

Planning for Recreational Waterway Access in Rural Coastal Settings¹

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Introduction

Increasing demand for waterfront land throughout the United States is a long-term trend with a profound impact on the public's ability to access coasts and waterways for recreation (Springuel and Schmitt 2007). Overcrowding at beaches, boat ramps and popular destinations in Florida's densely populated coastal areas leads more Floridians and tourists to consider recreating in rural coastal communities

that still offer the solitude and natural settings desired by many (Shrestha et al. 2007). According to a recent report sponsored by the Outdoor Industry Association (Southwick Associates, Inc. 2012), an increase in outdoor recreation tourism, stimulated by the provision of public water access, has enormous potential to bring needed economic benefits to rural areas. However, many of these communities lack planning resources to measure local support and user needs and to estimate the benefits that investments in

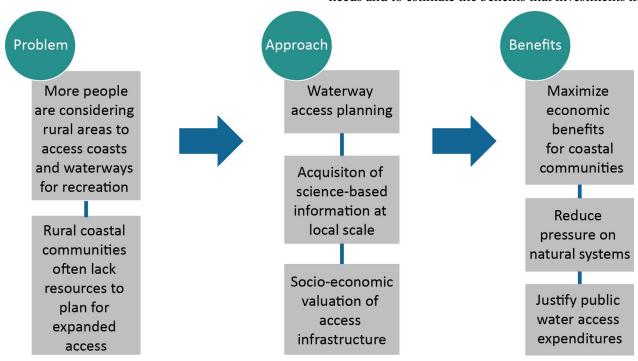


Figure 1. Rationale for waterway access planning in rural coastal settings.

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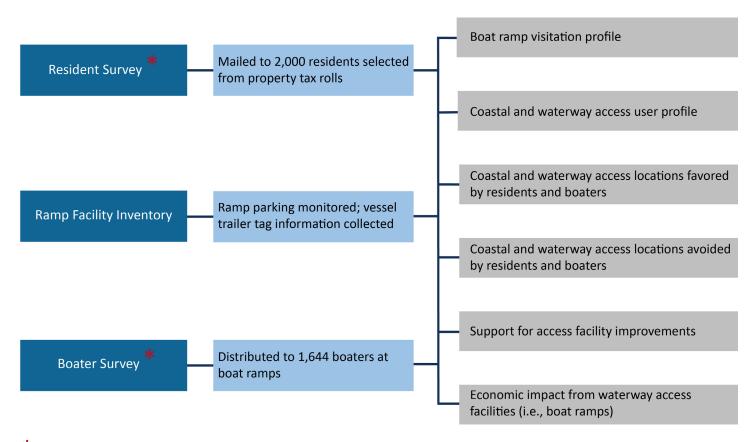
public-access infrastructure might bring. Here we describe an approach those communities can use to characterize user needs and to quantify local economic benefits derived from public-access infrastructure with a focus on boat ramp facilities (Figure 1).

Need for Localized Analysis

Previous studies to assess the demand for boat ramps, parking and other waterway access infrastructure and their economic contributions are regional in nature. However, aggregating coastal and interior counties for analysis can undervalue or overvalue the demand for waterway access infrastructure and the economic contribution from associated recreational use in a particular coastal county (Bell 1995; Sidman et al. 2005). Therefore, a localized study was conducted for rural Taylor County, Florida. Primary methods included an inventory of public water-access facility features, a survey of county residents, and a survey of water-access facility users (Figure 2).

Case Study of Taylor County, Florida

Taylor County, located in an area known as Florida's "Nature Coast," is representative of many rural coastal communities pursuing economic development through nature-based recreation. Taylor County's 2060 Economic Development Plan (2008) outlined a vision for encouraging further development of nature-based tourism by enhancing accessibility to coastal state lands and by providing deepwater access for boating. In the past, Taylor County has made efforts to provide public coastal and waterway access to residents and visitors. However, those efforts have been hampered by a lack of science-based information to facilitate water-access planning, measure public support, and secure the funding needed to make desired infrastructure improvements. Thus, Taylor County and the University of Florida partnered to implement a survey of residents and boat ramp users to determine water-access use profiles, infrastructure needs and the economic contribution of water-access facilities to the county (Figure 3 and 4).



^{**} map-based questionnnaire was included for cross-referencing coastal and waterway locations with specific questions

Figure 2. Survey methods and planning outputs.

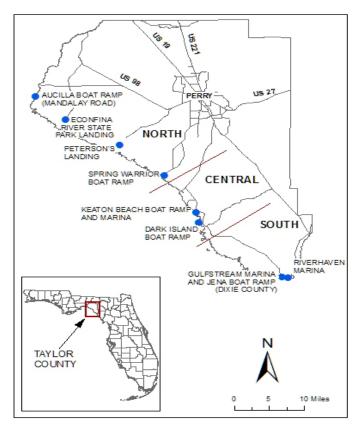


Figure 3. Selected prominent boat ramp locations in Taylor County.

Social Analysis Underpins Planning

The resident and boater surveys provided estimates for the number of trips generated by Taylor County ramps, quantifying the important contribution that local ramps make in drawing visitors to the county (Figure 5).

The field inventory of vehicles and trailers at public boat ramps allowed for a determination of which facilities were operating at surpassed capacity (Keaton Beach), at capacity (Steinhatchee), and below capacity (Dark Island, Econfina River State Park Landing and Petersons Landing) – Figure 6. Inclusion of a map in the survey allowed residents and visitors to identify specific locations where existing amenities were acceptable and areas in the County (north, central, south) where specific types of amenities were desired. Importantly, results show that a clear majority of both residents and visitors supported the provision of new ramps and improvements to existing ramp facilities: Residents favored ramps and ramp improvements in the central areas of the County, specifically in Keaton Beach; visitors preferred that improvements be made in southern areas of the County, specifically in the town of Steinhatchee.

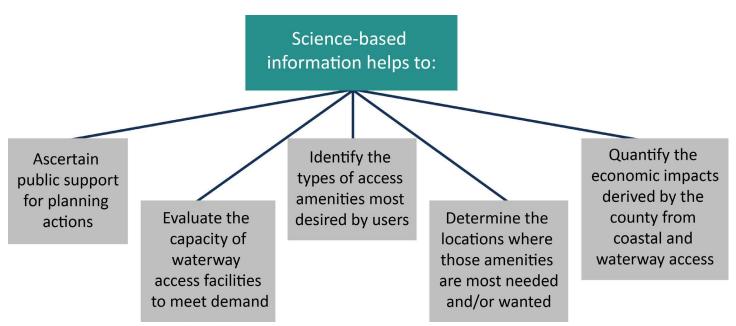


Figure 4. The scientific approach: Survey-based socio-economic valuation.

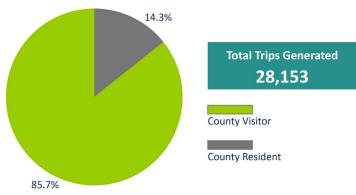


Figure 5. Comparison of boating trips between county residents and visitors.

Location	Category	Rank
Keaton Beach Boat Ramp	Ramp	1
Keaton Beach	Coastal Location	2
Spring Warrior Boat Ramp	Ramp	3
Gulfstream Marina (Dixie Co.)	Ramp	4
River Haven Marina	Ramp	5
Figure 7. Favorite waterway access locations.		

Ramp Name	Rank
Keaton Beach Boat Ramp	1
Ecofina River State Parking Landing	2
Aucilla Boat Ramp (Mandalay Road)	3
Keaton Beach Marina	4

Figure 6. Parking capacity at boat ramps.

Ramp Location	Capacity Reached
Keaton Beach: Keaton Beach Boat Ramp & Keaton Beach Marina	Surpassed Capacity
Steinhatchee: Gulfstream Marina, River Haven Marina, & Jena Boat Ramp	At Capacity
Dark Island, Ecofina River State Park, and Petersons Landing	Below Capacity

Figure 8. Avoided waterway access locations.

The surveys also identified ramps that were favored because they offered desired amenities, such as bathrooms, multiple boat ramp lanes and adequate parking (Figure 7). The surveys also identified ramps that were avoided due to congestion and the lack of desired amenities (Figure 8). Survey results showed that some of the most favored locations were also the most avoided, such as Keaton Beach, highlighting the opportunity to enhance services at those facilities.

Quantifying Local Economic Impacts

The economic benefits derived from recreational boating and other activities associated with Taylor County's water-access facilities were quantified using an input output model (IMPLAN software). This type of analysis offers a snapshot of the economy, detailing sales and purchases of goods and services between all sectors of an economy over a given period of time. The analysis was based on data that captured trip expenditures reported by county residents and visitors who were observed at Taylor County waterway-access facilities. Boat ramp facility users were characterized as day visitors or overnight visitors. The average day visitor

spent about \$140; overnight visitors spent about \$400 per trip. The IMPLAN model coupled these expenditures with economic and demographic data for Taylor County (Figure 9) to generate estimates for jobs, labor income and added value to produce a broad measure of economic activity that is comparable to Gross Domestic Product (GDP). The total economic impact generated by Taylor County's public boat ramp facilities is estimated to be about \$10 million in economic revenues annually (Figure 10).

Planning Benefits

The survey revealed broad support for improvements to public waterway access facilities from residents and visitors alike. Respondents desired new ramps and facility improvements particularly at the Steinhatchee and Keaton Beach localities. Importantly, the survey showed that public water-access facilities generated significant local economic activity with the majority of waterway-access-related trip expenditures (87%) remaining in Taylor County, contributing significantly to the County's economic base (Figure 10). Survey results highlighting broad community support for public investment in waterway access facilities and the substantial local economic impact stimulated by visitors

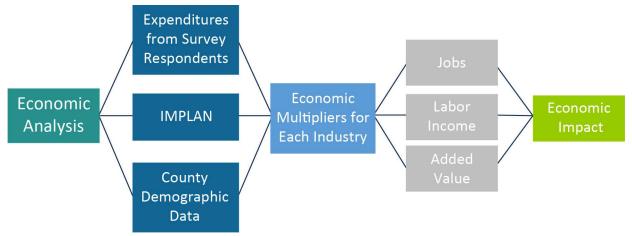


Figure 9. The process of completing an economic impact analysis.

helped Taylor County successfully compete for \$700,000 in state funds to add parking at Keaton Beach (\$100,000) and acquire additional land and infrastructure for a new boat ramp in the town of Steinhatchee (\$600,000). Information about the kinds of public-access amenities desired by users and the locations where those amenities are most needed provides a long-term road-map to guide future county efforts to keep public access at pace with anticipated future demand (Figure 11).

A description of the survey questionnaire, methods, and economic analysis can be found online in a Florida Sea Grant Technical Report titled: *Planning for Access in Taylor County, Florida: Residents and Users Speak* (TP- 177). http://nsgl.gso.uri.edu/flsgp/flsgps11001.pdf

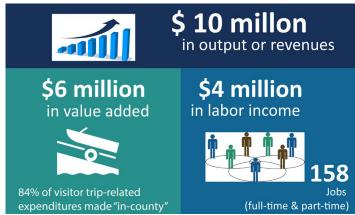


Figure 10. Economic impacts.

\$600K Supports a successful request by the county toward the development of a new boat ramp in Steinhatchee Supports a request for a grant to expand parking at Keaton Beach Road Map Supports the prioritization of future improvements

Figure 11. Planning benefits.

Planning for Waterway Access in Taylor County, Florida: RESIDENTS AND USERS SPEAK

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Figure 12. http://nsgl.gso.uri.edu/flsgp/flsgps11001.pdf

References

Bell, F. 1995. Estimation of the Present and Projected Demand and Supply of Boat Ramps for Florida's Coastal Regions and Counties. Florida Sea Grant Technical Publication TP 77. University of Florida, Gainesville.

Shrestha, R., T. Stein, and J. Clark. 2007. "Valuing Nature-based Recreation in Public Natural Areas of the Apalachicola River Region, Florida." *Journal of Environmental Management*. (85) 977-985.

Sidman, C., T. Fik, R. Swett, B. Sargent, and S. Fann. 2005. *Estimating Land and Waterside Service Areas and Use Potential of Boat Ramps: A Case Study of Tampa and Sarasota Bays*. Florida Sea Grant Technical Publication TP-142. University of Florida, Gainesville.

Sidman, C., T. Fik, G. Davidson, A. Hodges, R. Swett, and F. Vose. 2011. *Planning for Waterway Access in Taylor County, Florida: Residents and Users Speak*. Florida Sea Grant Technical Publication TP-177. University of Florida, Gainesville.

Southwick and Associates, Inc. 2012. "The Outdoor Recreation Economy." The Outdoor Industry Association. 20pp.

Springuel N. and C. Schmitt. 2007. *Access to the Waterfront: Issues and Solutions across the Nation*. Maine Sea Grant Technical Publication. http://www.seagrant.umaine.edu/files/pdf-global/07access.pdf

Taylor County. 2008. *Vision 2060 Plan: Taylor County Economic Development Plan*. http://www.taylorcountyvision.org/web-content/pdf/Economic%20Development%20 Plan%20Vision%20Document%201-8-08.pdf