

speeds in some locations between crab pots, thereby potentially reducing the number of crabs landed on a daily basis. The speed limits may also slow transit speeds between fishing grounds for both crab and mullet fishing boats. As noted above, mullet fishing activity generally includes slow net casting and, therefore, such activities are unlikely to receive much impact. Note also that along the Halifax River, a corridor is available for boats to travel up to 25 mph. The manatee refuge area along the Halifax River stretches from the Flagler-Volusia County line in Halifax Creek past the Ponce de Leon Inlet to the South Causeway Bridge (New Smyrna Beach), a distance of approximately 43.5 km (27 miles). The waterbody ranges from 0.5 km (0.3 miles) to just over 1.6 km (1 mile) in width. The manatee refuge also includes tributaries and river basins of varying length and width. The number of fishing boats operating and the amount of blue crab and mullet landings occurring in areas that are newly designated speed zones under this rule is unknown.

There were 128 licensed blue crab operators in Volusia County in 2001. In 2001, based on blue crab landings in Volusia County of 230,577 kilograms (508,337 pounds), and the weighted average price of \$1.06 for blue crab statewide, the value of the blue crab fishery in Volusia County is estimated to be \$539,266 (FWCC: FMRI, 2003). In 2001, based on mullet landings in Volusia County of 188,675 kilograms (415,958 pounds), and the weighted average price of \$0.66 for mullet statewide, the value of the mullet fishery in Volusia County is estimated to be \$272,591 (FWCC: FMRI, 2003). Only a very small portion of these values is likely to be affected, as the crabbing and fishing activities will still occur but with some changes due to additional speed zones. In addition, crabbing and mullet fishing occur in parts of Volusia County outside of the manatee refuge area, including Mosquito Lagoon, St. Johns River, Lake George, etc. (Ponce Inlet Authority, 2003). The county-wide figures provide an upper bound estimate of the economic impact on these fisheries; this would assume that the regulation closed down the entire fishery, which is not the case.

Given available data, the impact on the commercial fishing industry of extending slow speed zones in portions of the Caloosahatchee, St. Johns, and Halifax Rivers cannot be quantified. The designation will likely affect commercial fishermen by way of added travel time, which may result in an economic impact. However, because the

manatee refuge designations will not prohibit any commercial fishing activity, and because there is a corridor available for boats to travel up to 40 km per hour (25 mph) in most affected areas, it is unlikely that the rule will result in a significant economic impact on the commercial fishing industry. It is important to note that in 2001, the total annual value of potentially affected fisheries is approximately \$8.3 million (2001\$); this figure represents the economic impact on commercial fisheries in these counties in the unlikely event that the fisheries would be entirely shut down, which is not the situation associated with this rule.

#### *Agency Administrative Costs*

The cost of implementing the rule has been estimated based on historical expenditures by the Service for manatee refuges and sanctuaries established previously. The Service expects to spend approximately \$600,000 (2002\$) for posting and signing 15 previously designated manatee protection areas. This represents the amount that the Service will pay contractors for creation and installation of manatee signs. While the number and location of signs needed to post the manatee refuges is not known, the cost of manufacturing and posting signs to delineate the manatee refuges in this rule is not expected to exceed the amount being spent to post previously designated manatee protection areas (Service, 2003a). In addition, the Service anticipates that it will spend \$1.7 million (2002\$) for enforcement of newly designated manatee refuges annually. These costs are overstated because they represent the cost of enforcing 13 new manatee refuges and sanctuaries designated earlier on November 8, 2002, as well as the 3 manatee refuges included in this rule. The costs of enforcement include hiring and training five new law enforcement agents and two special agents, and the associated training, equipment, upkeep, and clerical support (Service, 2003b). Finally, there may be some costs for education and outreach to inform the public about these new manatee refuge areas.

While the State of Florida has 19,312 km (12,000 miles) of rivers and 1.21 hectares (3 million acres) of lakes, the rule will affect approximately 156 kilometers (97 river miles). The speed restrictions on approximately 156 km (97 miles) of manatee refuges in this rule will cause inconvenience due to added travel time for recreationists and commercial charter boats and fishermen. As a result, the rule will impact the quality of waterborne activity experiences for some

recreationists, and may lead some recreationists to forgo the activity. The extension of existing State speed zones for 156 km (97 miles) is not expected to affect waterborne activity to the extent that it would have a significant economic impact. The rule does not prohibit recreationists from participating in any activities. Alternative sites are available for all waterborne activities that may be affected by this rule. The distance that recreationists may have to travel to reach an un-designated area varies. Water skiers in the Tomoka River will likely experience the greatest inconvenience in terms of added travel time, as travel by water to the nearest alternative site could take approximately 2½ hours depending on time of year. The regulation will likely impact some portion of the charter boat and commercial fishing industries in these areas as well. The inconvenience of having to go somewhat slower in some areas may result in changes to commercial and recreational behavior, resulting in some regional economic impacts. Given available information, the net economic impact of designating the three manatee refuges is not expected to be significant (*i.e.*, an annual economic impact of over \$100 million). While the level of economic benefits that may be attributable to the manatee refuges is unknown, these benefits would cause a reduction in the economic impact of the rule.

b. The precedent to establish manatee protection areas has been established primarily by State and local governments in Florida. We recognize the important role of State and local partners and continue to support and encourage State and local measures to improve manatee protection. We are designating areas where existing State and local designations are considered minimal protection and where existing designations are confusing and/or unenforceable.

c. This rule will not materially affect entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients. Minimal restriction to existing human uses of the sites would result from this rule, but the restriction is believed to enhance manatee viewing opportunities. No entitlements, grants, user fees, loan programs or effects on the rights and obligations of their recipients are expected to occur.

d. This rule does not raise novel legal or policy issues. We have previously established other manatee protection areas.