Case Study #2: Inland Bays Commercial Shellfish Aquaculture Initiative

A healthy oyster population can provide tremendous ecological benefits in an estuary, such as water quality improvements and habitat restoration. Over the past several years, the Delaware Center for the Inland Bays

(CIB), in collaboration with the University of Delaware's Marine Advisory Service, has successfully demonstrated the viability of growing shellfish in the Inland Bays using a variety of aquaculture techniques and methods. In response to stakeholder interest, the CIB is now pursuing legislation to support the establishment of commercial shellfish aquaculture in the Inland Bays. In support of this initiative, SCCI was asked to use the *weTable* to engage stakeholders, including commercial clammers, in coastal geospatial planning. The objective of this activity was to identify areas most suitable for shellfish aquaculture activities in order to reduce conflicts among uses, reduce environmental impacts, facilitate compatible uses, and preserve critical ecosystem services to meet economic, environmental, security, and social objectives.



Special thanks to Texas Sea Grant for ideas and guidance on use of the weTable technology.

Mission Statement and Goals

The mission of the Sustainable Coastal Communities Initiative (SCCI) is to coalesce expertise from across the University, and elsewhere, to provide science-based information, through applied research, outreach and training to help analyze and offer solutions to the issues and challenges facing coastal communities in the State of Delaware to help them achieve their sustainable development goals. The goals of the Sustainable Coastal Communities Initiative are:







Economic Prosperity

Healthy community economies that include vibrant downtowns, active waterfronts, working agricultural lands and an abundance of recreation and tourism opportunities.

Land Use & Environment

Coastal communities that make efficient use of land, energy and water resources and protect the natural resources needed to sustain coastal ecosystems and quality of life.

Sustainable Communities

Citizens, community leaders, and businesses that recognize the complex inter-relationships between social, economic and environmental values in coastal areas and work together with this in mind.

Enhancing Citizen Engagement in Planning Processes

Sustainable Coastal Communities Initiative







The *weTable*: A tool for participatory geospatial planning

Introduction

University of Delaware outreach and extension specialists have been assisting local stakeholders with geospatial planning efforts in a number of Delaware communities. Recently, our specialists have introduced a new technology that has enhanced citizen engagement in these public processes.

The end game of public engagement should be empowerment: creating a real and meaningful mechanism for public input to be heard far enough upstream in policy making and program development to influence decisions.

-Source: scienceprogress.org#

The weTable transforms an ordinary tabletop into an interactive computer interface. This affordable participation tool allows groups to collaboratively explore and use computer-based data and programs in a workshop setting. Participants can easily use the interface with very little instruction, and it allows them to work with what matters most in a meeting- data, maps, and their fellow participants!

The weTable is an ideal tool for use in community projects where participants use data and maps to help define planning priorities and strategies. The setup is especially useful for exploring GIS data and as a participatory GIS tool. Rather than crowding around a computer screen or viewing presentations across a room, participants work together in a shared and open tabletop interface. The result is a dynamic tabletop workspace that helps participants engage in the issues more meaningfully. This setup of off-the-shelf technology represents a leap in the collaborative potential of public workshops and other meetings and its prospective uses are being realized by a number of planning agencies and groups around the State.

The weTable was originally imagined as an ad hoc workshop tool by Placeways, Inc., a non-profit spinoff of the Orton Family Foundation that specializes in GIS visualization and planning software. The technology was further developed by Texas Sea Grant at Texas A&M University.

weTable Set-up and Configuration

The weTable configuration works by projecting a computer screen onto a table surface. Participants interact with the table using an infrared "light" pen, similar to the way one might use a computer mouse. The pen's location on the table is detected by a Nintendo Wii remote (wiimote) that then sends a signal of the

pen's location to the laptop using a wireless Bluetooth connection. This allows the participants at the table to control the computer, open files, move windows, and run programs by using the pen on the table. Participants can easily share control of the tabletop interface by handing over the infrared pen.

To set up the *weTable*, it's likely you already have the major (and costly) pieces of the equipment. However, you will also have to acquire some additional equipment for the set up. The following items are what we found necessary to set up the *weTable*. Costs can vary greatly depending upon your workshop needs and ability to find deals. Any number of configurations could be made to work, and we encourage you to experiment (and to share your successes!).

- 1. Laptop (Dell Latitude from www.dell.com=\$500)
- 2. Digital projector (Dell 1510X Projector from www.dell.com= \$599) Note: You need a projector with an insert that accepts the tripod mounting plate!
- 3. Large table, preferably 60"L for viewing
- (Any office supply store or home center= \$75) 4. Tripod for digital projector
- (Sunpak Ultra 757TM Tripod 72" from www.bhphotovideo.com= \$80) Note: Don't skimp on the tripod; you NEED a stable base!
- 5. Wii remote (Older version of Nintendo Wii remote from www.amazon.com= \$25) Note: The newer version may not be compatible with the Smoothboard software
- 6. Bluetooth USB adapter (From www.newegg.com= \$12) Note: If needed, some newer laptops have built-in Bluetooth technology
- 7. GPS/Phone cradle to attach Wii remote to projector (Universal Car Mount Holder from www.amazon.com= \$20)
- **8. Infrared pen** (IR Sabre from www.wiiteachers.com= \$18)
- 9. Smartboard software

- (Single-use Smooth Board license from www.smoothboard.net= \$30)
- 10. Multi-plug outlet/reel & dipole adapter (Lowes or Home Depot= \$22)
- 11. Portable file and folding cart (From www.officemax.com= \$26)
- **12. White, tri-fold presentation board** (From WalMart= \$3.00)

Total Cost = ~\$1,500

Case Study #1: Chesapeake Watershed Implementation Plan Master Plan Process

Regional master plans can facilitate increased intergovernmental coordination for the phasing of infrastructure and services, and improve opportunities for economic development while protecting critical environmental resources. Staff from the Sustainable Coastal Communities Initiative (SCCI) have been collaborating with the Delaware Office of State Planning Coordination to assist with the development of a Master Plan for the Bridgeville-Greenwood area. Using the University's Land Use Model based on the CommunityVIZ platform, the *weTable* technology was deployed to engage town officials and other stakeholders in the development of future land-use growth scenarios. When completed and adopted through their respective public processes, the Master Plan will revise and update the current Comprehensive Plan and strategy documents of the Towns, County and State.

Left: Chesapeake Bay Watershed within Delaware





Above: Bridgeville-Greenwood



