



Florida Institute of Oceanography Strategic Plan 2015-2020

July 1, 2015

“Supporting Excellence in Marine Science, Technology and Education”
Through infrastructure, programs, information and people.

Introduction

The Florida Institute of Oceanography (FIO) strategic plan of 2010-2015 focused on education, research and outreach, emphasizing communication, networking and collaboration among members and member organizations and their expectations of the FIO. The goals were largely fulfilled. During this period FIO has expanded its role as an infrastructure support organization³, taken on new responsibilities and activities, expanded its membership to include associate and affiliate member organizations, assumed primary responsibility for allocation and management of RESTORE ACT funding to develop the Florida RESTORE ACT Centers of Excellence Program (FLRACEP) and assumed the operation of the Keys Marine Laboratory.

A comprehensive report (**Florida Institute of Oceanography: Member Survey and Recommendations, 2015**) on the current and prospective status of FIO was prepared based on input from every FIO member and others who hold oversight and leadership positions for FIO. The report was distributed to the Strategic Planning Steering Committee which met in July, August and September, 2015 to discuss the information in the document, review the ambitious nature of the FIO Academic Infrastructure Support Organization (AISO)⁴ and to design the goals, objectives and metrics for an updated strategic plan. All members agreed that the AISO needed to reflect a more realistic and feasible guide for FIO, scaling back the aspirations to a more realistic agenda that can be accomplished within a 5-10 year time frame with the appropriate resources and a reasonable level of participation by the members.

In developing the strategic plan, the following statements guided the committee members' thinking:

³ FIO was chartered by the SUS as a service organization.

⁴ Prepared for the first time in 2009.

- 1) FIO is basically a volunteer organization that has substantial member benefits. FIO is poised to expand its activities. To do so requires an increase in staff and member engagement.
- 2) FIO is a collaborative organization. Goals should complement, not compete with activities of the members and their affiliated organizations.
- 3) FIO should create a mechanism to incentivize members to become more deeply engaged in activities that match their expertise and their organizations' capabilities.
- 4) FIO should marry needs of the state with the expertise of its members.

Mission, Vision and Values

The 2010-2015 mission and vision were reviewed and presented more succinctly. A statement of values has been added.

Mission: FIO is chartered to provide infrastructure support to facilitate collaborative research and education related to Florida's coastal and ocean environment, and to serve as a coordinating body across academia, state and federal agencies, ocean science organizations and the private sector in addressing new opportunities and problems to be solved through research, education and outreach. FIO is an enabler, a facilitator and a coordinator.

Vision: To support excellence in marine science, technology and education through infrastructure, programs, information and people.

"Supporting excellence in marine science, technology and education" will serve as a tagline. Four subcategories are mirrored in the four strategic goals for FIO.

Values:

- **Cooperation, collaboration, coordination and participation** – of members to solve problems related to the coast and oceans, to facilitate the education and training of future marine scientists and to provide research results to others to make science-based decisions.
- **Communication** – among members to leverage the collective vast and deep expertise to benefit Florida.
- **Transparency and accountability** – in all interactions that support the members, member institutions and the SUS.

It is difficult to project goals for five years in this rapidly changing environment, and taking into consideration the role of FIO to enable the research and education of its members, many of the objectives projected in the plan will depend upon the efforts of the members and are not the primary responsibilities of FIO. As FIO has done each year, the Annual Report will include a work plan for the upcoming year with specific objectives to be accomplished. The metrics for these objectives will be developed with more specific targets at that time. Some of the objectives will extend over the entire five years, others may be completed in one or a few of the years. The Annual Report also includes progress and accomplishments for the previous year.

Strategic Goals, Objectives and Metrics

1. INFRASTRUCTURE: FIO will provide physical and financial assets and coordinate the efficient use of the members' expertise and resources to facilitate and support the research of scientific investigators and students, engage external contractual opportunities, and provide community outreach. FIO responsibility in working with members.

The FIO vessels and equipment and the Keys Marine Laboratory are the primary physical assets available through FIO. Member institutions also have a wide array of facilities and equipment that can be shared to strengthen the mission of FIO. An updated inventory of field marine resources will be developed and FIO will take an active role in the management of other shared resources identified by and in the possession of its members.

Objectives:

- Develop methods to ensure equitable distribution of subsidized ship time to SUS members regardless of geographical location.
- Continue to work for the *R/V Bellows* replacement.
- Expand operation of the vessels to include nonmember contracts. For example, the ships could become "field labs" for national maritime manufacturers to test new devices/equipment.
- Ensure efficient utilization and management of ship and laboratory resources to the fullest extent possible.

- Plan and identify funding to update and upgrade facilities at Keys Marine Lab multi-purpose buildings and residence halls in order to increase use by students and other researchers.
- Recommend important equipment upgrades for the vessels by way of the Ship Scheduling and Coordination Committee.
- Develop an inventory of accessible FIO and member assets and identify gaps in resources that need to be filled.
- Develop an FIO curriculum that engages all SUS members.

FIO Metrics:

1. Amount of external funding to increase the total use rate at KML by 25 percent over five years including housing, classroom, dry lab and wet lab space.
2. Number of ship days at sea separated into subsidized and non-subsidized.
3. Number of ship days paid by nonmembers.

Member Metrics:

4. Number of classes taught with FIO resources.
 5. Number of grants awarded to FIO members that include the use of FIO resources.
 6. Number of publications, theses, dissertations and degrees from FIO members and their students that have used FIO resources.
- 2. PROGRAMS:** FIO will seek and provide resources and value-added opportunities for research and educational programs for students at all levels, sustain and build upon the existing programs, and promote new programs and partnerships that expand FIO's role in marine science throughout Florida and the nation. FIO support for member initiatives.

Objectives:

- FIO will coordinate highly specialized courses and training among member institutions in order to have an adequate number of students to assure that offering the program is financially viable, e.g., scientific diving.
- Develop certificate programs for continuing education in disciplines such as marine technology.

- Identify FIO facilities such as KML, aquaria and institutional marine resources as sites for hands-on work to coordinate with on-line courses.
- Initiate more programs for K-12 teachers by providing training and educational materials and seek grant money to support them to engage in these programs.
- FIO will work with members to obtain grants that provide funding for infrastructure and for marine science education.
- Organize an effort to gather and market internships for students in the marine sciences.
- Hold a jobs/informational fair for students to interact with members of the marine industry in Florida.
- Continue to provide leadership for the recovery of the Gulf of Mexico. (e.g., continue to support the Gulf of Mexico University Research Collaborative (GOMURC))

Member Responsibilities:

- Grow and expand the Florida Summer Abroad course and develop other field-oriented courses at KML and other member facilities.
- Organize FIO branded mini-courses to various constituencies to be taught during breaks in the academic year and the summer.

Member Metrics:

1. Number of certificate programs advanced.
2. Number of students completing FIO facilitated courses and training, and the student credit hours (SCH) accumulated.
3. Number of teachers participating in FIO courses.
4. Amount of funding obtained to support teachers in continuing education courses.
5. Amount of new external funding for research infrastructure and marine science education.

3. INFORMATION: FIO will provide a leadership role in communicating scientific information about coastal and marine environments produced by members and

member institutions to benefit the citizens of Florida. FIO and member responsibilities.

Advocacy as a role for FIO is a cross cutting theme which promotes the importance of marine science to Florida as well as the value of FIO as an organization that can synthesize and integrate data into information products. FIO members can provide information, educational opportunities, data and expertise in the marine sciences to investigators, students, businesses, agencies, government, the media and the public, which will benefit from the knowledge in advancing Florida's economy and in making science-based decisions.

Objectives:

- Develop a communications and marketing strategy that promotes the value of FIO as a collective of its members and their broad and deep range of scientific expertise and cost effective research and education resources. It should include, for example, branding FIO via a tagline, new uses for the listserv, developing the newsletter as a mini-magazine, rethinking FIO's role at Ocean's Day in Tallahassee, and preparing economic impact reports, a "sponsored report" or article in *Florida Trend* and a series of fact sheets and multipurpose flyers. The strategy will vary according to the constituency targeted.
- FIO will communicate data on external research dollars FIO members have obtained and the number of jobs this funding supports.
- FIO leadership will communicate personally with legislative and SUS staff about the work and capabilities of FIO.
- FIO will seek an opportunity to report to a BOG committee in order to increase the BOG's familiarity with the work of FIO that the SUS supports.
- FIO will convene workshops that connect people with the expertise to approach unmet needs for research and education and to probe emergent problems in which they can collaborate to develop solutions.
- FIO will prepare comprehensive inventories of talent (member expertise), facilities and equipment and marine stations (see also **People**, "FIO Professionals").
- FIO will maintain a record of interactions it has with all member organizations.

- FIO will attend scientific conferences and present displays of its activities and distribute handouts of its assets and capabilities.

FIO and Member Metrics:

1. Number of visits made to the FIO web site.
 2. Number of conferences FIO attends and delivers presentations.
 3. Number of workshops organized and number of attendees in various categories (e.g., academic, business, government, public).
 4. Amount of external funding (research expenditures) received by FIO members and correlated increase in the number of jobs.
 5. Number of visits to member institutions and purpose for the interaction.
- 4. PEOPLE: FIO members are leaders in marine science programs, organizations and commercial enterprise. The synergy of the member’s interests, engagement and expertise will be capitalized upon to support the mission.**

Members of FIO are the lifeblood of the organization. Their expertise spans every discipline within the marine sciences. Members and colleagues at their institutions underpin and enhance the activities for which FIO gains recognition across the state, nation—even the world.

FIO and Member Responsibilities:

- Develop the “FIO Professionals” as a collective of scientists who are working in the field of coastal and ocean science, including members and others within their departments, related disciplines and other organizations. Membership in this group requires only the submission of name, academic rank or title, institution, contact information and a one to two line statement of the research area of interest. FIO members will designate categories and FIO Professionals will check one or two appropriate categories for their entry. The document will be maintained on-line and made available to anyone in the state who would benefit from this information. An alert will be sent to, for example, businesses, governments, universities, agencies and a hard copy made available if requested.
- Develop partnerships with members of consortia of other states to increase student and faculty exchanges in the coastal and ocean sciences.

FIO Responsibilities

- Establish new, regular or *ad hoc* committees such as a field lab committee, business relations and development committee, as needed.
- Expand the existing Board of Visitors by adding SUS Academic Vice Presidents and Research Vice Presidents, and others such as a mayor, a port director, an individual engaged in the tourism and restaurant industries, the High Tech Corridor and a power company.

FIO Metrics:

1. Number of individuals enrolled as FIO Professionals.
2. Number of new partnerships and MOUs illustrating the expanding network of FIO influence.
3. New relationships with other state-wide consortia and Florida coastal and ocean organizations.
4. Expand the membership of the Board of Visitors with new Key Opinion Leaders (KOL) members.
5. Number of requests from state and community governments and organizations for information and advice regarding coastal and marine issues and problems.

The **Florida Institute of Oceanography: Member Survey and Recommendations** report lists four possible models to capture the roles and responsibilities for FIO into the future. The Strategic Planning Group settled on a modification of the third suggested model as the most appropriate:

FIO is an organization that will provide infrastructure and broad support for marine research and education, at enhanced levels compared with the present, and promote its leadership in marine science to multiple constituencies within the state and nation.