GCOOS Education and Outreach (E/O) Strategic Plan

Preamble: This plan is designed for the Gulf of Mexico Coastal Ocean Observing System (GCOOS) Education and Outreach Council (EOC). Specific goals, objectives, and actions are identified in the plan. Not all goals, objectives, and actions will be implemented each year. Specific activities will be linked to available resources, priorities, and opportunities. In addition, this plan is a living document that will be reviewed and updated annually within the regular planning process.

GCOOS Mission: We seek to establish a sustained observing system for the Gulf of Mexico to provide observations and products needed by users in this region for the purposes of

- Detecting and predicting climate variability and consequences,
- Preserving and restoring healthy marine ecosystems,
- Ensuring human health,
- Managing resources,
- Facilitating safe and efficient marine transportation,
- Enhancing national security, and
- Predicting and mitigating against coastal hazards.

We envision sharing of data, models, and products via the internet for the common benefit of all participants, including industry, NGOs, academia, and federal, state, regional, and local government agencies. It is understood that this Gulf of Mexico observing system will be integrated with other regional coastal ocean observing systems, in particular to create an integrated and sustained U.S. component of the ocean observing system.

We recognize that the system will require sustained financial support from a combination of government, private, and non-governmental organizations. That will be possible only if the system is built and remains responsive to the needs of these organizations and to the public. Thus, the system will be subject to continuing oversight by representatives of such organizations and of the public.

Collaborations with other nations bordering the Gulf of Mexico is to be actively sought in the design and implementation of this regional observing system.

EOC Vision: Regional user communities and residents empowered to be knowledgeable of and effectively utilize GCOOS and IOOS products and services when making decisions concerning their work and life in ocean and coastal waters, estuaries and watersheds.

EOC Mission: Provide guidance and leadership essential for the development of programs designed to address regional needs for education, outreach, public awareness and the understanding of programs and materials applicable to our user communities and especially the residents of the Gulf of Mexico region.
Goal 1 – GCOOS Education and Outreach Network
Establish a GCOOS education and outreach network within the Gulf of Mexico region.

**Obj. 1 – Office and Staff**
Establish a sustained central E/O office.
- **Action:** Hire a full-time education and outreach coordinator.
- **Action:** Seek extramural funding and support for EOC activities.
- **Action:** Develop a one-page summary of GCOOS EOC to use in recruiting members.

**Obj. 2 – Membership**
Ensure diversity and inclusiveness in EOC membership.
- **Action:** Review membership on an annual basis.
- **Action:** Actively seek and recruit members, including those from underrepresented and underserved populations.

**Obj. 3 – External Communication and Collaboration**
Increase collaborations, coordination, and communication efforts within the broader Gulf of Mexico E/O communities by increasing and maintaining effective partnerships that reach diverse audiences.
- **Action:** Identify liaison contacts with potential partners.
- **Action:** Establish a list of E/O organizations that may utilize GCOOS materials.
- **Action:** Coordinate joint meetings with other E/O associations and entities (i.e. GOMA EEN, Sea Grant, NERRS).
- **Action:** Establish collaborative efforts with state and federal agencies, colleges and universities, private sector and non-profit entities and the variety of educational organizations in the Gulf of Mexico Region.

**Obj. 4 – Educator Development**
Enhance the GCOOS E/O community by supporting and developing professional development programs and practices of formal and informal educators.
- **Action:** Raise awareness of GCOOS products and services by augmenting the awareness and understanding of EOC members.
- **Action:** Hold an annual meeting of EOC to review the strategic plan, consider resource availability, and set priorities for work to be completed by the next meeting.
- **Action:** Create a listserv of 1) EOC members and 2) use the GOMAEEN listserv to communicate to regional educators.

**Obj. 5 – Internal EOC Marketing**
Develop and reinforce key messages in the daily work of GCOOS EOC members.
- **Action:** Create rewards and incentives for all who engage in GCOOS education, outreach, and communication activities.
- **Action:** Conduct professional development programs at meetings attended by the EOC.

Goal 2 – GCOOS Coordination
Communicate within GCOOS to ensure all committees’ efforts guide education and outreach efforts, and that all GCOOS partners deliver a consistent message.
Obj. 1 – Communication within GCOOS
Facilitate two-way communication between data providers and users to maximize relevancy and usefulness of products.

*Action:* EOC members will be assigned to each GCOOS committee to maximize in-network communication and the development of appropriate education and outreach products.

Obj. 2 – Internal GCOOS Marketing
Collaborate with appropriate committees to create relevant products and materials.

Goal 3 – GCOOS Use
Work toward the use and application of GCOOS observations, products, and services throughout the region.

Obj. 1 – User Needs
Develop GCOOS EOC relevant programs and materials for diverse stakeholder audiences (such as the general public, formal and informal educators, coastal decision makers and resource managers).

*Action:* Conduct a market analysis and needs assessment for specific audiences within the Gulf of Mexico region.
*Action:* Inventory existing information and educational resources.
*Action:* Develop an annotated catalog of both current and future products based on the analysis and interpretation of needs assessment surveys.
*Action:* Guide the development of GCOOS exhibits, brochures, and materials for use at conferences and meetings (these materials should have specific audiences in mind).
*Action:* Develop partnerships between private/public/academic agents to ensure a coherent suite of education and outreach products for specific audiences.
*Action:* Review materials to assess usefulness, effectiveness, and accuracy regularly.
*Action:* Maintain an engaging and accurate E/O presence on the GCOOS website.
*Action:* Provide inventory of existing materials and GCOOS E/O on website.

Obj. 2 – User Education
Increase the awareness and understanding of GCOOS products and services by various audiences.

*Action:* Design key and consistent messages and themes for GCOOS that are consistent with IOOS messages.
*Action:* Develop materials with clear and consistent messages.
*Action:* Disseminate messages and themes through traditional (TV, radio, print) and non-traditional (web, podcasts, blogs) mass media.

Obj. 3 – User Outreach
Target E/O effort at diverse stakeholder groups.

*Action:* Establish comprehensive list of stakeholder organizations and associations that utilize or could utilize GCOOS products and services.
Action: Develop the most effective tools to reach target audiences.  
Action: Leverage current technology to reach diverse communities.  
Action: Provide and staff display booths at major stakeholder conventions/festivals.  
Action: Inform public audiences through free-choice educational opportunities.

Goal 4 – Workforce Development
Encourage and enhance workforce development into the ocean observing system.

Obj. 1 – Outreach to Educators
Ensure K-16 teachers are aware of GCOOS as a platform for teaching and learning science, math and technology as well as an opportunity for a professional or vocational career.

Action: Create post-secondary curricula that addresses identified workforce needs.
Action: Develop vocational/technical training and retraining programs.
Action: Develop and implement programs to attract, nurture, develop and retain underrepresented groups.
Action: Engage professional societies to develop professional certifications.
Action: Expand awareness and understanding of careers aligned with OOS.
Action: Increase the number of local education leader experts who use OOS information to highlight related careers.

Obj. 2 – Outreach to Students
Increase knowledge and skills of students in the K-16 community who will improve ocean, coastal, and science literacy through their use of GCOOS products, services, projects, and activities.

Goal 5 – Evaluation
Evaluate effectiveness and accountability of outreach and education activities

Obj. 1 – Establish Baseline
Establish a baseline to gauge future success.

Obj. 2 – Assess Effectiveness
Identify and implement mechanisms that can be used to measure effects of specific education and outreach activities (e.g., pre/post tests, website hits, feedback form/email, questionnaires, needs assessment instruments, Likert-scale evaluations, and other related evaluation tools).