FY2007: Regional Integrated Ocean Observing System Development

NOAA initiated a competitive funding process in 2007 to continue building capacity for regional ocean observing systems towards three long-term outcomes; establishing coordinated regional observing and data management infrastructure, developing applications and products for regional stakeholders, and establishing regional and national data management and communications protocols. These projects are contributing to these outcomes.

GREAT LAKES REGION

The Great Lakes Region includes the coastal states of New York, Pennsylvania, Ohio, Indiana, Illinois, Wisconsin, Minnesota, and Michigan. The 2007 award to this region is for $500,000.

Project Title:

Implementation Projects for the Great Lakes Observing System

Recipient/ Lead Principal Investigator:

Great Lakes Observing System/ Roger Gauthier (*gauthier@glc.org*)

Cost:

Funded: $500,000

Performance:

The Great Lakes Observing System (GLOS) will focus on four tasks that support regional observation priorities: 1) initiation, validation, testing, and training of multi-dimensional hydrodynamic modeling for the lakes Huron-to-Erie Corridor (HEC); 2) prototype development, user assessments, and market analysis of customized integrated harbor specific products (Great Lakes HarborView); 3) implementation of the Great Lakes Modeling and Assessment Center (GLMAC); and 4) a workshop to create an offshore observation system implementation plan. Implementation of these four tasks will provide distinct and material benefits to a wide array of constituents within the region.

Schedule:

1. Develop Huron-to-Erie Corridor hydrodynamic modeling products.
   - Link existing 2-dimensional (2d) models for the corridor with the NOAA 2d Great Lakes Coastal Forecasting System (GLCFS) and run this linked model in a pre-operational setting.
   - Generate a 3-dimensional (3d) public domain hydrodynamic model for the St. Clair River.
   - Perform risk assessments on contaminant transport mechanisms with proprietary code 3d hydrodynamic model for the St. Clair River.

2. Develop web-based nearshore currents, winds, waves and prevailing weather for five high traffic harbors on each of the five Great Lakes (e.g., Duluth/Superior, Ashland, Marquette, Muskegon, Calumet Harbor, Chicago). Market, distribute and assess user responses to harbor products.

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3. Establish the Great Lakes Modeling and Assessment Center.
   - Engage partners to stand-up the GLMAC facility.
   - Hire a part-time GLMAC Coordinator position.
   - Develop an online inventory of models, modeling tools and related resources, including comprehensive documentation of software.

4. Develop plans for an offshore observation system.
   - Hold multi-day workshop to identify core observations and requirements from operational forecasters, managers, researchers and educators.

NOAA Contacts:

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