

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

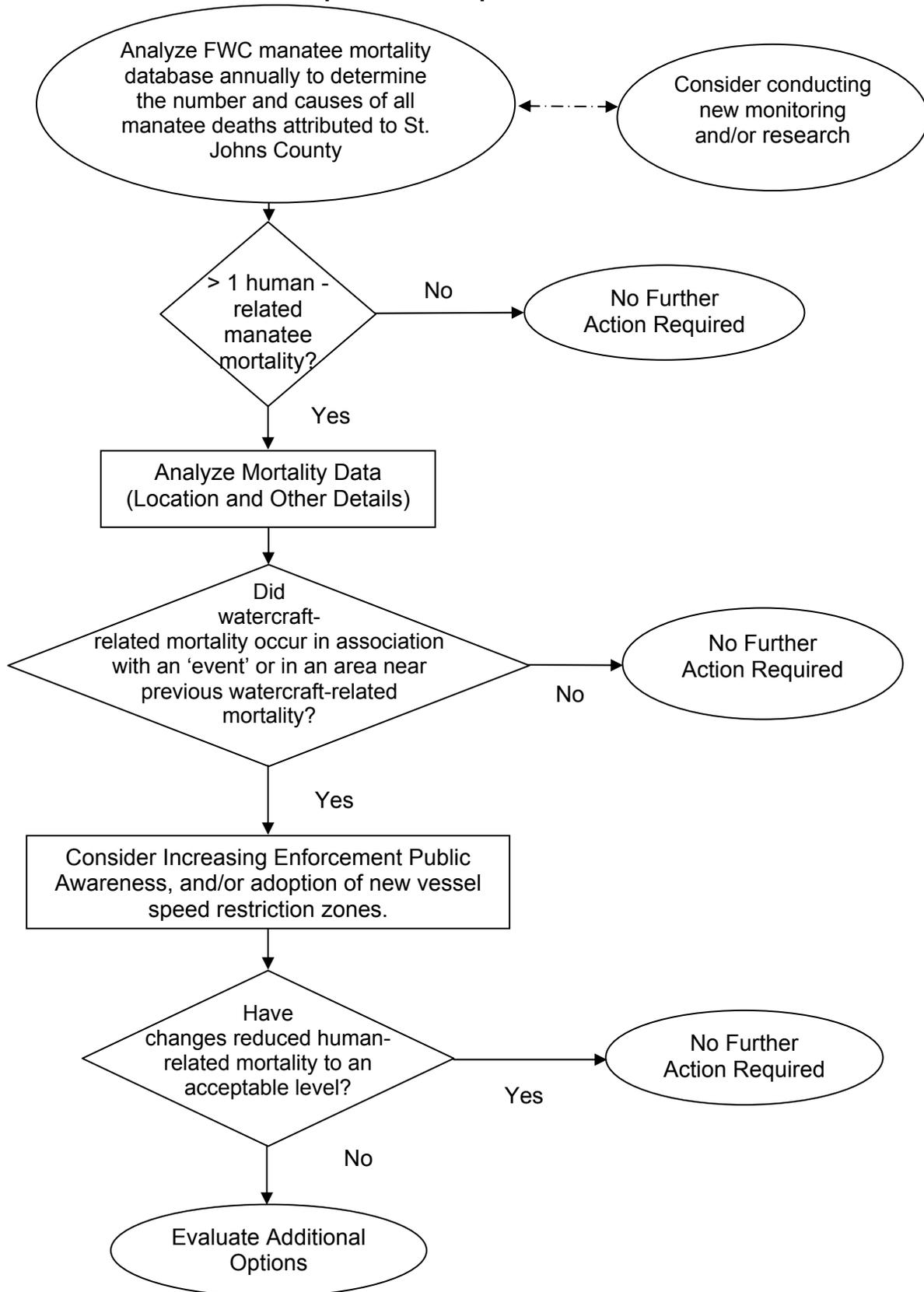
Section D (Education and Awareness) in the Inventory of Existing Conditions identified and described a variety of existing public education and awareness programs in St. Johns County that are available to the County and/or its residents. This Section uses that information to make recommendations for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

**Figure 20
Proposed MPP Implementation Process**



New staff need not be hired to implement this initiative, as environmental education initiatives are within the current responsibilities of the NE. Florida Sea Grant agent who is based in St. Johns County. It is recommended that St. Johns County provide funds to allow the Sea Grant agent to dedicate additional time toward manatee related education and monitoring. Potential sources of funding could include but not be limited to a combination of: grants; a portion of penalties received from violations of speed zone restrictions; vessel registration fees; the assessment of an additional impact fee on all waterfront development; and other sources. The County could also seek financial support through FWC's Advisory Committee on Environmental Education (ACEE) or other similar environmental education grant programs.

2. Awareness Programs – Boat and Personal Watercraft

In addition to the lifelong learning materials and programs identified above, the County could consider developing and/or distributing public awareness materials of its own. These materials should be accessible, free or low-cost, easy to use and easy to understand by the general public. Distribution of the Sea Grant-produced Boater's Guide to St. Johns County would be an excellent start for such a program. A boat speed zone pamphlet with maps showing the boundaries of speed zones could also be distributed at the public boat ramps closest to the Julington Creek MPA. Options to improve public awareness could include the development, distribution and implementation of the following:

- Production and distribution of a single, two-sided laminated reference card showing vessel speed restriction zones in St. Johns County;
- Distribution of "Mind Your Waterway Signs" laminated cards that have been developed by the State of Florida;
- Posting and maintenance of manatee awareness and up-to-date speed zone signs at all public boat ramps; and
- Developing a program to ensure that public awareness materials are made available to all individuals who own, rent or otherwise use personal watercraft.

St. Johns County can consider making these materials available at the County Tax Collector's Office, where boat-owners must annually register their watercraft and where individuals born after September 30, 1980 can obtain their watercraft operator's certificate.

3. Coordination of Education, Awareness, Research and Monitoring

It is suggested that the County work with the Sea Grant Agent as the County's principal contact on all manatee-related issues. Because the Sea Grant Agent is responsible for a multi-county area, including Duval County (where manatee-related issues are at a considerably higher profile than in St. Johns County) there will be an added benefit of the Sea Grant Agent's ability to work with colleagues in the surrounding counties and other educational institutions to obtain existing materials, compile new documents and/or coordinate new research and/or monitoring programs.

Discussions with GTMNERR staff do not suggest that there is presently much interest in becoming involved in manatee-related issues, however, increased coordination between the County and GTMNERR could result in their agreeing to at least record manatee sightings and provide information to the county, even if they are unwilling to add manatees as a species worthy of their targeted research.

Jacksonville University conducts aerial manatee surveys as part of their work for Duval County. It is recommended that the County consider contracting with the University to expand the spatial

limits of their surveys to include portions the portions of the St. Johns River in St. Johns County. FWC is presently devising protocols for conducting new aerial censuses that will likely begin during 2006, and it recommended that the County become involved with this process. Until such research/monitoring is conducted, it must be acknowledged that there is more that is unknown about the spatial and temporal distribution and abundance of manatees in St. Johns County than there is information that is known.

4. Existing Grant Programs and Other Funding Sources

Conducting aerial surveys, monitoring manatee use at specific sites, developing presentations, printing and distributing manatee awareness materials all cost money, and it is acknowledged that presently St. Johns County is not in a position where such expenditures are mandatory. Consideration should be given, however, to the potential adverse impacts that could result from an increase in human-related manatee deaths, which would raise the county's designation from 'medium risk (0.8 watercraft-related deaths/year' to 'high risk' (≥ 1.0 watercraft-related deaths/year). In addition to, or in lieu of a budgeted line item specifically for MPP implementation, potential sources of funding include:

- A portion of (or surcharge on) boat registration fees;
- A portion of the income derived from enforcement-related penalties;
- Assessment of an additional impact fee on waterfront development; and
- Federal, state, regional, and local grant programs and foundations.

There are specific grant opportunities available from the state for manatee public awareness through FWC's Advisory Committee on Environmental Education (ACEE), and it is likely that the focused work of a professional grantwriter could identify a variety of other sources of funds for manatee protection. It is recommended that the county consider using the experience of their environmental planning staff to identify and pursue funding for MPP implementation.

Although there has been no attempt to verify that any of these programs are still functioning, several years ago a list of potential funding sources was developed as part of the MPPs for Martin and St. Lucie Counties. This list, which could serve as a 'starting point' for identifying potential funds for implementing the St. Johns County MPP, is included as Appendix I.

Additional information on these and other programs is available from various sources, including the Catalog of Federal Domestic Assistance, the Guide to Florida Foundations, 2005, and the Environmental Grantwriters Association.