

that County staff meets with FWC law enforcement, FWS enforcement personnel and St. Johns County Sheriff's Office staff to discuss methods to increase compliance within the County's one speed restriction zone (i.e., Julington Creek). A two-fold approach of: 1) increasing public awareness efforts; and 2) prosecution using FWC's authority to enforce federal, state *and* County regulations could serve as the inducement to increase compliance. The County could consider adopting by ordinance county-specific speed zone restrictions and amend, as necessary from time to time, the penalties for violation of applicable speed zones. This ordinance could include penalties for repeat offenders that are more stringent than state standards, and FWC officers could be given authority to prosecute offenders under County regulations.

Although there are no manatee-related boat speed restriction zones in eastern St. Johns County, the St. Johns County Sheriff's Office has indicated on-going problems with unsafe vessel operation. Because fiscal constraints often limit the amount of on-the-water enforcement, St. Johns County might want to consider replicating at the local level the federal program through which marinas provide slip space for enforcement vessels at no charge. Through the development review and approval process, St. Johns County might want to consider requesting or requiring that such slip space be provided at new or expanding marina(s) if there is a need for such space. If adequate docking has been dedicated for marine law enforcement watercraft, the County could also consider funding offers that would provide additional enforcement on County waterways as mitigation for marina projects.

5. Sanctuary Designation by FWS and/or FWC

Both the state and the federal government have agreed that vessel speed restrictions are necessary to protect manatees in the Julington Creek area. Unfortunately, the widths and boundaries of the state and federal protection areas are not identical (See Figures in Appendix C). This inconsistency appears to present difficulties for vessel operators *and* enforcement personnel. It is suggested that County staff coordinate meetings with FWS and FWC personnel and the St. John County Sheriff's Office to seek modifications that would bring together the boundaries of the state and federal zones.

No new sanctuaries, refuges and/or manatee protection areas appear to be warranted at this time, but the results of the monitoring recommended previously may result in the need to evaluate new protection zones if specific areas are identified as being important for calving, resting or feeding.

C. Land Development

Section C in the Inventory of Existing Conditions summarized the existing manatee protection mechanisms in effect in St. Johns County. This section provides descriptions of mechanisms through which St. Johns County could consider making improvements to local development standards to reduce the potential for negative impacts on manatees.

1. Shoreline Development Standards

In general, St. Johns County and the municipalities in the County rely on state and federal regulations and permitting criteria to protect the natural resources of the shoreline. State and/or federal regulations provide protection for mangroves, seagrasses and other shoreline vegetation, and permits must be obtained for projects that involve water management systems

and/or discharges from these systems into jurisdictional waters. Regulations also dictate conditions concerning the construction of vertical bulkheads and other erosion control structures that could affect shoreline vegetation.

No changes in shoreline standards appear to be needed in order to protect manatees and/or manatee habitat.

2. Development Standards for Submerged Lands

The majority of the submerged lands in eastern St. Johns County that are accessible to manatees are lands that are owned or controlled by the State of Florida. The designation of approximately 55,000 acres of the Guana, Tolomato and Matanzas marshes as National Estuarine Research Reserve provides the State of Florida with additional control over activities affecting state-owned lands. Projects on/over submerged lands (e.g., marinas, utility installations) are reviewed by the FDEP Bureau of State Lands for compliance with various environmental and public interest criteria and in many instances must be approved by the Governor and Cabinet sitting as Trustees of the Internal Improvement Trust Fund. Additionally, dredge/fill activities proposed on submerged lands are independently reviewed by federal agencies, including ACOE, EPA, USFWS, NMFS and USCG. In addition to these state and federal reviews, St. Johns County has developed and implemented an approval process through which proposed projects must be reviewed and approved by the County prior to construction.

Based on these multi-agency jurisdictions, it does not appear that any changes are necessary in order to protect manatees and/or manatee habitat from development of submerged lands.

a. Marina Facility Siting Criteria

Marina facility siting criteria for the protection of manatees were considered in the Water Dependent Uses Study commissioned by the County in 2002. The Study appears to be an excellent planning tool to assist the County in being aware of the need to reserve area for future water access. The study would likely require additional manatee-related screening criteria if/when it needed to meet FWC standards as a Boat Facility Siting Plan.

b. Performance Criteria

The USFWS has developed a ranking system that describes the relative threat to manatees on a county-by-county basis (FWS, 2001). Counties that have had no watercraft related manatee mortalities are classified as low risk. Counties that where there has been some watercraft related manatee deaths, but less than one per year averaged over the last ten years are considered medium risk. Counties that have averaged more than one watercraft-related manatee death per year during the last ten years are considered high risk. Permits for waterfront construction are most difficult to obtain in high risk counties. St. Johns County's present designation by FWS is medium risk, and the County's watercraft-related manatee death rate is 0.8 manatees/year for the period from 1995-2004.

Because the County does not want to have waterfront construction restricted based on the manatee mortality criteria, it may be advisable for the county to voluntarily implement some or all of the measures identified previously in this section in order to help maintain the medium risk designation.

It is recommended that St. Johns County begin analyzing manatee mortality on an annual basis, with particular emphasis on the categories of 'watercraft-related' and 'other human-related'. Depending on what these data show, the County could then decide on an annual basis the extent to which corrective actions should be taken. A process flow chart describing the recommended sequence of events is provided on Figure 20.

c. "No Entry" Areas

In St. Johns County, there are no "No Entry" zones, and based on the results of surveys there are no manatee congregating areas that warrant such a designation.

d. Restriction of Coastal Construction

There is no evidence indicating that existing regulations pertaining to coastal construction are inadequate at protecting manatees and/or manatee habitat, and so no changes appear warranted.

D. Education and Awareness

Section D (Education and Awareness) in the Inventory of Existing Conditions identified and described a variety of existing public education and awareness programs in St. Johns County that are available to the County and/or its residents. This Section uses that information to make recommendations for opportunities and initiatives to further improve this important aspect of manatee protection.

1. Educational Programs

Although there are a variety of education and awareness materials concerning manatees that are available for use in public education and awareness programs (Table 6), they appear to be little known and/or little used in St. Johns County. To address this improvement opportunity, it is suggested that St. Johns County consider developing a program to distribute educational materials about manatees. Key components of this initiative could include:

- Establishing and maintaining a publicly accessible physical or electronic reference library of educational materials concerning manatees;
- Using existing educational materials that are available from other organizations throughout the state to develop age-specific materials for life-long learning about manatees;
- Establishing a system for distributing educational materials to interested educators and individuals;
- Establishing and maintaining a "speaker's bureau" through which audience-specific programs are developed and offered to interested organizations; and
- Developing and distributing Public Service Announcements (PSAs) to local media (i.e., television, radio, newspaper) to promote coverage of critical manatee protection issues including speed zones, seasonal restrictions, locations of interest, and locations where manatees can be observed through non-obtrusive means. The existing PSAs developed by SMC should be considered as an initial inventory of potential materials.