Protecting and Improving Estuaries with Smart Growth Tools
Tampa Bay Estuary Program

July 2008 FINAL

Part of the National Estuary Program since 1990, the Tampa Bay Estuary Program (TBEP) provides leadership and coordination to restore and maintain the water quality and ecological integrity of almost 19,000 acres of habitat in Tampa Bay, Florida.

The National Estuary Program (NEP) was established under the 1987 Clean Water Act Amendments. It is a unique voluntary program that operates through partnerships with EPA and other public and private sector entities. Each NEP operates via an inclusive, collaborative decision-making process to deliver on-the-ground results, making the NEP a leading model of watershed management.

Why Is Smart Growth Important For Estuary Protection And Improvement?

Runoff from developed areas often contains nutrients, pathogens, and metals. Nationally, runoff is the second most common source of water pollution for estuaries. Cumulative impacts from conventional development -- including increased stormwater volume and flow rates – lead to erosion, estuary degradation, and habitat destruction. Conventional stormwater management practices address peak flows and suspended solids, but are only partially effective in managing cumulative impacts. Compact development paired with preservation of critical natural areas can help protect estuaries by (1) using land more efficiently, (2) reducing the amount of impervious surface per capita, and (3) allowing open lands to filter rainwater naturally, thus recharging local groundwater aquifers and supporting improved hydrologic function.

How Did The Tampa Bay Estuary Program Use Smart Growth To Protect Its Estuaries?

In 2006, the Tampa Bay region joined the ranks of numerous other U.S. communities when it conducted the visioning process known as Reality Check, which is designed to:

- Promote a region-wide awareness of the level of growth that is coming;
- Allocate projected housing and employment growth among jurisdictions;
- Recognize the legitimate points of view of different stakeholders; and
- Lay the foundation for the development of a concrete list of next steps to assure quality growth to meet the region's needs over the coming decades.

The Tampa Bay process, known first as Reality Check Tampa Bay and later as One Bay, used workshops to engage participants in discussing, negotiating, and plotting future residential and job growth, regional land use, transportation systems, and natural resources in the Tampa Bay area.

City of Tampa Mayor Pam Lorio (left) discusses future growth scenarios with other Reality Check participants.

On May 18, 2007, the Tampa Bay Estuary Program (TBEP) and Urban Land Institute (ULI) Tampa Bay convened more than 300 leaders from the seven-county region to engage in tabletop exercises designed to educate them about the interrelationships among regional land use, transportation systems, and natural resources. Trained facilitators led workshop participants who worked in 10-person groups to plan future growth by placing Lego® building blocks to represent new homes and employment centers on a detailed map. Participants also used colored ribbons to depict new or expanded roads and regional transit corridors, such as light rail or bus transit. This process resulted in a future vision for West Central Florida, which is expected to welcome 3.2 million additional residents, requiring an additional 1.3 million housing units and 1.5 million new jobs, by the year 2050. Following this kick-off event, more than 15 community workshops were held, involving an additional 650 interested individuals and organization representatives.

TBEP's Comprehensive Conservation and Management Plan (CCMP) names water and sediment quality, particularly reduction in nitrogen levels, as a top priority. TBEP took an active role in the Reality Check process because it saw an opportunity to address nitrogen loading levels that are harming biological resources in local estuaries. TBEP will use One Bay's 2050 vision to estimate nitrogen loadings into Tampa Bay assuming that (1) Florida's current stormwater regulations remain in effect and (2) proposed new regulations take effect. TBEP's main objective is to determine whether the organization's nitrogen loading cap, which is a reduction of 7 percent (17 tons per year) nitrogen loading, can be maintained as the region grows by 3 million new residents. If TBEP determines this cap cannot still be met, the organization will examine how the area can grow smarter to protect the bay.

The value of the One Bay process will be enhanced by a concurrent study being led by EPA's Office of Research and Development Gulf Breeze Laboratory that will evaluate, through models and other tools, how the ecosystem services provided by the estuary will change under different development scenarios.

How Did Smart Growth Tools Help TBEP Achieve Its Goals?

One Bay is a collaborative partnership between the ULI Tampa Bay District Council, the Tampa Bay Partnership Regional Research & Education Foundation, Southwest Florida Water Management District, the Tampa Bay Regional Planning Council, and TBEP. These organizations realized the importance of working together to bring different interests to the table and emphasize commonalities in order to achieve realistic smart growth goals for the Tampa Bay area. In addition, they used the Reality Check process to engage and collaborate with the public, creating a shared vision for growth and protection of resources, including estuaries. Workshop participants concluded that three principles are essential as the Tampa Bay area grows:

- Create an integrated multi-modal transportation system using cars, buses, light rail, and ferries to bridge the bay;
- Cluster housing close to work, shopping, and entertainment; and
- Preserve Florida's natural habitats and water supplies.

Not only do these goals embody smart growth principles, they are more likely to be implemented because the ideas were developed by the citizens, Tampa Bay area organizations, and their official representatives.

How Can Other NEPs Learn From The TBEP Experience?

TBEP used anticipated rapid growth in the Tampa Bay area as an opportunity to collaborate with other organizations and present an engaging learning process, in the form of Reality Check. TBEP then used the outcome of the process to address goals in its CCMP. Other NEPs can look for similar opportunities by asking themselves these questions:

- Should you work with the Urban Land Institute and other organizations to hold Reality Check workshops or other visioning exercises in your area?
- Can you use specific results of Reality Check or other planning analyses to effectively utilize smart growth tools for protection of your estuaries?
- If you have engaged in Reality Check or another similar process, can you create or participate in partnerships, like One Bay, to keep the momentum going and achieve your CCMP goals by implementing smart growth practices?

Principles of Smart Growth

- Create Range of Housing Opportunities and Choices
- Create Walkable Neighborhoods
- Encourage Community and Stakeholder Collaboration
- Foster Distinctive, Attractive Communities with a Strong Sense of Place
- Make Development Decisions Predictable, Fair and Cost Effective
- Mix Land Uses
- Preserve Open Space, Farmland, Natural Beauty and Critical Environmental Areas
- Provide a Variety of Transportation Choices
- Strengthen and Direct Development Towards Existing Communities
- Take Advantage of Compact Building Design

For Additional Information:

Tampa Bay Estuary Program
Phone: 727-893-2765
saveit@tbep.org
www.tbep.org

Smart Growth Online
www.smartgrowth.org

US EPA Office of Wetlands, Oceans, and Watersheds (OWOW)
Coastal Management Branch
Phone: 202-566-1260
www.epa.gov/owow/estuaries

US EPA Smart Growth Program
Development, Community, and Environment Division (DCED)
Phone: 202-566-2878
www.epa.gov/smartgrowth