

*Florida Institute of Oceanography*

Annual Report

2009 - 2010

**Approval Date by** (*Board of Trustees or designee*):

\_\_\_\_\_

**Review Date by Council of Academic Vice Presidents:**

\_\_\_\_\_

**Date of Submission to Board of Governors Office:**

\_\_\_\_\_

## Table of Contents

<b>Description and Mission of the Florida Institute of Oceanography.....</b>	<b>3</b>
<b>Summary of Activities and Accomplishments for Previous Fiscal Year.....</b>	<b>4</b>
<b>Actual Expenditure and Position Data for Previous Fiscal Year .....</b>	<b>7</b>
<b>Workplan for Current Fiscal Year (2010-2011).....</b>	<b>9</b>
<b>Appendices.....</b>	<b>12</b>
<i>Appendix A: FIO Council Members.....</i>	<i>13</i>
<i>Appendix B: FIO By-Laws.....</i>	<i>16</i>
<i>Appendix C: Ship-time Used for Previous Fiscal Year.....</i>	<i>21</i>
<i>Appendix D: FIO 09-10 Grants List.....</i>	<i>22</i>
<i>Appendix E: FIO BP Fast Track Funds (\$10M) Proposal Process.....</i>	<i>25</i>
<i>Appendix F: Auxiliary Expenditure.....</i>	<i>30</i>

## **Description and Mission of the Florida Institute of Oceanography**

### **Mission**

The FIO mission is to (1) provide a diverse and collaborative statewide forum addressing problems of concern in coastal oceanographic research and education; (2) leverage and integrate existing physical and intellectual resources within the State University System (SUS) and throughout Florida; (3) anticipate and plan for future infrastructure needs; (4) facilitate, promote and support collaborative ocean-related research and education statewide; and (5) develop and strengthen networks that enable timely identification of oceanographic research opportunities and distribution of research results and other information to the general public, natural resource management agencies and local, state and national policymakers.

To achieve this mission, FIO will facilitate access to major marine research and educational capabilities and facilities throughout the State, including the operation of sea-going vessels and a full-service marine research and education center for coastal ocean research, and will promote research, education, economic development, and environmental sustainability of Florida's coastal ocean. FIO enables the SUS to provide a virtual intellectual and physical hub for the mature and diverse marine science enterprise that exists in the state

FIO will facilitate effective collaboration among various coastal, marine and oceanographic components of the SUS and with other marine research and educational entities. FIO will provide statewide leadership in helping Florida's citizens and policymakers understand critical issues related to:

- The impact of clean oceans and beaches on the state tourism industry;
- Risks associated with hurricanes and tropical weather;
- Red-tide blooms;
- The health of living marine resources such as coral reefs;
- The health and economic importance of recreational and commercial fisheries and aquaculture;
- Impact of offshore oil drilling;
- Impact on living marine resources, human health and agriculture from freshwater usage, estuarine and coastal water quality;
- Ocean acidification;
- The relationship of coastal ocean currents to effective search and rescue operations;
- Sea-level rise; and
- Impact of climate change.

This is a report of the Florida Institute of Oceanography's achievements in the Fiscal Year 2009-2010, including a summary of the substantial role it played during and after the Deepwater Horizon Oil Spill.

## **Summary of Activities and Accomplishments for Previous Fiscal Year**

### **A. Administration and Planning**

In the first full year as an AISO, FIO worked on a number of administrative and planning items. These included:

- The Inaugural meeting of the newly formed FIO Council (Appendix A), which was held on 11 December 2009. A second meeting of the Council was convened on 21 May 2010.
- Updating the FIO Strategic Plan, By-Laws, and the Ships Scheduling process to ensure efficient resource utilization by all member institutions. The By-Laws (Appendix B) were approved by the FIO Council in August, 2010. Ship-time Used by FIO members for the previous fiscal year is given in Appendix C. The Strategic Plan is being updated and will be presented for approval to the FIO Council in January 2011.
- Revised FIO's budget and organizational structure to increase and enhance services to member institutions.
- Administer FIO grants (Appendix D).
- Conducted an international search for a new Director. The search was suspended due to operational considerations and the Deepwater Horizon Oil Spill.

### **B. Legislative Initiatives**

As a state-wide organization, FIO has:

- Served as advisor to the Governor, State University System Board of Governors, State Legislature, and others as requested, providing science-based advice on natural resource management, mitigation, regulation, programs and policy.
- Submitted a Legislative Budget Request (LBR) for inclusion in the 2011-2012 Legislative Operating Budget to: 1.) enhance FIO's State-wide responsibilities; 2.) stabilize and expand its administration, shared use resources, and member support; and 3.) establish it as the point of coordination for the SUS and other marine research and educational entities in coordinating and administering the academic research response to disaster events affecting the State, such as oil spills and hurricanes. The LBR, currently, has been approved by the USF Board of Trustees and the Board of Governors.

### **C. Academic Support**

As part of the FIO mission as an Academic Support Organization, which includes operating the Research Vessels, the Keys Marine Lab (with FWC), and providing general support to Academia, the following items have been accomplished:

- Reviewed and awarded ship days as provided in the Academic Infrastructure Support Organization Agreement.
- Re-developed the FIO website to better meet the needs of the FIO members and other marine interests around Florida (<http://fio.usf.edu/>).

In addition, funding for FIO initiatives supported all SUS institutions in contributing to degrees awarded, Federal R&D expenditures, and other AAU and NRA metrics important to all institutions.

### **D. Infrastructure Development**

In consultation with FIO membership, acquired significant research equipment upgrades for the R/V Weatherbird and the R/V Bellows. These were implemented before the Deepwater Horizon spill, and proved to be invaluable during the subsequent research and monitoring cruises.

### **E. Response to Deepwater Horizon Oil Spill**

FIO played a substantial role in the immediate and long-term response to the Deepwater Horizon oil spill.

- The Oil Spill Academic Task Force was formed by Chancellor Frank Brogan to draw on depth of expertise around Florida, and a website, <http://oilspill.fsu.edu> was established as a clearinghouse website to share data and information.
- Building on this, FIO was designated the State's central point of coordination for BP studies related to the oil spill scope and impact on the marine and estuarine environments.
- FIO research vessels were used in numerous water sampling research cruises. The three initial sampling cruises were funded by USF Research Foundation to sample the sediment, subsurface oil, and the toxicity of oil and dispersants to the food chain organisms. These were multi-institutional cruises with scientists from various FIO members aboard (e.g. Eckerd College, FWRI, FIT, FL-DEP).
- Shortly after the oil spill, Governor Crist requested FIO to determine the research and monitoring needs for the State of Florida. The FIO Director issued a call for proposals and Governor Crist asked BP for \$100 million to begin these time-

sensitive studies. Although this money was not released by BP, FIO received proposals for approximately \$120 million.

- Subsequently BP announced \$500 million over 10 years for the Gulf States, of which \$10 million was provided as a Fast Track Grant to FIO. FIO issued a second call for proposals for the Fast Track funds to address the following priority areas:
  - Determine the properties, distribution, and extent of spill and dispersants
  - Baseline studies and impact assessments
  - Contribute to an integrated coastal and ocean observing system and improve modeling
  - Develop and implement systems for data integration, synthesis, sharing and dissemination
  - Develop and implement strategies to protect and restore habitats and species

233 proposals, totaling approximately \$60 million, were received. A broad-based review committee, guidelines and criteria for ranking for the review of proposals were established (Appendix E) by the FIO Executive Committee. The review committee and FIO Executive Committee recommended 27 proposals (approximately \$1.4 million over budget) to the full FIO membership. The package was approved with the requirement that the FIO Director would work with each PI to reduce projects to meet the budget. The funds have been awarded as sub-contracts from USF. The cruise plans will be on the FIO website and the data will be on a NOAA website. Results from the proposals will be published in a peer-review journal. The funded projects and PIs are given in Appendix E.

For the longer term, a plan needs to be developed for coordinating the rapid response of FIO members to assess and understand the impacts on the Gulf of Mexico and Atlantic ecosystems and critical coastal ocean, estuarine and riverine resources of events such as hurricanes, oil spills, red tide and other harmful algal blooms.

## Actual Expenditure and Position Data for Previous Fiscal Year

These are from the Education and General Account.

Description	Amount
STAFF	\$201,375
FACULTY	\$269,588
FRINGE – MATCHING	\$137,840
TRAVEL	\$1,500
REGISTRATION/CONFERENCE/MEMBER	\$500
TELEPHONE & TELECOMMUNICATIONS	\$10,000
CONTRACTUAL SERVICES	\$250
POSTAGE & SHIPPING	\$250
COMPUTER RELATED - MATERIAL, S	\$297
MATERIALS, SUPPLIES & EQUIPMEN	\$2,000
REPAIRS/MAINTENANCE/RENOVATION	\$1,000
OTHER EXPENSES	\$10,000
<b>Sub-Total Administration</b>	<b>\$634,600</b>
STAFF	\$166,258
FRINGE – MATCHING	\$74,053
OTHER EXPENSES-Ship	\$100,000
<b>Sub-Total Ship Support</b>	<b>\$340,311</b>
<b>GRAND TOTAL</b>	<b>\$974,911</b>

### Staff and Faculty Budget Justification

#### Staff Administration

The five administrative support staff at the FIO includes the Marine Superintendent, Keys Marine Laboratory Manager, Administrative Assistant, Fiscal and Business Specialist, and Fiscal Assistant. The Marine Superintendent and KML Manager are responsible for coordinating use and activities of the FIO research vessels and the KML respectively. The Administrative Assistant coordinates all the FIO consortium activities including

Council meetings, workshops, personnel management, and supports the Director in all his/her activities. The Fiscal and Business Specialist and Fiscal Assistant are responsible for E&G, Auxiliary, and grant expenditures including reconciling accounts, projecting expenditures, purchase orders, invoices, and P-card expenditures.

#### Faculty Administration

The three faculty of the FIO are non-tenure track positions for the Director, Assistant Director, and Coordinator of Technical Services. The Director is responsible for program development, budget initiatives, outreach to the FIO consortium members, and interaction with state and national research planning commissions. The Assistant Director oversees the day to day operations, administers the grant budgets, interacts with the PIs, and manages grant funded personnel. The Coordinator of Technical Services provides technical support for the scientific equipment aboard the research vessels, serves on the Dive Safety committee, coordinates permitting requirements for users of both the research vessels, and the KML, edits and issues the annual RFP for FIO awarded ship-time and use of the KML, and works with the consortium members to determine future scientific equipment needs.

#### Staff – Ship Support

Currently there are three staff for ship support: the Captain, Assistant Captain, and Cook/Deckhand on the RV Bellows. The Captain is responsible for the safe operation of the vessel and insuring that the scientific party needs are met. The Assistant Captain has similar responsibilities during the 24 operations of the research vessel. The Cook/Deckhand provides all meals for the 13 persons aboard the research vessel, conducts safety briefings for the scientific party, and assists in deck operations.

Auxiliary expenditures for the Research Vessels and Keys Marine Laboratory are in Appendix F.



## **Workplan for Current Fiscal Year (2010-2011)**

This is a draft workplan and will be brought before the full FIO Council for approval at the next meeting in January 2011. However, elements of this are underway based on the FIO Mission and the proposal used to establish the AISO. Many of these are taken from the Strategic Plan which will also be finalized and approved at the next Council meeting.

- I. Provide, promote, and support a collaborative statewide forum for addressing opportunities to advance the understanding and management of Florida's coastal oceans;
  - a. Conduct regular visits to all member institutions to strengthen member networks, to explain availability and promote use of shared resources, and to solicit recommendations for enhancing academic infrastructure support.
  - b. Conduct three FIO Council meetings each year (the first of these was held on August 12, 2010). These will be held at different member institutions, to allow all FIO members to have first-hand knowledge of activities and resources across Florida.
  - c. Conduct and sponsor workshops to gain membership consensus on priorities for collaboration and cooperation
  - d. Ensure understanding and acceptance by SUS Board of Governors and State Legislators of FIO's role, responsibility, and requirements
- II. Leverage and integrate existing physical and intellectual resources within the SUS and throughout the State of Florida;
  - a. Continue to establish FIO as the SUS coordinating body for ships, equipment, marine laboratories and other shared-use facilities and equipment
  - b. Coordinate a state-wide collaboration to develop new marine science educational programs.
  - c. Establish an east coast FIO satellite office
  - d. Explore use of FIO vessels and other facilities by private enterprise
  - e. Develop long-term plan to ensure support of essential personnel, marine technical experts and support positions for both research vessels and the Keys Marine Lab
- III. Anticipate and plan for future shared use infrastructure needs;
  - a. Prepare analysis for Council consideration of regional ship needs in the Gulf of Mexico and Atlantic coast of Florida

- b. Conduct needs-assessment of research capability enhancements for RV/Weatherbird II, RV/Bellows, and KML and the need for additional shared-use resources
  - c. Conduct needs-assessment of other shared-use research facilities throughout Florida, with the goal of minimizing duplication of major research facilities, where practical
  - d. Establish 5-year program to identify and solicit sources of funding for shared-use infrastructure
- IV. Develop and strengthen networks that enable timely identification of research opportunities and distribution of results
- a. Actively participate in appropriate State-wide and Regional alliances
  - b. Explore and implement innovative ways of communicating results of shared-use research platforms, equipment, and facilities
  - c. Seek recognition by and participation with national and international leaders in establishing priorities in coastal oceanographic research
- V. Establish FIO as the State's designated oceanographic research organization to plan, coordinate, and implement response to catastrophic events affecting the Gulf of Mexico and Atlantic coastal marine ecosystems.
- a. Obtain agreement of FIO members and BOG
  - b. Seek recognition by FEMA, Coast Guard, NOAA and relevant State and Regional agencies and organizations
  - c. Serve as advisor to the Governor, State University System Board of Governors, State Legislature, and others as requested, providing science-based advice on mitigation, regulation, programs and policy.
  - d. Develop plan for coordinating rapid response of FIO members to assess and understand impacts on the Gulf of Mexico and Atlantic ecosystems – and including atmosphere, coast, estuaries, and rivers - of events such as hurricanes, oil spills, red tide and other harmful algal blooms
  - e. Administer resources provided to address impacts of disaster events, e.g., the \$10M provided to FIO by BP to conduct research on the environmental impacts of the Deepwater Horizon Oil Spill of April 2010
  - f. Ensure peer-reviewed documentation, widespread dissemination and interpretation of findings and recommendations to policy-makers, educators, and the general public.
- VI. Establish the Gulf of Mexico Research Collaborative. The Gulf of Mexico Research Collaborative (Gulf Research Collaborative) is comprised of a team

of five university-based consortia representing the many marine-oriented research organizations within the five Gulf States.

- a. Serve as the primary university-based, multi-State research organization to respond to disasters that endanger the Gulf of Mexico's marine life, seabed, water column, surface, shoreline, and communities dependent upon these valued ecosystem components. The disaster that provided the impetus for the creation of the Gulf Research Collaborative was the BP oil well blow-out and resulting oil spill in 2010, and the short-term and long-term response to that disaster is a significant, but not exclusive, mission of the Gulf Research Collaborative. The Gulf Research Collaborative will respond to other disasters, and engage in other related and unrelated activities consistent with the missions described above, as may be determined by its members.
- b. Develop and promote research initiatives, and provide infrastructure for marine research programs within the Gulf of Mexico and Caribbean that expand opportunities for Gulf Research Collaborative members.
- c. Support existing marine education programs and member's research programs with centrally maintained facilities, and with research vessels, in order to promote efficiency of expenditures and asset acquisition and maintenance.
- d. Support, lead, and participate in conferences and other opportunities to provide educational opportunities related to the Gulf Research Collaborative's mission, for the marine science community and the general public.
- e. Seek opportunities to partner and collaborate with local, state and federal organizations and authorities in opportunities that advance the mission of the Gulf Research Collaborative. As an example, without excluding other opportunities, the Gulf Research Collaborative will seek collaboration opportunities with the Gulf of Mexico Alliance and its partner organizations.

## *Appendices*

## Appendix A: FIO Council Members



### FIO Council Membership List 2009-2010

The Institute is governed by the FIO Council. Council members are appointed by the head of their respective institutions and serve two-year terms. They are active members of the Florida oceanographic science and education community. In addition to advising the FIO leadership regarding statewide collaboration in oceanographic science and education, the Council's key duty is to plan and align legislative budget requests with strategic priorities.

**Lee Edmiston, Director**

Office of Coastal & Aquatic Managed Areas  
Department of Environmental Protection  
3900 Commonwealth Boulevard M.S. 49  
Tallahassee, FL 32399  
850-245-2094 (phone)  
850-245-2110 (fax)  
[Lee.Edmiston@dep.state.fl.us](mailto:Lee.Edmiston@dep.state.fl.us)

**Jennifer Cherrier, Associate Professor**

Environmental Sciences Institute  
Florida A&M University  
1515 Martin Luther King Jr. Boulevard  
Tallahassee, FL 32307  
850-561-2134 (phone)  
[Jennifer.cherrier@fam.u.edu](mailto:Jennifer.cherrier@fam.u.edu)

**Gil McRae, Director, (FIO ExCom)**

Fish and Wildlife Research Institute  
100 Eighth Avenue SE  
St. Petersburg, FL 33701-5020  
727-896-8626 (phone)  
[Gil.McRae@MyFWC.com](mailto:Gil.McRae@MyFWC.com)

**David Hastings, Associate Professor**

Galbraith Marine Science Laboratory  
Eckerd College  
4200 54<sup>th</sup> Avenue South  
St. Petersburg, FL 33711  
727-864-7884 (phone)  
727-864-7964 (fax)  
[hastindw@eckerd.edu](mailto:hastindw@eckerd.edu)

**Shirley Pomponi, Executive Director, (FIO Council Chair) (FIO ExCom)**

Harbor Branch Oceanographic Institute  
Florida Atlantic University  
5600 US 1 North  
Fort Pierce, FL 34946  
772-465-2400 (phone) Ext. 449  
[spomponi@hboi.fau.edu](mailto:spomponi@hboi.fau.edu)

**Aswani Voley, Chair**

Division of Ecological Studies  
Florida Gulf Coast University  
10501 FGCU Boulevard S.  
Fort Myers, FL 33965-6565  
239-590-7216 (phone)  
[avolety@fgcu.edu](mailto:avolety@fgcu.edu)

**George Maul, Chair**

Department of Marine & Environmental Systems  
Florida Institute of Technology  
150 West University Boulevard  
Melbourne, FL 32901-6975  
321-674-7453 (phone)  
[gmaul@fit.edu](mailto:gmaul@fit.edu)

**Ian MacDonald, Professor**

Department of Earth, Ocean & Atmospheric Science  
Florida State University  
Rm 511 OSB  
Tallahassee, FL 32306-4320  
850-644-5498 (phone)  
[imacdonald@fsu.edu](mailto:imacdonald@fsu.edu)

**Sandra Gilchrist, Professor**

Pritzker Marine Sciences Research Lab  
Division of Natural Sciences  
5800 Bay Shore Road  
Sarasota, FL 34243  
941-487-4596 (phone)  
[gilchrist@ncf.edu](mailto:gilchrist@ncf.edu)

**Valerie Paul, Senior Scientist & Director**

Smithsonian Marine Station at Fort Pierce  
701 Seaway Drive  
Fort Pierce, FL 34949  
772-462-0982 (phone)  
[paul@si.edu](mailto:paul@si.edu)

**Karl Havens, Director**

Florida Sea Grant College Program  
University of Florida  
803 McCarty Drive, PO Box 110400  
Gainesville, Florida 32611-0400  
Phone: 352-392-5870  
E-mail: [khavens@ufl.edu](mailto:khavens@ufl.edu)

**Courtney Hackney, Chair, (FIO ExCom)**

Department of Biology  
University of North Florida  
1 UNF Drive  
Jacksonville, FL 32224  
904-620-1850 (phone)  
[c.hackney@unf.edu](mailto:c.hackney@unf.edu)

**Michael Heithaus, Director**

School of Environment and Society  
Florida International University  
3000 NE 151 Street  
North Miami, FL 33181  
305-919-5234 (phone)  
[heithaus@fiu.edu](mailto:heithaus@fiu.edu)

**Kumar Mahadevan, President and CEO**

Mote Marine Laboratory, Inc.  
1600 Ken Thompson Parkway  
Sarasota, FL 34236  
941-388-4443 (phone)  
[kumar@mote.org](mailto:kumar@mote.org)

**Dick Dodge, Director**

National Coral Reef Institute  
Nova Southeastern University  
Oceanographic Center  
8000 North Ocean Drive  
Dania Beach, FL 33004  
954-262-3617 (phone)  
[dodge@nova.edu](mailto:dodge@nova.edu)

**Graham Worthy, Professor**

Department of Biology  
University of Central Florida  
4000 Central Florida Boulevard  
Orlando, FL 32816  
407-823-2141 (phone)  
[gworthy@mail.ucf.edu](mailto:gworthy@mail.ucf.edu)

**Peter Ortner, Professor**

Rosenstiel School of Marine and Atmospheric Science  
University of Miami  
4600 Rickenbacker Causeway  
Miami, FL 33149  
305-421-4619 (phone)  
[POrtner@rsmas.miami.edu](mailto:POrtner@rsmas.miami.edu)

**Wade Jeffrey, Professor**

Center for Environmental Diagnostics  
and Bioremediation  
University of West Florida  
11000 University Parkway  
Pensacola, FL 32514  
850-474-2472 (phone)  
[wjeffrey@uwf.edu](mailto:wjeffrey@uwf.edu)

**William Hogarth, Interim Dean, (FIO ExCom)**

College of Marine Science  
University of South Florida  
140 7<sup>th</sup> Avenue South  
St. Petersburg, FL 33701  
727-553-1130 (phone)  
[billhogarth@admin.usf.edu](mailto:billhogarth@admin.usf.edu)

**Y. Peter Sheng, Chair & Professor**

Florida Coastal Ocean Observing System Consortium  
(FLCOOS)  
Civil and Coastal Engineering  
University of Florida  
Gainesville, FL 32611-6590  
352-392-9537 x 1521  
[pete@coastal.ufl.edu](mailto:pete@coastal.ufl.edu)

**Karen Holbrook, Senior Vice President, (FIO ExCom)**

Division of Research and Innovation  
University of South Florida  
3702 Spectrum Boulevard, Suite 175  
Tampa, FL 33620  
813-974-5481 (phone)  
[kholbrook@research.usf.edu](mailto:kholbrook@research.usf.edu)

**Richard Stevens, Director (Ex-Officio Member)**

Academic & Student Affairs  
Florida Board of Governors  
State University System  
325 West Gaines Street, Suite 1614  
Tallahassee, FL 32399-0400  
850-245-0466  
[Richard.Stevens@flbog.edu](mailto:Richard.Stevens@flbog.edu)

## ***Appendix B: FIO By-Laws***

Approved by FIO Council August 12, 2010

### Florida Institute of Oceanography Council Bylaws

DRAFT for Review and Approval by the FIO Council

#### I. Creation and Administrative Assignment of the Florida Institute of Oceanography

The Florida Institute of Oceanography (FIO) is an Academic Infrastructure Support Organization (AISO) of the State of Florida approved by the State University System (SUS<sup>1</sup>) Council of Academic Vice Presidents (CAVP), ratified by the presidents and chairs of the boards of trustees of the member organizations and approved by the Florida Board of Governors (BOG). Under a Memorandum of Understanding (MOU) ratified by the member organizations and approved by the BOG, the University of South Florida (USF) assumes the role of host university, with the support of participating universities, for the operation of FIO. FIO administrative offices are housed on the campus of the College of Marine Science in St Petersburg, Florida and fiscal accounting functions are administered by USF and will be overseen by the USF Board of Trustees (BOT).

#### II. Purpose and Duties of the FIO

The FIO will facilitate and support Florida's emergence as the pre-eminent state in the nation for research and education in understanding ocean processes and how they impact economically essential natural resources and contribute to natural and man-made hazards. The FIO will have within its scope all aspects (research and education) of oceanography that affect the State of Florida. FIO will direct its focus on the entire coastal ocean, from the coast to the deep ocean, thereby positioning itself to facilitate and support systems-wide scientific leadership within the SUS for the environmental stewardship of the State of Florida. The FIO mission, as defined in the MOU, is to: (1) provide a diverse and collaborative statewide forum addressing problems of concern in coastal oceanographic research and education; (2) leverage and integrate existing physical and intellectual resources within the SUS and throughout Florida; (3) anticipate and plan for future infrastructure needs; (4) facilitate, promote and support collaborative ocean-related research and education statewide; and (5) develop and strengthen networks that enable timely identification of oceanographic research opportunities and distribution of research

---

<sup>1</sup> The State University System Consists of the following institutions: Florida Agricultural and Mechanical University, Florida Atlantic University, Florida Gulf Coast University, Florida International University, Florida State University, New College of Florida, University of Central Florida, University of Florida, University of North Florida, University of South Florida, and University of West Florida



results and other information to the general public, natural resource management agencies and local, state and national policymakers.

As an AISO, the FIO provides technology, equipment, facilities, services, and resources for academic programs and research in Florida. The FIO facilitates access to major marine research and educational capabilities and facilities throughout the State, including the operation of sea-going vessels for coastal ocean research, and promotes research, education, economic development, and environmental sustainability of Florida's coastal ocean. FIO enables Florida to provide a virtual intellectual and physical hub for the mature and diverse marine science enterprise that exists in the state. Established entities across academia, government, and the private sector will collaborate to:

- a. Promote research, education, and project management;
- b. Enhance awareness of ocean science issues affecting all Floridians;
- c. Maximize the efficient use of supporting infrastructure;
- d. Produce scientific solutions;
- e. Leverage public and private sector investments to increase capacity; and
- f. Inform public policy development and decision-making.

### III. Membership and Governance

The FIO shall consist of the Membership, the FIO Council, the FIO Director and staff, standing and ad hoc committees of the Membership, and a Board of Visitors.

A. Membership. The FIO consists of the eleven (11) state universities and nine (9) other entities which include faculty, staff, and scientists conducting research and teaching and who may wish to utilize ships, facilities, and other services provided by FIO. The non-state university members of FIO by ratification of the MOU are: Eckerd College; Florida Sea Grant College; University of Miami, Rosenstiel School of Marine and Atmospheric Science; Florida Department of Environmental Protection; Florida Fish & Wildlife Conservation Commission, Fish and Wildlife Research Institute; Florida Institute of Technology; Mote Marine Laboratory; Nova Southeastern University; and the Smithsonian Marine Station at Fort Pierce.

Election of New Members. The FIO Council may elect to membership other institutions in the Florida ocean science education and research community that meet the criteria for membership approved by the FIO Council. Criteria for membership will address commitment to the support of shared use facilities; agreement to support legislative budget requests of the FIO as required to maintain and operate these facilities in a safe, efficient and cost-effective manner; commitment to attend all scheduled meetings of the FIO Council and FIO Executive Committee, if appropriate; and completion of assignments in a timely manner as agreed to by the FIO Council or FIO Executive Committee.

B. FIO Council. The primary function of the FIO Council is advisory to the FIO leadership, including the FIO Director and the Provost of the host institution. The FIO

Council will consist of one (1) representative from each member organization and two (2) from the host institution who are active members of the Florida coastal ocean research and education community and who are appointed for a two (2) year term by its president or CEO or his/her designee. The president or CEO (or his/her designee) of each member organization may also appoint one (1) alternate who may serve in the representative's stead at meetings of the Council, but each institutional member may be represented by only one (1) individual in the deliberations of the Council. Member representatives may be reappointed, but shall not serve more than three (3) consecutive terms. The foregoing notwithstanding, the second member appointed by the host institution may serve unlimited terms. The FIO Council shall elect a Chair biennially from the membership. The FIO Director together with a representative of the BOG will serve as non-voting, *ex-officio* members. Council members shall have the authority to participate in all activities on behalf of the member organization and cast its vote as required. Each institutional member can change a delegate at any time by notifying the FIO Director by written communication. The Director is required to notify the affected organization member if an appointed representative misses two consecutive meetings of the FIO Council.

C. FIO Director and staff. The FIO Director shall be appointed by the Provost of the host institution in consultation with the FIO Executive Committee. The FIO Director reports to the Provost of the host institution. The FIO Director will maintain active contact with FIO member institutions by visiting campuses, scheduling and conducting workshops, conducting needs assessments and providing advance knowledge of FIO activities to achieve the goals of the AISO. The FIO Director shall complete an annual report no later than September 1 of each year covering the previous fiscal year (July 1-June 30). The report shall include a summary of activities and accomplishments, provide actual expenditure and position data, and include a workplan for the current fiscal year. Prior to its submission to the Chancellor, no later than October 31 of each year, the report will be distributed to members of the FIO Council for review and comment and will be approved by the Provost of the host institution. Under the FIO Director's guidance, the FIO staff has the primary responsibility for operation and maintenance of the vessels, implementation of the ship schedule, and support for PIs to achieve the research goals; coordination of the education components to achieve the education goals; maintenance of the FIO website; and support for grants and other services provided to member institutions. In the event of a vacancy in the FIO Director position, a search committee will be appointed by the Provost and will follow the customary search process of the host institution.

#### IV. FIO Council Meetings

The FIO Council will meet at least once in person each year and by telephone conference as needed. Agendas for the meetings will be set by the Chair of the FIO Council in consultation with the FIO Director and approved by the Provost of the host institution. A quorum must be present for the Council to take action. A quorum shall consist of no less than half of the member institutions plus one. All meetings will be conducted according to Roberts Rules of Order.

Voting. Each member of the FIO Council has one vote. Voting will be decided by a simple majority of member representatives present unless otherwise specified in these by-laws. New member institutions elected to the FIO secure voting privileges upon the appointment of an FIO Council representative as specified in the bylaws, but not before adjournment of the meeting at which they were elected.

Meetings of the FIO Council are open to the public. A Council member may designate an individual to attend the meetings as an observer and to comment on agenda items but the observer will not have voting privileges.

Minutes of the Meetings. Minutes shall be kept for all regular meetings of the Council and shall be made available by email to the membership within two weeks of each regularly scheduled meeting. Following a period of two weeks for comment and amendment, the minutes shall be approved by email vote of the members and posted on the Council web site.

Staffing of the Council. Members of the staff of the FIO will act as staff for the Council, organizing meeting logistics, taking minutes and handling communications with the members.

#### V. Standing Committees and Workgroups

Executive Committee. The FIO Executive Committee will consist of five (5) Council members including the Council Chair and four elected members. At least one member of the FIO Executive Committee shall be from the host institution. The FIO Executive Committee will meet at least three times per year and provide administrative oversight of the FIO in cooperation with the FIO Council and the Provost of the host institution. The FIO Director will serve as a non-voting, *ex officio* member. Written reports of the items discussed and actions taken at meetings will be sent to the FIO Council via email and posted on the FIO website for the benefit of the FIO Council and interested parties. Membership on the Executive Committee will be evaluated biennially. In the event of a vacancy on the Executive Committee, the FIO Council will elect a member to fill the vacancy.

Ship Scheduling and Coordination Committee. The Ship Scheduling and Coordination Committee (SSCC) will be elected by the FIO Council and will consist of at least three (3) Council members (with at least one from the host institution) reflecting the geographical diversity of Florida. The SSCC will provide oversight and advice to assure the efficient deployment of FIO research vessels in all of Florida's coastal ocean and surrounding waters (Straits of Florida, coastal Atlantic, Bahamas, Caribbean, northern Gulf of Mexico). The SSCC will assist the FIO Marine Superintendent with efficient long-term planning to ensure that FIO members will have equitable access to these vessels from Jacksonville to Pensacola. The SSCC will meet at least once annually, in conjunction with the FIO Council meeting.

Nominating Committee. A Nominating Committee will consist of three (3) members appointed by the Executive Committee. The Nominating Committee will recommend candidates to the FIO Council to serve on the standing and ad hoc committees. The Nominating Committee will meet on an as-needed basis to fill vacancies on the standing and ad hoc committees.

Board of Visitors. The FIO Board of Visitors will have five (5) to nine (9) members appointed by the host institution President, in consultation with the FIO Council and the Council of Academic Vice Presidents (CAVP), for a three (3) year term, to provide broad oversight to the FIO. Members may be reappointed, but shall serve no more than three (3) consecutive terms. Members will represent the overarching oceanographic research and education interests of global, national and Florida-focused entities. The FIO Board of Visitors shall include representatives from the private sector, higher education, government scientific laboratories and agencies, and others as deemed appropriate by the host institution President. The Board of Visitors will report to the Provost of the host institution and the FIO Executive Committee, and will serve as a valued resource to FIO by providing advice on best practices for optimizing the resources of the FIO and member institutions; identifying strategic directions for potential cooperative programming; interfacing with potential funding sources; and representing FIO and the vital importance of oceanographic research to the broader community.

Additional *ad hoc* or special committees may be formed by the Executive Committee with the cooperation of the Council to address particular issues.

## VI. By-Law Revisions

The bylaws and any proposed revisions shall be reviewed yearly. Council members shall submit any proposed revisions to the Chair at least 30 days in advance of the annual meeting. The Executive Committee and the Provost of the host institution shall review the proposed revisions prior to a full vote of the Council. Amendment of the bylaws requires a two-thirds vote of the Council.

### ***Appendix C: Shiptime Used for Previous Fiscal Year***

Shiptime Used FY09-10 by Insitution

<u>Institution</u>	RV Bellows Days	RV WBII Days
University of South Florida	24	30
Nova Southeastern	9	
Florida State University	11	
Florida Gulf Coast University	12	
University of West Florida	28	
University of Central Florida	2	
Florida A&M University	6	
Eckerd College	2	
Florida Atlantic University	19	
Department of Environmental Protection	5	
Florida Fish and Wildlife Conservation Commission		43
University of Texas		14
Florida Institute of Technology		12
<b>Total</b>	<b>118</b>	<b>99</b>

**Appendix D: FIO 09-10 Grants List**

Project #	Title	Sponsor	PI	Fund	F/R	Beg. Date	End Date	Budget
	<b>Active Projects FY 09/10</b>							
4710102600	Development of an Ecosystem-based	FL DEP	J. Ogden	21000		8/10/2005	6/30/2010	\$ 241,675
4710102700	Support for the CARICOMP	DOI	J.Ogden	20000	Reim.	7/1/2005	6/30/2010	\$ 145,000
4710104800	Operation and Maint. Of SEAKEYS	NOAA	W. Hogarth	20000	Reim.	8/24/2006	9/30/2011	\$ 490,000
4710104801	Benthic Monitoring	NOAA	W. Hogarth	20000		8/24/2006	9/30/2011	\$ 396,981
4710104802	Enhancement of HAB Observing System (HABSOS)	NOAA	W. Hogarth	20000		8/24/2006	9/30/2011	\$ 50,000
4710108500	GOMA program support	FDEP/NOAA	S. Vargo	20000	Reim.	10/1/2008	6/30/2011	\$ 709,274
4710109000	Resource Monitoring	FL DEP/EPA	S. Vargo	20000		7/1/2007	6/30/2011	\$ 249,665
4710109100	Using Artificial Neural Network to Model Toxic Phytoplankton Abundance in Saginaw Bay	U. Mich/NOAA	D. Millie	20000		7/1/2008	6/30/2012	\$ 41,775
4710109300	HABSOS	EPA	K. Steidinger	20000	Reim.	12/1/2008	11/30/2010	\$ 329,766
4710109400	Gulf of Mexico Alliance	Texas A&M	C. Carollo	20000	Reim.	10/1/2008	9/30/2011	\$ 218,569
4710109500	Scientific Copyediting Report	FWC	S. Vargo	21000	Fixed	7/1/2010	6/30/2011	\$ 69,194
4710109600	Support for FWC/FWRI HAB Monitoring	FWC	S. Vargo	21000	Fixed	7/7/2009	6/30/2010	\$ 143,120

4710109700	HAB Website and Database Management	FWC	S. Vargo	21000	Fixed	7/7/2009	6/30/2010	\$ 65,257
4710109800	Statistical-Based Modeling and Prediction	U. of Michigan	D. Millie	20000	Reim.	7/1/2009	6/30/2010	\$ 64,913
4710109900	Use of HPLC for Detection of <i>Karenia brevis</i> Blooms - Yr 2	FWC	D. Millie	21000	Fixed	1/5/2010	6/30/2010	\$ 20,000
4710110000	Binational Training Workshops on HABs in Support of HABSOS	EPA	K. Steidinger	20000	Reim	4/1/2010	3/31/2011	\$ 237,450
4710110100	Florida Coastal Sentinels; Active Monitoring of the Fate of the DWH Disaster Oil and Chemical Dispersants.	British Petroleum	W. Hogarh	22000	Fixed	6/23/2010	6/22/2011	\$ 10,000,000
4710110200	HAB Monitoring and Event Response	FWC	S. Vargo	21000	Fixed	7/1/2010	11/30/2010	\$ 79,597
4710110300	HAB Website and Database Maintenance	FWC	S. Vargo	21000	Fixed	7/1/2010	7/1/2011	\$ 66,030
4710110400	Scientific Copyediting	FWC	S. Vargo	21000	Fixed	7/1/2010	9/30/2011	\$ 72,336
4710110500	Harmful Algal Bloom Response	FWC	K. Steidinger	21000	Fixed	7/1/2010	7/1/2011	\$ 42,829
4710110600	Use of High Pressure Liquid Chromatography for the Detection of <i>Karenia brevis</i> Blooms in the GOM	FWC/EPA	S. Vargo	20000	Reim.	10/1/2010	1/31/2011	\$ 4,001
4710110700	Gulf of Mexico Alliance: Identification and Characterization of Gulf Habitat Priority Issue Team (Ecosystem Services)	TAMUCC	C. Carollo	21000	Reim.	3/1/2010	12/30/2010	\$ 15,467
4710110800	Continued Operation and Maintenance of	SECOORA/NOAA	S. Vargo	20000	Reim.	8/1/2010	7/31/2011	\$ 42,679

	the SEAKEYS							
	Network							
4710110900	Oil Spill Scientific and Technical Support for the DWH	FWC	S. Vargo	21000	Reim.	10/4/2010	12/31/2010	\$ 27,741
	Oil Spill							
Direct Billing	KML Support	FWC	S. Vargo	21000	Fixed			\$ 94,341
						<b>FY09/10</b>		
						<b>Total</b>		<b>\$ 13,917,660</b>



## ***Appendix E: FIO BP Fast Track Funds (\$10M) Proposal Process***

### **Review Committee Members:**

David Mann – USF/CMS  
Dennis Hanisak – FAU  
Felicia Coleman – FSU  
George Maul – FIT  
Jennifer Cherrier – FAMU  
Lee Edmiston – State of FL-DEP  
Luiz Barbiéri – FWC  
Michael Crosby – Mote Marine Lab  
Peter Ortner – University of Miami  
Richard Snyder – UWF  
Michelle Wood – NOAA  
Phil Mundy – NOAA-NMFS-Alaska Science Center

### **Guidelines for Proposal Reviewers:**

- Independent reviews of each proposal
- Each received 15-20 proposals
- Could not review any from their own institution
- Could not review any proposal on which they collaborated
- Could discuss with other reviewers to determine best proposals to be funded with limited funds

### **Criteria Used to Rank Proposals:**

1. Appropriate Scope
2. Urgency
3. Timeframe
4. Collaboration
5. Project Focus
6. Qualification
7. Cost Effectiveness
8. Scientific Rigor
9. Merge/combine priority focus areas

**Final Awarded Projects**

27 Awards

PI	Institution	Collaborators	Title	Award
Aronson, Richard	FIT		Effects of Oil Spill on Nektonic Assemblages of Salt Marsh and Adjacent SAV Habitats in Florida and Alabama	\$193,561
Hallock, Pam	USF		Toxicity of Deep Water Horizon Oil and Dispersants on Florida's Calcifying Reef Biota	\$173,449
Laramore, Susan	FAU		The Impact of Crude Oil and Dispersant Corexit on on Three Key Gulf of Mexico Invertebrate Species	\$104,374
Rumbold, Darren	FGCU	FAMU	Impacts from MC252 Oil on Ecologically and Commercially Important Plankton of the GOM	\$322,531
Worthy, Graham	UCF	Mote, FWRI, NMFS, NOS, MSU	Impacts of the 2010 Deep Water Horizon Oil Spill on Estuarine Bottlenose Dolphin Populations in the West Florida Panhandle	\$204,386
Lopez, Jose	NSU	FIU, HBOI, FAU	Baseline and Oil Spill Impacted Marine Sponge Microbial Communities and Gene Expression	\$219,004
Muller-Karger, Frank	USF	UM, FIT, NOAA, AOML	Early Warning 4-D Remote Sensing System to Assess Synoptic Threats to Coastal Ecosystems of and of Adjacent States and Nations	\$877,796

Jago, Charles	FAMU	UWF	Assessing the Impact of the Deep Water Horizon Oil Spill on Coastal Waters of the Florida Panhandle: Water, Sediments and Fish	\$193,518
Heithaus, Michael	FIU	UNF, Mote, NSU	Assessing Impacts of Oil Exposure to Deep Sea Ecosystems of the Gulf of Mexico using sharks and scavengers as Integrative Models	\$281,197
Patterson, William	UWF	FAMU, NMFs	Acute Effects of Oil on Northern Gulf of Mexico Reef Communities	\$236,929
Huettel, Markus	FSU	Eckerd	Penetration, Accumulation, and Degradation of BP DWH Oil in Florida Sand Beaches	\$232,556
Wise, Sherwood	FSU	MSU	Effects of the BP Oil Spill on Diatoms, Nannoplankton and Related Protists at the Base of the Food Chain in the NE Gulf of Mexico	\$177,853
Jeffrey, Wade	UWF	FAMU	Uncoupling of Autotrophy and Heterotrophy Effects of the Deep Water Horizon Oil Spill on Microbial Food Webs	\$215,021
MacDonald, Ian	FSU	UWF	Coast Watch: Remote Sensing and Verification Sampling of Oil Spill Impact on Florida Coast	\$258,157
Flower, Benjamin	USF	Eckerd, FIU	Assessing the Impact of the Deep Water Horizon Oil Spill on Sediments and Benthic Communities on the	\$284,654

West Florida Shelf				
Kerstetter, David	NSU	UNF	Monitoring of the Coastal Pelagic Fish Complex for Assessing DWH Related Trophic Changes and Contaminant Exposure	\$216,692
Grubbs, R. Dean	FSU		Assessment of Deepwater Fish Assemblages Associated with DeSoto Canyon and Continental Slope Waters in the Eastern GOM	\$97,225
Hollander, David	USF		Assessing the Concentrations and the Molecular and Isotopic Composition of Deepsea Submerged Oils in the Northern Gulf of Mexico	\$178,916
Hueter, Robert	Mote	UNF, FIT, USM, NMFS, FIU	Effects of the Deep Water Horizon Oil Spill on Epipelagic and Large Coastal Sharks and Teleosts of the Gulf of Mexico	\$243,811
Chanton, Jeffrey	FSU	FAMU, USGS	Tracing the Intrusion of the GOM 2010 Oil Spill on Coastal and Marine Food Webs: Radiocarbon and Stable Isotope	\$266,250
Zika, Rod	UM		Resolving Chemical Properties and Extent of Crude Oil and Dispersant Distribution on the Deep Water Horizon Oil Spill	\$185,780
Proffitt, Edward	FAU	FSU, FFWCC, HBOI, FGCU	The Deep Water Horizon Oil Spill: Assessing Impacts on a Critical Habitat - Oyster Reefs and Associated	\$337,631

Species in Florida Gulf Estuaries				
Daly, Kendra	USF	Eckerd	Baseline for Impact Assessment of Zooplankton and Imaging Oil Droplet Detection on the West Florida Shelf	\$377,310
Edge, Sara	FAU	Mote, FFWRI	Molecular Diagnoses of Coral Exposed to Oil and Dispersants - A Holobiont Approach to Investigate Potential Effects on Corals	\$285,346
Paulay, Gustav	UF	FSU, SMS, NSU	Integrative Biodiversity Assessment of Coral-Sponge Communities of West Florida Shelf: Establishing a Baseline for a Sensitive Ecosystem	\$195,399
Zimmerman, Andrew	UF		Biodegradation of the DWH Oil in Florida Marsh Ecosystems and Exploration of Novel Passive Remediation Strategies	\$188,407
Weisberg, Robert	USF	FSU,	A Coordinated Modeling Approach to Support Oil Spill Tracking	\$660,000
TOTAL PROJECT COST				\$7,207,253

## ***Appendix F: Auxiliary Expenditure***

### **RV Weatherbird Auxiliary Actual Expenditures FY 09/10**

Staff Salaries	\$182,093
OPS	\$22,036
Fringe-Matching	\$56,803
Travel	\$1,011
Telephone and Data Communications	\$3,606
Contractual Services	\$49,259
Rental Space	\$600
Printing and Duplicating	\$19
Computer Related Materials	\$399
Materials, supplies and equipment	\$173,914
Repairs/Maintenance, Renovation	\$239,398
Risk Management Insurance	\$12,753
Other Operating Expenses	\$7,862
OCO	\$204,816
<b>Grand Total</b>	<b>\$954,569</b>

### **RV Bellows Auxiliary Actual Expenditures FY 09/10**

Staff Salaries	\$43,986
OPS	\$10,068
Fringe-Matching	\$13,117
Travel	\$1,320
Registration/Conference/Member	\$200
Telephone & Telecommunications	\$3,209
Contractual Services	\$7,058
Subscriptions	\$90
Materials, supplies and equipment	\$103,960
Repairs/Maintenance, Renovation	\$30,039
Risk Management Insurance	\$5,924
Other Expenses	\$31,600
<b>Grand Total</b>	<b>\$250,571</b>

**Keys Marine Laboratory Auxiliary  
Actual Expenditures FY 09/10**

OPS	\$14,127
Registration/Conference/Member	\$600
Telephone & Telecommunications	\$9,162
Contractual Services	\$36,831
Computer Related-Material, Supplies	\$55
Materials, supplies and equipment	\$29,760
Utilities	\$36,606
Repairs/Maintenance, Renovation	\$29,861
Other Expenses	\$5,842
<b>Grand Total</b>	<b>\$162,844</b>