



July 2006

Volume One, Issue Two

Christmas in July

Welcome to the latest edition of *eCoastal Evolutions*! In this issue we will discuss the latest tools, applications, and data that are now available through the eCoastal program. Everything discussed in this issue is accessible for download from the new and improved eCoastal website.

eCoastal Training Update

In this past quarter a number of Districts held custom eCoastal training courses. Courses were held at the following sites:

- Philadelphia April 2006
- Honolulu..... April 2006
- Jacksonville April 2006
- Vicksburg (CHL) May 2006
- Portland June 2006

For more information on eCoastal training or to access any of the training course modules from the above courses, please visit the **Training** page of the eCoastal website, <http://eCoastal.usace.army.mil>. Training modules cover everything from Introduction to GIS Mapping to Using the Lidar and Feature Analyst Extensions.

When & where is the next training being held?

The next round of eCoastal training is currently in the planning stages. We are looking at holding training in the winter of FY 2007 at a central location. All Districts will be invited to attend. In the interim, if you would like a custom course designed specifically for the users in your District remember, the cost is minimal – just travel, per diem, and salary for the course instructor.

Need to Calculate Shoreline Rate Change?

The USGS recently released the latest update to the Digital Shoreline Analysis System (DSAS). DSAS is computer software that computes rate-of-change statistics from multiple historic shoreline positions residing in a GIS. It is also useful for computing rates of change for just about any other boundary change problem that incorporates a clearly-identified feature position at discrete times. For more information on DSAS, or to download the FREE software, visit: <http://woodshole.er.usgs.gov/project-pages/dsas/version3/index.html>. As part of the eCoastal program, training is delivered on the use and application of this program. Training modules are accessible through the Training page of the eCoastal website.

Coastal Data Coming Soon for Great Lakes

The CHARTS & SHOALS systems are operating in the Great Lakes in June/July of 2006. As part of USACE's National Coastal Mapping Program, CHARTS and SHOALS are surveying lakes Erie, Huron and the east side of Michigan. For more information on CHARTS, visit <http://shoals.sam.usace.army.mil>.

New eCoastal Website!

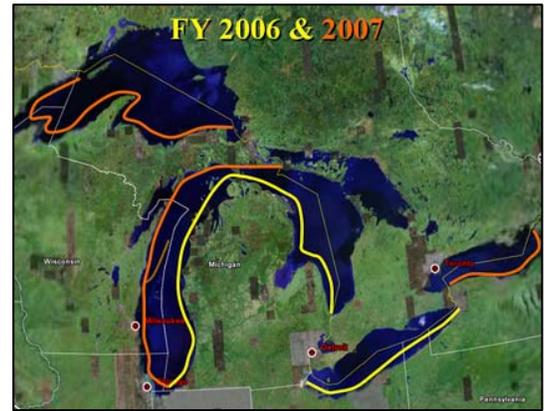
The eCoastal website has recently been updated and moved to <http://eCoastal.usace.army.mil>. The website now contains the following sections:

- **What's New?**
- **Getting Started**
- **Frequently Asked Questions**
- **Maps & Data** – Links to USACE eCoastal map and metadata services. Also includes links to coastal data web services hosted by other agencies.
- **Training** – View latest training events and download training modules and data.
- **Tools & Software** – Download the eCoastal desktop tools here!
- **Documentation** – Newsletters, design documents, standard operating procedures, tutorials, and much more!
- **Contact Us** – Looking for a document? Need eCoastal training? Have a question? Just contact us.



Data products to be expected for this region in early fall:

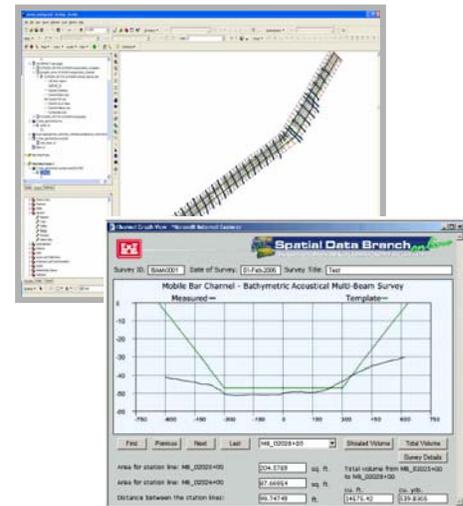
- Elevations, ESRI GRID format
 - Land @ 1m x 1m 200%
 - Hydro @ 4m x 4m
 - geodetic (NAVD88 & NAD83)
- LAS Format
- Ortho RGB Imagery (Mr. Sid)
- Shoreline vector ("0" NAVD88)
- Building footprint
- Bare Earth
- Bottom Reflectance
- Hyperspectral Cube



eGIS Survey Management Tools are Ready!

In the past year, the Spatial Data Branch in the Mobile District has developed a set of web and ArcMap desktop based tools used to support operational dredging. This Survey Management application allows the user to:

- **Share Data**--Loading the raw survey data into a central location in an easy-to-use format allows for easier data sharing throughout each Division. The goal is to decrease your data call work loads.
- **Upload Data**-- You'll be working with your raw survey data and taking a few extra steps to ensure that everyone has access to this data.
- **Create**--This system will allow Operations Division to create a central repository of all survey and mapping.
- **Visualization**--This tool allows the user to have the final QA/QC of the data before it is loaded into the central database
- **Present**--Showing the results of your work is easy.



Tools included in this application are:

- **ArcGIS/ArcMap Desktop Processing Application:** This application runs on a server within CESAMOP-J and performs the GIS processing needed to get the data into the eGIS system. It processes the surveys loaded into the Web application in two steps: Pre-Processing and Post Processing.
- **ArcIMS Profile Application:** The Profiler tool allows a user to overlay a profile of a set of survey data against the channel design template.

If you are interested in implementing this tool at your District or require training, please let us know. The Mobile District can assist with the installation procedures. Just submit a request on the eCoastal website. These applications do require a connection to an SDSFIE geodatabase, supplemental business table database, and an ArcIMS service. For more information on this application, visit the **Tools & Software** section of the eCoastal website.

Did you know?

The eCoastal website now contains internet accessible links to all types of **coastal data** hosted by various agencies? Using ESRI's ArcMap, you can connect to these data sources and add datasets directly into your ArcMap sessions. For detailed instructions, visit the **Maps & Data** page of the eCoastal website.

Custom Application Development Update

The Spatial Data Branch is continuing the development of the **Jetty Condition Application**. The ArcIMS Jetty Tool is an ArcInternet Mapping Service application that allows users to view the operational condition of coastal structures. Users can compare the cross-sectional profile of the jetty, with as-built drawings and condition surveys as overlays. Release of this application is due near the end of the FY.

The Spatial Data Branch is collaborating with ERDC's Coastal Hydraulics lab on the design of a **Coastal Structures ArcGIS Desktop tool**. The tool will view data currently available in the CHL's coastal structures database.

New Tool Available for Download!

From the Tools & Software section of the eCoastal website you can now download the latest data services toolbar from the Engineering Research & Development Center (ERDC). The **SWWRP toolbar** provides data-on-demand access to a variety of sources via web services. This toolbar holds connections to the USGS historic stream flow gauges, the EPA STORET database, and the DBHydro database. To connect, just use your AKO login credentials.

For more information on the toolbar, visit <https://swwrp.usace.army.mil/>.

The Silent **Inspector Dredge Disposal Monitoring Application** is almost ready for its first release. This application is designed to be used to monitor the ocean dumping activities of our contractors, run initial quality control queries, and produce reports to inform the Environmental Protection Agency (EPA) of dredge disposal activities. Any District can participate in this program. However, at its current state the Mobile District must acquire the authorized Disposal Area polygons for each District. If interested, please send us a message on our Contact Us page.

The **eGIS Toolbars** allow any user with ArcGIS to locate spatial data that is stored in the geodatabase. It references a group of tables in a database that store business information about each of the layers such as, layer name, description, or keywords. In the past, this tool was fueled by data that was stored in a simple Microsoft Access database. However, due to installation difficulties at particular districts, this tool is currently being redesigned to also support enterprise level databases, such as SQL or Oracle.

Visit the **What's New?** page of the eCoastal website for links to more information about any of the projects listed above.

Contact Us!

Do you have any questions or comments on the eCoastal program? If so, please contact

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