas Co. Dept. of Environmental Mgt.)
- 11:20 **Progress Toward Goals for Tampa Bay Restoration and Protection.** H. Greening, R. Eckenrod, N. Holland (Tampa Bay Estuary Program)
- 11:50 to 12:30 PM **BASIS 4 CONFERENCE OVERVIEW.** Dr. Fred Holland, NOAA

NOTES
