I. BUDGET NARRATIVE FOR 2003–2004

Actual Expenditures

Although the Coastal Watershed Institute is now a Type II University Institute within the State of Florida, it was originally established as a Type III Center/Institute. The Institute’s actual 2003–2004 and proposed 2004–2005 budgets reflect this fact, relying solely on external funds for its operation. Furthermore, because the Coastal Watershed Institute was established in March 2004, the annual report submitted to the Florida Board of Education included only those expenditures recorded from March through June 2004.

Budget expenditures for the fiscal year ending June 30, 2004 totaled $297,508 with the sources of funding being a Federal appropriation through the U.S. Department of Education (#20006: total funding $1,000,000) and a grant from the Rookery Bay National Estuarine Research Reserve (#20163: total funding $322,794). Of the total expensed, $221,731 was directed toward salaries and fringe (faculty, A&P, and USPS positions): course releases and summer salary for faculty, 2 full-time staff positions at the Coastal Watershed Institute, and 13 full-time positions at the Rookery Bay National Estuarine Research Reserve in Naples, Florida. Another $13,478 was used to support undergraduate interns working with the Institute on faculty directed research programs and graduate students working on their thesis research. Approximately $10,185 was used to purchase laboratory supplies and equipment and $52,114 was used to purchase capital equipment in support of the Institute’s research activities and infrastructure needs. Capital equipment purchased included a calorimeter for conducting energetic studies, mini-computers for student use in the Geographic Information Systems (GIS) lab, and a new boat, motor, and trailer for conducting field operations. See attached Form 4 for additional information on actual expenditures for FY 2003–2004.

II. BUDGET NARRATIVE FOR 2004–2005

Estimated Expenditures

Estimated expenditures for the Coastal Watershed Institute for FY 2004–2005 are anticipated to be approximately $1,310,437. Sources of funding for these expenditures include a Federal appropriation from the U.S. Environmental Protection Agency (#20028: total funding $1,341,200), and grants from the Rookery Bay National Estuarine Research Reserve (#20163: total funding $523,601) and the South Florida Water Management District (#20408: total funding $200,000). It is anticipated that additional grants will be available to support Institute activities for the remainder of this fiscal year.
Of the total estimated expenditure for FY 2004–2005, it is anticipated that approximately $806,505 will be used to support salaries and fringe (faculty, A&P, USPS positions). Support includes 9-month salary for a Visiting Assistant Professor of Marine Science, and course releases and summer salary for Coastal Watershed Institute faculty to conduct research; 3 full-time staff at the Coastal Watershed Institute; and 14 full-time staff at the Rookery Bay National Estuarine Research Reserve. Approximately $108,511 is budgeted to support undergraduate interns working with the Institute on faculty directed research programs and graduate students working on their thesis research. Expenses for FY 2004–2005 are projected to total $122,938 and include $23,401 for graduate student tuition with the remainder being used to purchase supplies and equipment for field and laboratory operations. A total of approximately $244,494 will be used to purchase capital equipment in support of the Institute’s research activities and infrastructure needs. Capital equipment identified for purchase includes a microtome and embedding system for conducting histological analyses, a total organic carbon analyzer for examining organic nutrients in local watersheds and their potential influence on red tide blooms, a Coulter counter for quantifying sediment grain size, and a new boat and tow vehicle for expanding the Institute’s field capabilities. See attached Form 3 for additional information on estimated expenditures for FY 2004–2005.

III. RESOURCES (EXISTING AND POTENTIAL)

During its first fiscal year of operation, the Coastal Watershed Institute was entirely supported through grants from State and Federal agencies as well as through a Congressional appropriation. Since then, new grants and appropriations have become available that will fund the activities of the Institute through FY 2006–2007.

Since the Institute’s inception, its growth has been carefully planned and controlled so that its activities remain sustainable through time. For example, two additional marine science faculty were originally hired as Visiting Assistant Professors through grant funds; one of these has since been converted to a regular multi-year appointment, and we anticipate that the second visiting position will be converted to a faculty line by fall 2005. With all Institute faculty eventually being on regular faculty lines, additional funding will be used specifically to support Institute staff and programs.

In order to ensure successful operation for an extended period of time, Institute faculty will continue to pursue external funds in support of Institute activities. We anticipate future grant awards from such agencies as the South Florida Water Management District, the Southwest Florida Water Management District, the Rookery Bay National Estuarine Research Reserve, and the Charlotte Harbor National Estuary Program. We are currently seeking additional infrastructure support, both equipment and staff, in the form of a Federal appropriation and we will seek new sources of grant funds from such agencies as Florida Sea Grant. Furthermore, projected funding for the new Marine Science laboratory facility will include additional infrastructure support.
Existing Resources FY 2003–2004 (Institute faculty and staff in **bold**)


Current Resources FY 2004–2005 (Institute faculty and staff in **bold**)


IV. SPACE ALLOCATION

Although Florida Gulf Coast University is designated a comprehensive university, with both undergraduate and graduate degree programs, its primary emphasis is on undergraduate education. As such, limited laboratory facilities are available for faculty to conduct research. With the continued success of Institute faculty in securing funding for watershed research, the projected growth in the Marine Science undergraduate program, and the projected growth in the Environmental Science graduate program, these already limited facilities prove increasingly inadequate. A new marine research and education laboratory has already been identified as a
priority on FGCU’s Capital Improvement Plan and is on the State of Florida’s Public Education Capital Outlay (PECO). FGCU has also been diligently seeking a private-public partnership to move this project toward the front of the line: private funds will be used to leverage additional funding from the State using the Courtelis Capital Facilities Matching Trust Fund. We anticipate having private funds in hand and making a request for State support through the Courtelis Fund by December 2005.

FGCU is currently working with the Rookery Bay National Estuarine Research Reserve to obtain a 50-year sublease on a 20-acre parcel of property within the Reserve for the purpose of locating the proposed marine research and education laboratory. This site is located approximately 35-40 minutes south of FGCU’s main campus, consists of ~ 14 buildable acres of disturbed uplands, and has available infrastructure nearby. The proposed facility will take the form of a small campus of adjacent or interconnected buildings that meets the research, education, and support needs of a marine lab and that is appropriate to the site itself. Actual square footage of the laboratory will be predicated on available funding, but current preliminary plans envision a 25,000 square-foot facility. The campus approach is appropriate because of the programming elements involved: in addition to classroom and laboratory space, the facility will consist of wet labs (aquarium rooms), office space, meeting space, boat storage, and support space for field operations. Due to the corrosive nature of seawater, it is important that aquarium rooms be kept isolated from sensitive equipment and computing facilities. The marine lab located within the RBNERR will (1) provide students access to a wide variety of shallow-water marine habitats, (2) offer boat access to the estuarine and coastal waters of Southwest Florida, (3) allow access to clean seawater for use in aquarium systems.

Existing space currently allocated to the Coastal Watershed Institute is located in Whitaker Hall and is detailed below:

**Laboratory Space**

*Microscope Lab (WH 105)*: This laboratory is actually a multipurpose laboratory that is used primarily for the sorting, identification, and cataloguing of marine organisms. Housed in the lab are a number of dissecting stereo-microscopes including a high-end zoom microscope connected to a digital camera and monitor for imaging marine organisms, a petrological scope for examining thin slices of rock, and an inverted compound microscope. Also contained within the lab are a biological fume hood and a vapor pressure osmometer for determining the osmotic pressure of environmental and biological tissue samples.

*Combined Marine Chemistry/Physics/Geology Lab (WH 110)*: This laboratory houses such specific research capabilities as a gas chromatograph mass spectrometer (GS-MS), which can separate, identify, and quantify organic compounds from biological and environmental samples; a bomb calorimeter, which can determine the caloric (energy) content of biological samples; and a rotating side-scan sonar unit capable of creating high-resolution images of the seafloor. This space will also house the new total organic carbon analyzer, which is being purchased to identify and quantify organic nutrients in local waterways.
Sedimentology Lab (WH 125F): This laboratory is where sediment cores are processed, analyzed, and archived for studies on sea-level rise and paleo-environmental conditions.

Marine Physiology Lab (WH 127): This laboratory houses a micro-plate reader for conducting bioassays and general laboratory equipment and supplies. Principal activities conducted in this lab are related to the physiological responses of marine organisms to environmental stress and include the examination of energy stores, disease prevalence, and condition, and reproductive state or marine organisms.

Histology Lab (WH 266D): This space was just recently acquired to house a new microtome/embedding system capable of creating thin slices of tissue samples and then staining and embedding these samples for microscopic examination of subcellular structure and features.

Support Space
Wet Lab (WH 127A): This is an aquarium room where marine organisms are maintained under controlled and experimental conditions to examine the effects of environmental stressors on physiology. The lab is located immediately adjacent to the marine Physiology Lab.

Coastal Watershed Institute Main Office (WH 231): This room houses office space for three CWI staff members, grant and purchasing information maintained on file, all quality assurance and quality control documents required by the U.S. Environmental Protection Agency, and other documents and materials related to the operation of the Institute. In addition, a high-speed laser printer, a color laser printer, and a report binding machine are on hand for use by Institute faculty and staff.

Shared Space
Mud Room (WH 126): This multipurpose space is shared with faculty and students from the Environmental Studies and Social Sciences programs and is used primarily as a staging area for field operations, space for “dirty work” that does not require conditions space, and storage of field, boat, and safety equipment as well as tools and spare parts. This space is located immediately adjacent to a loading dock for loading and unloading Institute boats and tow vehicles.

Geographic Information System Lab (GIS) (WH 230): This space is allocated for use by both faculty and students working on research projects. The room houses multiple PC computers purchased by the Institute, a large-format printer-plotter for creating maps and posters, a variety of statistical, mapping, data imaging, and GIS software, and a Global Positioning System (GPS) to ground-truth environmental and mapping data using GIS software. Students from all disciplines of the College utilize this room for creating posters to capture their capstone experiences as well as to present the results of their work at FGCU’s annual Research Day held each spring.
V. ENHANCING THE MISSION OF FLORDIA GULF COAST UNIVERSITY

Recognizing its unique location within a region characterized both by diverse and sensitive environments and by the pressures of rapid population growth, Florida Gulf Coast University made a conscious decision at its inception to emphasize the study of the environment as part of its mission. Toward this end, the FGCU founding Mission Statement outlines the building of a strong undergraduate curriculum as well as the goal that the University ultimately becomes “a center for environmentally oriented graduate programs and research.” The Mission Statement also underscores the value of focusing research efforts on state and regional needs. This focus on the environment was reinforced when the Mission Statement was revised in 2002.

The Coastal Watershed Institute has made significant contributions to environmental education and research at FGCU. Institute faculty have attracted external funding for both research and education, and have obtained significant resources, financial and otherwise, to support both undergraduate and graduate students. Institute faculty have a track record of scholarly products related to innovation in teaching, and the Department of Education grant administered by the Institute during FY 2003–2004 expanded and enhanced the use of the Campus Ecosystem Model at FGCU (http://www.nsta.org/main/news/stories/college_science.php?news_story_ID=46684). This model for undergraduate education was originally created by two faculty members currently with the Coastal Watershed Institute.

In response to growing student demand, the University developed a Marine Science undergraduate degree program in 2002. This program, coupled with the graduate program in Environmental Science, ensures that FGCU’s emphasis on water-related issues and on coastal and estuarine environments will continue. Both of these academic programs provide students with the technical training they will need for an increasingly competitive job market, and both require students to become actively involved in research as part of their educational experience. The Coastal Watershed Institute provides additional resources and training opportunities for students in both of these programs.

Institute faculty have also taken a leadership role in restoration coordination in Southwest Florida through its involvement with the Greater Everglades Ecosystem Restoration, an $8 billion public works project. An FGCU faculty member currently chairs the Big Cypress Basin–Estero Bay Coordination Team and co-chairs the Southwest Florida Regional Restoration Team. An FGCU faculty member also has a seat on the Science Coordination Team that makes direct recommendations to the South Florida Ecosystem Restoration Working Group. The working group, in turn, advises the Federal Task Force on Everglades Restoration.

Furthermore, the Coastal Watershed Institute enhances the contributions of FGCU to research and education related to regional water issues by developing partnerships with other agencies and organizations in Southwest Florida. For example, the current partnership with the Rookery Bay National Estuarine Research Reserve, located southeast of Naples, Florida, will continue to enhance educational opportunities for FGCU students and will increase the scope and scale of watershed research throughout the 110,000-acre Reserve. This partnership agreement includes cost sharing for five staff positions at the Reserve that will mutually benefit the Reserve and the
University. As part of the partnership the Reserve will also serve as the new home for the FGCU marine laboratory as well as for the Coastal Watershed Institute.

VI. RESEARCH CAPABILITIES AND OPPORTUNITIES

Florida Gulf Coast University is in the right place at the right time to provide leadership and expertise in the field of coastal watershed studies. The five-county service area designated for the University includes all or portions of the following important watersheds: the Peace and Myakka rivers, Charlotte Harbor, the Caloosahatchee River and Lake Okeechobee, Estero Bay (the State’s first aquatic preserve), Naples Bay, the Rookery Bay National Estuarine Research Reserve, the Ten Thousand Islands, and the Florida Everglades. Although some of these watersheds are relatively healthy, major challenges exist in managing them effectively in the face of tremendous population growth and the concomitant development and changes in land and water use. Several of these watersheds are currently the subjects of intensive restoration, including what has been referred to as the world’s largest ecosystem restoration effort—the Comprehensive Everglades Restoration Plan. This long-term (decadal) restoration plan has significant research and education components that can be addressed by FGCU’s Coastal Watershed Institute.

Focusing on the study of coastal watersheds highlights and compliments the strength of existing FGCU faculty and staff in the College of Arts and Sciences. These faculty have been working with the South Florida Water Management District (SFWMD) to understand the influence of variability in freshwater inflow on the health of oysters and the use of oyster-reef habitat by associated organisms. This information is being used to establish minimum flows and levels of freshwater into the Caloosahatchee estuary and has already been used to modify the water release schedules from Lake Okeechobee into the estuary for the benefit of estuarine ecosystems downstream. Institute faculty have also been trying to identify the water quality conditions (including salinity, a proxy for freshwater inflow) that are conducive to healthy oysters and robust oyster-reef communities. As a result these faculty have been working with the SFWMD to develop performance measures for both the Caloosahatchee Estuary and the Big Cypress Basin as part of ongoing water management and restoration projects. Institute faculty have also been directly involved in oyster-reef restoration in several Southwest Florida estuaries. Using the above data, Institute faculty have identified locations in local estuaries where water quality conditions are favorable for oyster-reef growth, but where no hard substrate currently exists for the attachment of oyster larvae. Working with representatives from state and federal agencies, volunteers from the local community, and FGCU students, Institute faculty and staff then place bagged oyster shell in these areas to create a hard surface on which young oysters can attach and grow. These community-based restorations programs combine sound science with environmental stewardship in order to restore or enhance important ecosystems in Southwest Florida estuaries.
Specific research capabilities and interests are as follows:

*Oyster physiology.* – Research includes investigating the effects of watershed alteration, freshwater inflow and contaminants on the biochemical, physiological, and ecological responses of oysters.

*Geobiology.* – Interpretation of the history of environmental change during the late Holocene (past 5,000 years), including the effects of sea-level rise on coastal environmental evolution, the history and paleoecology of reef development, and the effects of environmental change on oyster reef ecology.

*Marine Organic and Inorganic Chemistry.* – Research investigates the character, sources, and fates of natural organic matter and nutrients. Specific capabilities include stable isotope analysis, total dissolved and particulate carbon analysis, and nutrient analysis.

*Sediment Transport.* – Research focuses on the development of three-dimensional sediment transport models with emphasis on coastal and estuarine circulation, sediment transport and changes in geomorphology resulting from altered freshwater inflow, and on sedimentation rates associated with mangrove ecosystems.

*Estuarine Ecology.* – Research investigates the influence of freshwater inflow on estuarine communities including the distribution and abundance of target organisms, the ecology of marine fishes, and the role of oysters in creating essential fish habitat.

VII. SUMMARY OF ACTIVITY

Because the Coastal Watershed Institute was officially established in March 2003, only four months of activity fall within the last completed fiscal year (FY 2004). The following activities were accomplished during this time period. Institute faculty and staff are presented in bold font.

**Peer-Reviewed Publications**


**Published Abstracts and Conference Presentations**

*Invited*


Contributed


Technical Reports


**Grants and Contracts**


South Florida Water Management District. $9,986. Molluscs as environmental indicators of salinity change in southern Florida's estuaries. CoPIs: **M. Savarese** & L. Wingard.

Big Cypress Basin Subdistrict of the South Florida Water Management District. $25,000. Coordination of environmental restoration efforts in the Big Cypress Basin. PI: **M. Savarese**; CoPI: H. Rein. 2004


**Coastal Watershed Institute Web Site**

[http://www.fgcu.edu/cwi/](http://www.fgcu.edu/cwi/)

**VIII. CONTRIBUTIONS OF UNIVERSITY PERSONNEL (FY 2003–2004)**

**S. Gregory Tolley**, Professor of Marine Science, Director of the Coastal Watershed Institute. – Dr. Greg Tolley oversees the day-to-day operations of the Institute. In addition to the responsibilities listed below, Dr. Tolley also maintains an active research agenda and serves as faculty advisor to three graduate students whose theses are related to the study of coastal watersheds.

*Supervisory Responsibilities.* – Hiring faculty and staff and for supervising staff both at FGCU and at RBNERR. Through a partnership agreement between FGCU and RBNERR, Dr. Tolley supervised 13 employees working at Rookery Bay. On the FGCU campus, Tolley was responsible for supervising two research assistants and for assigning activities to two visiting assistant professors.
Project Administration. – In addition to his responsibilities related to the administration of research grants at FGCU, Tolley was the principal investigator on the Coastal Watershed Institute Partnership grant ($322,794) that funded a number of positions at the Rookery Bay National Estuarine Research Reserve. Tolley was also principal investigator on a Congressional Grant through the U.S. Department of Education. This award totaled $1,000,000 and supported curriculum development, undergraduate research experiences, and infrastructure for the Institute itself.

Marine Laboratory Development. – Tolley also served as FGCU’s point person regarding the development of a new marine laboratory to be located within the Rookery Bay National Estuarine Research Reserve. During FY 2003–2004, this responsibility included working with FGCU faculty and staff, RBNERR staff, and an architect in the development of a conceptual plan for the facility. A related responsibility involved helping to put together a proposal to the State's Acquisition and Restoration Council for approval of the conceptual plan, as well as a formal request for a 50-year sublease on the 20-acre parcel immediately adjacent to the RBNERR headquarters for the purpose of locating the proposed marine lab.

Coastal Watershed Institute Administration. – Tolley’s primary responsibility as Director of the Coastal Watershed Institute involves the work of the Institute itself. As a result, he was responsible for the following activities and programs during FY 2003–2004.

- Strategic planning and budgeting in order to accomplish the Institute's mission
- Developing and maintaining partnerships with other water-related agencies in Southwest Florida
- Participating along with RBNERR representatives in the short-term and long-term planning for cost-shared positions between the two organizations
- Participating in public relations related to the Institute including establishing and maintaining a public presence on the World Wide Web
- Allocating resources and coordinating major equipment purchases
- Coordinating facilities support for the Marine Science undergraduate curriculum and a portion of the Environmental Science graduate curriculum once the marine laboratory is completed
- Reporting requirements

Aswani K. Volety, Associate Professor of Marine Science, Chair of the Division of Ecological and Social Sciences. – During FY 2003–2004, Dr. Volety’s primary contributions to the Coastal Watershed Institute included involvement in the conceptual planning for the proposed marine lab, budget preparation and strategic planning, and active participation in the research and education goals of the Institute. In addition, Volety was extensively involved in research related to watershed alterations on shellfish, community-based restoration of oyster reefs by involving citizens of
Southwest Florida as well as various state and federal agencies, and mapping of oyster reefs in the Ten Thousand Islands. Volety also serves as the Quality Assurance Manager for the Institute and as such is responsible for reviewing all quality control and quality assurance plans related to the environmental data operations of the Institute.

**Mike Savarese, Professor of Marine Science, Marine Science Program Leader, Environmental Science Graduate Program Leader.** – During FY 2003–2004, Dr. Savarese’s primary contributions to the Coastal Watershed Institute included involvement in the conceptual planning for the proposed marine lab, budget preparation and strategic planning, and active participation in the research and education goals of the Institute.

**Ai Ning Loh, Assistant Professor of Marine Science.** – During FY 2003–2004, Dr. Loh’s primary contributions to the Coastal Watershed Institute included involvement in the conceptual planning for the proposed marine lab, budget preparation and strategic planning, and active participation in the research and education goals of the Institute. She also coordinated the different sections of the Marine Systems course and standardized the course. This class now uses a common textbook with common labs offered.

**Guan-hong Lee, Visiting Assistant Professor of Marine Science.** – Dr. Lee joined FGCU during the last month of fiscal year 2003–2004. As a result, his contributions were limited to strategic planning and the development of new research capabilities at the Institute.

**Erin Rasnake, Research Assistant.** – Ms. Rasnake’s primary responsibilities include the scheduling, coordination, and direct oversight of all field and laboratory operations related to the Institute’s research and education programs. Rasnake also serves as an onsite supervisor of undergraduate interns working with the Institute.

**Lesli Haynes, Research Assistant.** – Ms. Haynes’ primary responsibilities include the coordination, and direct oversight of all field and laboratory operations related to the Institute’s research and education programs. Haynes also serves as an onsite supervisor of undergraduate interns working with the Institute.

**Heather Rein, Executive Assistant of the Big Cypress Restoration.** – Responsibilities include planning, coordinating, and organizing meetings for Big Cypress Restoration Coordination Team (RCT); updating the Big Cypress Science Plan and delivering it to relevant audiences; coordinating with other watershed initiatives; mapping regional monitoring efforts; and representing the Big Cypress RCT at Regional Restoration Coordination Team meetings.

The following personnel are affiliated with the Coastal Watershed Institute through a partnership grant with Rookery Bay National Estuarine Research Reserve; however, they work at Rookery Bay and their primary responsibilities are related to the education,
research, restoration, and public outreach goals of the RBNERR (http://www.rookerybay.org/)

**Beverly Anderson, Staff Biologist.** – Responsible for the Coastal Bird Monitoring program within the RBNERR.

**Brian Badgley, Coordinator, Coastal Training Program (CTP).** – Responsible for the development, coordination, and delivery of educational programs aimed at training local decision makers regarding the use of sound science as a basis of sound environmental decision making.

**Naomi Crews, Assistant Coordinator, Coastal Training Program.** – Assists the CTP Coordinator in the development, coordination, and delivery of educational programs aimed at training local decision makers regarding the use of sound science as a basis of sound environmental decision-making.

**Sarah Davis, Assistant Manager, Environmental Learning Center (ELC).** – Assists the ELC Manager in the on-site oversight of the Environmental Learning Center at Rookery Bay and for all public outreach programs run through the Center. On-site responsibilities include the training of volunteers, business management, purchasing, and scheduling of special events.

**Margaret Ferguson, Facilities Manager.** – Responsible for the day-to-day facilities operations of the Rookery Bay NERR headquarters, the Environmental Learning Center, and all three RBNERR field stations.

**Daphne Hawkins, Volunteer Coordinator.** – Responsible for the recruiting, placement, and initial training of volunteers involved in the research, environmental monitoring, restoration, and public outreach educational programs administered through RBNERR.

**Tim Jones, Water Quality Specialist.** – Responsibilities include deploying and maintaining automated water-quality monitoring devices throughout the RBNERR. Related responsibilities involved the management of the data stream generated by this water-quality monitoring system.

**Pam Keyes, Resource Management.** – Ms. Keyes is responsible for the control of invasive plants and animals within the 110,00-acre Rookery Bay National Estuarine Research Reserve. Specific activities include the removal of invasive exotics from RBNERR coastal lands.

**Vicki McGee, Water Quality Specialist.** – Responsibilities include deploying and maintaining automated water-quality monitoring devices throughout the RBNERR. Related responsibilities involved the management of the data stream generated by this water-quality monitoring system. Ms. McGee was also actively involved in oyster-reef restoration projects conducted by the Coastal Watershed Institute within
the RBNERR and has assisted Institute staff in the technical aspects of water-quality monitoring.

Cheryl Metzger, Resource Management. – Ms. Metzger is responsible for coordinating environmental restoration projects conducted within the RBNERR.

Jill Schmid, Geographic Information Systems (GIS) Specialist. – Ms. Schmid is responsible for training RBNERR staff in incorporation of GIS in research and restoration projects. She is also a certified technician who creates and manages many of the RBNERR GIS databases. Ms. Schmid has also assisted the Coastal Watershed Institute in the training of FGCU students and faculty in the incorporation into their own research.

Cloe Waterfield, Manager, Environmental Learning Center. – Responsible for the on-site oversight of the Environmental Learning Center at Rookery Bay and for all public outreach programs run through the Center. On-site responsibilities include the training of volunteers, business management, purchasing, and scheduling of special events.

Renee Wilson, Education Specialist. – Ms. Wilson’s responsibilities include the developing and delivery of public outreach activities related to marine and coastal education. Specifically, Ms. Wilson was one of the RBNERR staff responsible for leading educational field trips within Rookery Bay for FGCU students and faculty.

IX. GOALS AND OBJECTIVE (FY 2004–2005)

The following goals and objectives were identified as targets for Coastal Watershed Institute activities during the current fiscal year. These goals are directly related to the mission statement of the Institute and many of the objectives have already been achieved for this year.

Goal A
Address regional concerns regarding the use and conservation of coastal watersheds.

Objective 1
Dialogue with local and regional water and resource managers to identify issues of regional concern in Southwest Florida.

Objective 2
Work with Rookery Bay National Estuarine Research Reserve to identify and set research and restoration goals that complement the missions of both the Coastal Watershed Institute and the Reserve.

Goal B
Support undergraduate and graduate education in marine science and coastal watershed study.
Objective 1  
Provide and support research and internship opportunities in the areas of marine sciences and coastal watershed studies for undergraduate students.

Objective 2  
Support graduate student research in the areas of marine science and coastal watershed studies.

Objective 3  
Provide curricular enhancement to formal coursework for FGCU students in the areas of marine science and coastal watershed studies.

Goal C
Focus and coordinate university research on coastal environments and the conservation of natural resources.

Objective 1
Develop and implement research programs related to the establishment of minimum flows and levels of freshwater input into Southwest Florida estuaries.

Objective 2
Work with water and resource managers to develop water quality targets for oyster-reef restoration in Southwest Florida and implement community-based oyster-reef restoration and enhancement projects in Southwest Florida.

Objective 3
Design and implement a research program related to identifying and tracking paleo-environmental change, including sea level in Southwest Florida.

Objective 4
Develop and implement a new research initiative examining the potential influence of organic nutrients on harmful algal blooms.

Goal D
Disseminate information to Southwest Florida citizens to engage and inform them about the health of coastal watersheds and related issues.

Objective 1
Develop an initial website for the Coastal Watershed Institute to inform the general public about the mission of the Institute and its activities related to education, research, and restoration.

Objective 2
Participate in public presentations and forums regarding issues related to the study of coastal watersheds and the work of the Coastal Watershed Institute.