



Florida Institute of Oceanography

Annual Report

FY 2011/12

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STRATEGIC PLAN 2010-2015

For the

FLORIDA INSTITUTE OF OCEANOGRAPHY

(Approved by FIO Council January 7, 2011)

The Florida Institute of Oceanography (FIO) was established in 2009 as an Academic Infrastructure Support Organization (AISO) by the State University System (SUS) Council of Academic Vice Presidents, ratified by the presidents and chairs of the Board of Trustees of the member organizations and approved by the Florida Board of Governors. Under a Memorandum of Understanding (MOU) ratified by the member organizations and approved by the Board of Governors, the University of South Florida (USF) is the designated host institution. Operations and administrative offices of the FIO are housed on the campus of the College of Marine Science in St Petersburg. The **Vision** of the FIO founders was that a statewide consortium of universities and research laboratories would allow development of both human assets and physical infrastructure that would elevate Florida into a leadership position in oceanographic and coastal education and research. Exploration, solving problems, and development of new knowledge is the very definition of education and FIO should facilitate the functional integration of education and research by involving students in every facet of FIO activities. The **Mission** of the FIO is to facilitate and support Florida's emergence as the pre-eminent state in the nation for coastal ocean education through the development of educational and research infrastructure, which will support faculty and scientists who can advance our understanding of coastal ocean processes and communicate that understanding to Florida's residents, educators, policy makers and resource managers.

Goals and Strategies

1. Provide, promote and support a collaborative statewide organization that can support the education of students in state and private colleges and universities by:
 - a. Supporting existing marine education programs and member institution research projects with FIO maintained facilities, research vessels and other infrastructure.
 - b. Developing a statewide coastal and ocean network that can organize the coastal and oceanographic intellectual assets of Florida to provide high quality educational opportunities for students interested in coastal and ocean science and related disciplines.
 - c. Supporting and leading conferences, seminars, and workshops for students, teachers, public officials, and residents of Florida.
2. Maintain a state-of-the-art infrastructure for coastal ocean education and research with centrally maintained assets including research vessels, marine laboratories, and shared-use facilities and equipment that will:
 - a. Establish and support FIO as Florida's coordinating body for coastal ocean research. This may include reduced cost for ship time and laboratory use for FIO members that can provide a competitive advantage to FIO member institutions.

- b. Arrange and coordinate vessel and equipment leasing opportunities for FIO member institutions when FIO infrastructure is not sufficient to support member needs.
 - c. Develop and promote research initiatives for FIO member institutions within coastal waters of Florida as well as within the Gulf of Mexico and Caribbean.
 - d. Prepare a long-range plan to support FIO members in the future through the maintenance and purchase of research vessels and equipment.
 - e. Hire vessel crews, marine technical experts and support positions.
3. Develop and strengthen networks that enable timely identification of needs of member institutions, state agencies, and local governments by:
- a. Actively participating in state-wide and regional alliances, including ocean-observing alliances.
 - b. Participating in national and regional forums that will assist in establishing priorities for the FIO.
 - c. Exploring and implementing innovative ways of communicating research results with scientists, agencies, policy makers and citizens of the state.
 - d. Assisting the state in communicating technical and scientific concerns with FEMA, Coast Guard and relevant state or federal agencies in emergency situations, e.g. the Deepwater Horizon oil spill.
 - e. Providing science-based advice to the state's leaders on coastal and ocean issues whenever requested.
 - f. Visiting constituent FIO institutions to understand needs and opportunities for both teaching and research.
 - g. Partnering to develop plans for rapid technical response to environmental and natural disasters that impact the state.

Summary of Activities for Fiscal Year (FY 2011/12)

A. Administration and Planning

FIO completed the following administrative actions in fiscal year 2011/12:

- Ongoing review of the crew job descriptions to evaluate their job responsibilities compared to other similar research vessels operated by other institutions and/or agencies.
- Salary adjustments were made where justified in order to keep our crew members competitive.
- Reclassification of the two Marine Captains and Program Planner/Analyst to Administration.
- Sea Day Pay policy and procedures were established for eligible employee(s) who served aboard the research vessel(s) at sea, when away from home port on a scientific cruise.
- FIO Fiscal and Business Specialist retired. New Fiscal and Business Specialist recruited.
- Three in-person meetings of the full FIO Advisory Council were held at FIO Member Institutions on September 16, 2011 (UNF, Jacksonville), January 26, 2012 (HBOI/FAU, Ft. Pierce), and June 29, 2012 (Eckerd College, St. Petersburg), . In addition, numerous Executive Committee and the FIO Council meetings were held by phone.
- Representatives and alternates on the FIO Council were appointed (or re-appointed) by their Institutional President, CEO or designated representative. (Appendix A).
- For the first time in its 40+ year history, FIO established Associate and Affiliate Membership tiers. FIO accepted six) new Associate Members and one new Affiliate Member (Appendix A). The FIO is now a Consortium of 27 member institutions.
- The FIO Advisory Council elected a new Chair (Dr. Wade Jeffrey, UWF). The Executive Committee was re-structured and new members were elected.
- FIO Committees were reviewed and membership all committees was revised based on the new Council, including new members. New FIO Committees: Education Committee, Nominations Committee, Strategic Plan Committee, By-Laws Committee. The FIO By-Laws revisions were approved by the FIO Council on June 29, 2012. (Appendix B)
- The Council approved the FIO Ship Operations Strategic Plan on June 29, 2012. (Appendix C)
- In FY 2011/12 FIO administered 18 on-going and new grants totaling \$11,216,839, including meeting all technical and fiscal reporting requirements, and contract negotiations.

- The R/V Weatherbird II and R/V Bellows were placed in the shipyard in January 2012 for general maintenance and repairs, including installations of new equipment such as the EK-60 side scan sonar on the R/V Weatherbird II, and a new marine sanitation system on the R/V Bellows.
- A new autopilot and satellite gyrocompass was installed on R/V Bellows in June 2012.
- A Marine Engine Specialist was hired for the R/V Weatherbird II in September 2011. A new Marine Engineer position was established for the R/V Bellows in April 2012 as a necessary 4th crew member.
- Continued providing shiptime for those Principal Investigators that required research funds under the original BP grants in 2010. This field work was completed in June 2012 and final reports are due by December 31, 2012.
- Dr. Virmani worked with FIO institutions on research proposals for the second round of BP grants to establish 8 centers throughout the five Gulf of Mexico states to address potential impacts of the Deepwater Horizon spill on the Gulf of Mexico ecosystem.
- FIO member institutions (University of Miami - RSMAS, Florida State University - COAPS and University of South Florida-College of Marine Science) received 3 of the 8 centers awarded by the BP Research Board. This will result in approximately 2 million dollars in shiptime for the two FIO research vessels.
- Dr. Virmani and Dr. Thompson, Director of Keys Marine Lab, and administrative assistant Lisa Tipword prepared a proposal to NSF for new dormitories at KML.
- An advertisement is in progress for a Postdoctoral Research Associate at the Keys Marine Lab to work on research projects and assist with visiting scientific groups.
- FIO executed a Memorandum of Understanding (MOU) with the U.S. Coast Guard (USCG) 7th District in Miami. The USCG is the lead agency in responding to oil spills. This MOU will enable FIO researchers and faculty to work closely with USCG and provide expert advice on critical issues. In addition, we will conduct several workshops with the USCG, including topics of two-dimensional and three-dimensional analytical models for use in tracking oil spills and for other events, and establishing baseline information for SE Florida.

B. Legislative Initiatives

As a state-wide organization, FIO:

- Serves as advisors to the Governor, State Legislators, State University System Board of Governors, and others as requested, to provide science-based advice on natural resources management, mitigation, regulations, programs and policies.

- A Legislative Budget Request (LBR) was approved for FY 2012/13 by Legislators and the Governor. Legislative funding allowed FIO to: 1) Enhance state-wide services and responsibilities, in particular the Research Vessels--Weatherbird II and Bellows; 2) Stabilize and expand its administration, shared use resources, and member support; 3) Establish FIO 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; 4) Place all crew members on recurring funds and free up funds in Auxiliary accounts to hire relief crew members and 5) Reinstate subsidized days at sea for teaching and research purposes and maintain the vessels in a safe operating condition.
- Language was added to the RESTORE Act (part of the Transportation Bill) to establish Centers of Excellence for the five Gulf States. In July 2012 (FY12/13), the RESTORE Act was signed into law by President Obama, and Senator Nelson recognized FIO as the entity that will establish the Center of Excellence for Florida in a statement in the Congressional Record: *“University and research institutions in Florida have been a vital part of the response to the Deepwater Horizon incident. Since the 1960s, Florida research institutions have worked together to benefit oceanographic science in the State. This coordinated effort is called the Florida Institute of Oceanography. This institute is essentially Florida’s marine science brain trust and its members have done excellent science work, particularly since the oil spill. This model has produced excellent results that avoid the duplication and make the most effective use of the resources in the State. That is why the RESTORE Act includes language that specifies that in our State of Florida, a consortium of public and private research institutions in the State—a total of 20 with 7 associate additional members, including the two State resource agencies—is going to be the ones named to carry out the center of excellence in our State. This language is intended to provide for the Florida Institute of Oceanography to carry out this program as the centralized voice of the ocean science in Florida.”*
- FIO Organized and co-sponsored in Ocean Day activities at The Capitol in Tallahassee to highlight marine activities around Florida for Legislators.

C. Academic Support

As an Academic Infrastructure Support Organization (AISO), FIO’s primary supporting structure includes operating the research vessels, the Keys Marine Lab (with FWRI), contributing to the Science, Technology, Engineering, and Mathematics (STEM) degrees and supporting other performance metrics that are imperative to all SUS institutions. As a result FIO was able to achieve its mission in FY 2011/12.

- A FIO General e-mail listserve has been maintained and expanded, consisting primarily of faculty and others associated with FIO Member Institutions and beyond, currently with over 260 subscribers. This is used to make announcements of interest to the Florida's marine science community, such as meetings that are being organized by FIO Members, updates on Federal and State Legislative initiatives that impact marine science research and education, BP funded research projects and posting faculty, post-doctoral or student employment opportunities and other funding opportunities.
- An educational plan is being developed for further state-wide collaborations, including a semester with some Marine Laboratories around the state. Florida is uniquely positioned as a living marine educational laboratory. Marine scientists have easy access to the largest range of ocean environmental conditions; from the broad, relatively calm shelf and the semi-enclosed Gulf of Mexico Basin on the west, to the dynamic Gulf Stream on the east, and from the sub-tropics in the north to the tropical Keys in the south.
- FIO has started compiling an inventory of large marine equipment in Florida. This will improve collaborations and make FIO members more competitive in grant applications.
- Collection of data to assess the impact of FIO on marine science education and research in Florida is on-going. The data gathered so far was used to develop a new FIO one-pager for use to promote the LBR and for general use. It will be adapted to each FIO member institution for use.
- Under the MOU with the USCG, FIO will provide experts the USCG requests in the event of an oil spill or other marine incident.

D. Infrastructure Development

- Renovation of the SEAKEYS laboratory and office space in KML to provide working space for FWC and FIO administrators, and for KML customers.

Workplan for Current Fiscal Year (2012/13)

This workplan will be presented to the FIO Advisory Council at the next meeting. Elements of this are underway based on the FIO Mission and the proposal used to establish the AISO. Many of these are taken from discussions at Council Meetings and from the Strategic Plan, which was finalized and approved at the January 7, 2011 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; *to be completed by FIO Team.*
 - a. Future meetings will continue to be held at different member institutions, to allow all FIO members first-hand knowledge of activities and resources across Florida. *Handled by Associate Director*
 - b. Review of FIO's vessel and business operations by outside expert. *Handled by Director*
- II. Leverage and integrate existing physical and intellectual resources within the SUS and throughout the State of Florida; *to be completed by FIO Team.*
 - a. Continue to establish FIO as the SUS coordinating body for ships, equipment, marine laboratories and other shared-use facilities and equipment. *Handled by Program Planner/Analyst and KML Office Manager*
 - b. Coordinate a state-wide collaboration to develop new marine science educational programs. *Handled by Director and Associate Director*
 - c. Explore opportunities for establishment of an east coast FIO satellite office. *Handled by Director and Associate Director*
 - d. Continue to promote the use of FIO vessels and other facilities by private enterprise. *To be completed by FIO Team.*
 - e. Explore the possibility of a joint undergraduate summer field course offered by several FIO member institutions and utilizing the FIO assets such as the research vessels and Keys Marine Laboratory. The newly formed Education Committee is currently developing a syllabus and actively developing site-specific activities for this course. *Handled by Director and Associate Director and KML Director*
 - f. Continue to implement a long-term plan to ensure support and professional development of essential personnel, marine technical experts and support positions for both research vessels and the Keys Marine Lab. *Handled by FIO Administrative Team*
 - g. Provide support, as needed, to each FIO member. For example, participate in member strategic planning activities (Dr. Hogarth) and serve on member Advisory Board (Dr. Virmani). *Participated by Dr. Hogarth and Associate Director*
- III. Anticipate and plan for future shared use infrastructure needs;

- a. Analyze regional infrastructure needs in the Gulf of Mexico and Atlantic coast of Florida. *Handled by Director and Associate Director*
 - b. Conduct needs-assessment of education and research capability enhancements for RV/Weatherbird II, RV/Bellows, and KML and the need for additional shared-use resources. *Handled by Fiscal & Business Administrator and Program Planner/Analyst*
 - c. Provide vessels to member institutions as reasonably priced as possible to keep FIO competitive and thus provide opportunities for faculty and students. *Handled by FIO Administrative Team*
 - d. Conduct needs-assessment of other shared-use research facilities throughout Florida, with the goal of minimizing duplication of major research facilities, where practical. *Handled by FIO Administrative Team*
 - e. Develop 5-year program to identify and solicit sources of funding for shared-use infrastructure. *Handled by FIO Administrative Team*
- IV. Develop and strengthen networks that enable timely identification of research opportunities and distribution of results; *Handled by FIO Administrative Team*
- a. Actively participate in appropriate State-wide and Regional alliances, including the development of a Coastal Ocean Observing System for Florida, the Gulf and the SE Atlantic. *Handled by Director and Associate Director*
 - b. Explore and implement innovative ways of communicating results of shared-use research platforms, equipment, and facilities. *Handled by FIO Administrative Team*
 - c. Seek recognition by, and participation with, national and international leaders in establishing priorities in coastal oceanographic research. *Handled by FIO Administrative Team*
 - d. Support, lead, and participate in conferences and other opportunities to provide educational and research opportunities related to the FIO mission and for the marine science community and the general public. *Handled by FIO Administrative Team*
- V. Establish FIO as the State's designated oceanographic research organization. *Handled by FIO Administrative Team*
- a. 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. *Handled by Director and Associate Director*
 - b. Participate in planning a coordinated 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. *Handled by Director and Associate Director*
 - c. 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. *Handled by Fiscal & Business Administrator*

- d. *Gulf Research Initiative (GRI)* FIO Director, Dr. William Hogarth currently serves as one of the two State of Florida representatives to the Board. The other, Dr. Richard Dodge, is also a member of the FIO Advisory Council. In April 2011, the GRI Board released their first RFP. With \$35M per year, the RFP established approximately 8 centers around the Gulf to address five thematic areas. Due to a conflict of interest, the FIO Director had to recuse himself from this RFP. After consultation with the FIO membership, the Oil Spill Academic Task Force, and a letter from Chancellor Brogan to the SUS in support of FIO, Associate Director, Dr. Jyotika Virmani became the point of contact for Florida institutions submitting proposals. She took a two-fold approach resulting in FIO as the lead institution on two proposals, and as co-PI on nine (9) other proposals. As a result, three of the eight centers were established in Florida with FIO receiving \$2M for ship support. *Dr. William T. Hogarth, appointed by Governor Crist.*
 - e. Ensure peer-reviewed documentation, widespread dissemination and interpretation of findings and recommendations to policy-makers, educators, and the general public. *Handled by Director and Associate Director*
- VI. Continue participation in the Gulf of Mexico University Research Collaborative (GOMURC). The GOMURC is comprised of a team of five university-based consortia representing the many marine-oriented research organizations within the five Gulf States (Alabama, Florida, Louisiana, Mississippi, and Texas). *Handled by Director*
- VII.
- a. Serve as a key member of 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 GOMURC will respond to other Gulf-wide disasters, and engage in other related and unrelated activities consistent with the missions described above, as may be determined by its members. *Handled by Director and Associate Director*
 - b. Develop and promote research initiatives, and provide infrastructure for marine research programs within the Gulf of Mexico and Caribbean that expand opportunities for GOMURC members. *Handled by FIO Administrative Team*
 - c. Continue to host the GOMURC Executive Directorate at FIO, with funding currently provided by the host university, USF's Academic Affairs and Sponsored Research divisions. The Executive Director will continue to remain at FIO, with future funding provided by the Harte Institute in Texas. *Handled by Fiscal & Business Administrator*
 - d. Seek opportunities to partner and collaborate with local, state and federal organizations and authorities, such as the Gulf of Mexico Alliance, in opportunities

that advance the mission of the GOMURC and FIO. *Handled by FIO Administrative Team*

Other Ongoing Workplan in 2012/13

- I. Work closely with legislature to maintain funding as necessary to operate and maintain research vessels and provide subsidized days for researchers and students to FIO membership through a competitive process. *Handled by Director and Associate Director*
- II. Review all 27 BP proposals to ensure they are completed on schedule and all obligations met. *Managed by Fiscal & Business Administrator and Fiscal Team*
- III. Provide shiptime and support 3 BP Consortia within the State of Florida. *Handled by FIO Administrative Team*
- IV. Develop internship programs for the Keys Marine Lab, *Managed by KML Director in consultation with FIO Director and Fiscal & Business Administrator*
- V. Live broadcasts from research vessels back to classrooms and other educational venues. *Program Planner/Analyst, Marine Captain and Principal Investigators*
- VI. Increase subsidized days for full FIO members. *Director in consultation with Fiscal & Business Administrator*
- VII. Develop best possible plans for the utilization of funds received from Restore Act Legislation. *Director and Associate Director in consultation with Fiscal & Business Administrator*
- VIII. Offer training to crew members to maintain and upgrade expertise to better serve FIO customers. *Marine Captains and Program Planner/Analyst in consultation with Fiscal & Business Administrator*
- IX. Become more efficient in our business processes, particularly servicing the research vessels. *Marine Captains, Program Planner/Analyst in consultation with Director and Fiscal & Business Administrator*

- X. Initiate planning for long-term vessel needs for FIO membership, including replacement of the 40 year old + R/V Bellows. *Director and Fiscal & Business Administrator*

- XI. Better coordinate vessel maintenance and scheduling to optimize days at sea and safety. *Fiscal & Business Administrator and Program Planner/Analyst*

- XII. Work with the USCG to implement the MOU and involve FIO members in response planning. *Handled by Associate Director*

Appendices

Appendix A: FIO Council Members



FIO Advisory Council Membership List 2012

The Institute is governed by the FIO Advisory Council. Council members are appointed by the head of their respective institutions and serve two-year terms.

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Florida Institute of Oceanography Council Bylaws

(Approved by FIO Council June 29, 2012)

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 (SUS¹) 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 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-

¹ 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

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 state universities as defined by the Florida Statute Title XLVIII 1000.21 sec (6) and fifteen (15) 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. All state universities are full members of FIO. The non-state university full 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. The associate members are Hubbs-Seaworld Research Institute, Jacksonville University, SRI St. Petersburg, St. Petersburg College, and University of South Florida St. Petersburg. The affiliate member is Roffer's Ocean Fishing Forecasting Service, Inc.

1. Full Members: All SUS members (as defined by the membership of the CAVP) who wish to become members of FIO can do so as a Full Member. As an AISO, FIO serves the needs of the SUS. To retain integrity as an AISO, the majority of Full Members needs to be from the SUS, therefore, at least 51% of the Full Membership needs to be SUS institutions.

If there is a vacancy on the Council for a new non-SUS Full Member, acceptance of the new non-SUS Full Member to the Council will be by a vote of the entire FIO Advisory Council at an in-person Council meeting. A 3/4 majority vote is required to accept a non-SUS member as a Full Member.

2. Associate Members: Associate Membership is established for non-profit non-SUS organizations with a marine science focus. These include all non-profit entities, such as, but not limited to, colleges, museums, aquariums, and other organizations that fit the Criteria for New Member Applications. Associate Members will promote FIO and

provide FIO and its members with access to ships, laboratory facilities, and other ocean and coastal research and education assets (for a fee, if appropriate). Other branch campuses of existing SUS Council Members may become Associate Members, but there can only be one voting (Full) member from any one SUS institution other than the Host University, which has two voting members. All SUS faculty, regardless of whether on a main campus or on a branch campus, remain eligible to apply for SUS-subsidized ship time.

3. Affiliate Members: Affiliate Membership is established for for-profit non-SUS organizations with a marine science focus. Affiliate Members will provide FIO and its members financial or in-kind support, use or access to ships, laboratory facilities, and other ocean and coastal research and education assets (at a fee, if appropriate).

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 (“New Members”). 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. The FIO Council will evaluate each New Member request individually. All SUS (as defined by the membership of the CAVP) New Members are eligible to be Full Members and will automatically be awarded a seat at the FIO Advisory Council. A simple majority vote will be required to accept any non-SUS Members as a New Associate or Affiliate Member onto the FIO Advisory Council.

Criteria for New Member Applications:

1. Significant presence in Florida, such as an operating facility in the State of Florida.
2. Primary focus is marine science education and research.
3. Ratify a modified FIO MOU specific to the Associate or Affiliate Membership.
4. Provide a proposal (written), including documentation of the extent of presence in the State of Florida. Orally present to the FIO Advisory Council how the institution will support FIO Council activities.
5. Demonstrate ability to bring tangible support to FIO.

Privileges of FIO Membership

	Full Members	Associate Members	Affiliate Members
Attendance and participation at FIO Advisory Council Meetings	Yes	Yes	Yes
Voting privileges on the FIO Advisory Council	Yes	No	No
Participate in specific FIO project funding opportunities	Yes	Yes	Yes
Access to subsidized ship time on FIO vessels.	Yes	No	No
Access to at-cost ship time on FIO vessels.	Yes	Yes	No
Access to commercial rates of ship time on FIO vessels.	No	No	Yes

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 full 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 full member representatives (or designated alternates) present in person, by phone, or by e-mail unless otherwise specified in these by-laws. New full 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) full 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. The past Chair will serve as a non-voting, *ex officio* member for one year following the election of the new Chair of the Council. The Board of Governor's representative on the FIO Advisory Council 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 Advisory Committee. The Ship Advisory Committee (SAC) 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 SAC 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 SAC 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 SAC 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 FIO Advisory Council 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: FIO Organizational Chart

Appendix D: Strategic Plan for Ship Operations

Florida Institute of Oceanography (FIO)

Strategic Plan for Ship Operations

(Approved by FIO Council June 29, 2012)

The acquisition and maintenance of research and teaching platforms for offshore coastal and oceanographic research is critical for Florida coastal and oceanographic educators and scientists and one of the most important assets of the FIO. Maintaining a research fleet with state-of-the-art, on-board equipment currently consumes a large portion of the FIO budget. Doing so requires maintaining research vessel designation from the U.S. Coast Guard and operating the vessel where relevant, in compliance with UNOLS practices and policies. The strategic use of these assets will be important if FIO is to continue to support state and private universities and research institutions.

While future plans may include a FIO research vessel located on the East Coast of Florida, the current ocean-going, research fleet is based at the Host Institution, University of South Florida's St. Petersburg Campus in the Gulf of Mexico. This presents difficulty for FIO scientists and marine educators working on the Atlantic Coast or even those working off the western Florida panhandle. Transit time for FIO vessels can consume a large proportion of operational days per year if vessel use efficiency is not a priority in scheduling. Priority use of vessels should always consider overall cost (including transit time), but also assign priority as follows.

- 1) Applications for paid ship-time by member institutions (in order of priority: Full, Associate, Affiliate) shall have priority over paid ship-time applications from non-member institutions.
- 2) Member institutions and cruises subsidized by government agencies shall be charged at the standard published day rate for that member category (Full, Associate, Affiliate). Non-member institutions without government affiliated funding may be charged a higher day rate. Additional costs for shore side logistical support may also be charged for non-member or non-government subsidized cruises.
- 3) As per the By-Laws, FIO SUS-subsidized ship-time shall be provided to Full member institutions. All SUS faculty, regardless of whether on a main campus or on a branch campus, remain eligible to apply for SUS-subsidized ship time. Priority shall be granted to eligible FIO institution proposals that effectively integrate student education and training into their requests including, but not limited to incorporating students registered in a class at an FIO institution. Secondary priority shall be provided to proposals that utilize students while assisting faculty in their research projects. Students gain important experience when assisting faculty research and this practice is encouraged. However, when adequate FIO subsidized days are not available for all proposals, priority should be given to those classes where ship-time experience is most valuable. Exceptions can be made where the proposed student activity involves time during vessel transit that would otherwise be wasted. Following student training, submitted proposals that demonstrate and support faculty 'seed' research shall also be given priority. 10% of the daily ship rate will be charged to each proposal awardee.

- 4) FIO subsidized ship-time will vary each year and is set by the FIO Director based on budget considerations and in consultation with FIO scheduling personnel. The goal of the subsidized days is to provide the maximum number of students experience on a vessel with available funds. Typically, this will require the use of the least expensive vessel. In cases where more students might be able to gain experience for less cost, FIO personnel may schedule the more expensive vessel for FIO subsidized days.
- 5) A Call for Proposals for subsidized educational ship-time shall be made each year and a time frame for submission, review and award set by the FIO Director in consultation with the FIO Ship Advisory Committee. .
- 6) Proposals submitted for FIO subsidized educational ship-time shall be reviewed by the Ship Advisory Committee and Prioritized based on the general guidelines set by the FIO Council. Current levels of support from the State University System (SUS) to the FIO are not adequate to assign vessels to research and education programs without external funding from individual research scientists and marine educators. FIO scientists and marine educators enjoy lower ship-time rates, which makes proposals by FIO scientists more cost effective. Future budget requests for FIO should endeavor to provide additional funds so that rates to FIO scientists can provide a financial advantage for grant and contract competition.

Even when operating at peak efficiency, vessels and crews cannot operate 365 days a year. FIO staff, including Captains, will determine how many days FIO vessels can safely operate. FIO staff, including Captains, will determine when normal maintenance is needed or when a vessel needs to be removed from service for repair or maintenance. Safety of the crew and research party shall always be a priority, even if there is a substantial fiscal cost associated with a schedule change due to a safety issue. The FIO Program Planner/Analyst shall notify the appropriate research scientists when a schedule change has occurred and shall attempt to reschedule.

The FIO Program Planner/Analyst, in consultation with the FIO Director, shall set schedules for all FIO vessels. The scheduling goal shall be to maximizing income from vessel use, while maximizing research platform availability for FIO educators and research scientists. Requests for paid ship-time will vary each year depending on funding to member faculty. It will be necessary to maintain scheduling flexibility. While priority shall be for FIO institutions, there may be cases where costs may be less if non-FIO vessels are leased to allow non-FIO research scientists use of vessels. Such flexibility is allowed providing such decisions are cost effective for all parties.

Scheduling can be altered by the FIO Program Planner/Analyst with approval from the FIO Director, and in consultation with the Chief Scientist, based on inclement weather, necessary ship repairs, requests to change ship days, etc..

A report on vessel use and scheduling shall be submitted by the FIO Director to the FIO Ship Advisory Committee, which will review the document and provide it to the FIO Council. The annual report will include:

1. Number of operational days, transit days, maintenance days, and in port days,
2. An account of income generated by vessels through rental to FIO and non-FIO scientists,
3. Number of scientists and students who participated in FIO subsidized research cruises,

4. Number of courses supported by FIO vessels and laboratory facilities,
5. Summary of changes in safety policies, inspections, certifications, and any other aspect of ship operations that has or may affect safety of the crew or research party,
6. Projected improvements to the equipment base of the vessels.

A goal of the FIO should be to provide research and education platform opportunities to all research scientists and marine educators along Florida's coasts. Ultimately, this will include the availability of platforms along the Florida Atlantic Coast. Issues arising from this need may include purchasing or renting vessel time, location(s) of berthing facilities, vessel size, etc. This issue should be revisited by the FIO Council on an annual basis. A decision to expand the FIO research platform capability is dependent on funding. Any proposal to expand these capabilities must include a strategic budgeting plan along with justification for purchase or rental. Such a plan must be approved by the Executive Committee and the FIO Council before being presented to the Provost of the University of South Florida. If approved by the Provost, this will be incorporated into the annual budget for FIO.

Appendix E: Ship time used for Fiscal Year11/12

In FY2011/12 the total numbers of days at sea for the research vessels are:

R/V Bellows = 95

Institution	Science Days
FWRI	11
USF	35
UWF	33
Mercyhurst College	4
HBOI	5
Eckerd	2
UF	5
Total	95

R/V Weatherbird II =121

Institution	Science Days
FWRI	17
USF	39
FSU	39
Mote	12
UWF	14
Total	121

Appendix F: Auxiliary Expenditures

R/V Weatherbird II Auxiliary
(account held under College of Marine Science)
Actual Expenditures

	FY10/11	FY 11/12
Expenditures		
Staff Salaries	280,690	303,237
Bonuses	16,500	12,988
OPS	144,876	100,545
Fringe-Matching	96,527	90,584
Travel	0	3,413
Telephone and Data Communications	22,250	27,401
Contractual Services	6,734	8,141
Computer Related Materials	898	1,120
Materials, supplies and equipment	275,610	286,743
Repairs/Maintenance, Renovation	78,747	210,834
Risk Management Insurance	16,265	30,794
Other Operating Expenses	139,164	126,914
OCO	9,610	5,500
Grand Total	\$1, 087, 871	\$1,208,213

R/V Bellows Auxiliary
Actual Expenditures

Expenditures	FY10/11	FY11/12
Staff Salaries	103,584	62,011
Bonuses	4,107	5,460
OPS	37,676	17,893
Fringe-Matching	0	21,269
Travel	0	0
Telephone and Data Communications	10,237	30,671
Contractual Services	9,889	6,180
Computer Related Materials	0	61.60
Materials, supplies and equipment	119,958	101,635
Repairs/Maintenance, Renovation	28,003	161,051
Risk Management Insurance	6,215	8,357
Other Operating Expenses	68,540	52,273
OCO	0	0
Grand Total	\$388,209	\$466,861

Keys Marine Laboratory Auxiliary
Actual Expenditures

	FY10/11	FY 11/12
Expenditures		
OPS	14,225	15,607
Travel	590	7,987
Telephone and Data Communications	8,381	7,578
Contractual Services	21,413	18,349
Computer Related Materials	988	2,902
Materials, supplies and equipment	45,465	115,863
Repairs/Maintenance, Renovation	27,092	24,879
Utilities	23,814	32,127
Other Operating Expenses	9,394	25,609
OCO	3,347	19,124
Grand Total	\$154,709	\$270,025