

observed in shallows all responded to the presence of approaching boats. A study conducted from 1999 to 2000 documented manatee response to random boat traffic (Nowacek *et al.*, 2000). In each observation, manatees responded either by accelerating, turning, or moving toward or into a nearby channel when approached by boats.

Studies further addressed response times (Wells *et al.*, 1999). "At an average initial response distance of 20 meters, the animal has less than two seconds to respond to a planing vessel and about seven seconds to respond to a vessel approaching at slow speed" (Wells *et al.*, 1999). Based on these observations, it is apparent that manatees will respond to the presence of oncoming boats and that their ability to successfully do so is predicated on the speed of the oncoming boat. As such, protection areas that regulate boat speeds should minimize the incidence of manatee-boat encounters and, thereby, "the number of injuries and deaths associated with watercraft activities."

*Comment 17:* One peer reviewer believes the section on "Relationship to Manatee Lawsuit" is distracting to the overall intent of the rule, unless there is a legal requirement for its inclusion.

*Response 17:* The comment is noted; however, we believe it is important for the public to be aware of the lawsuit.

*Comment 18:* One peer reviewer suggested the addition of scale bars to the maps.

*Response 18:* The final maps have been revised accordingly.

*Comment 19:* One peer reviewer believed it would strengthen the rule and the Service's position to include a timeframe on which the requirement of "preventing the take of one or more manatees" is based.

*Response 19:* The only specific reference to a timeframe in our manatee protection area regulations is in regard to establishment on an emergency basis if the anticipated taking is "imminent" (50 CFR 17.106). That said, our regulations state that the establishment of manatee protection areas may occur if there is "substantial evidence" that the action is necessary to prevent the taking of one or more manatees. While not specific, this phrase strongly implies that there is a proximate connection between our action (establishment of a manatee protection area) and the result (prevention of take). We interpret this to mean that action may be warranted in those areas where take is documented and ongoing with sufficient regularity to indicate that it is likely to continue in the near future unless appropriate

action is taken. In other words, our manatee protection area designations are intended to prevent take that we expect may occur in the near future in the absence of such regulations.

*Comment 20:* Several commentors suggest that the existing State and Federal zones on the Caloosahatchee are relatively new, and have so far been effective. Many of these commentors speculate that past manatee watercraft-related mortalities may have been related to fuel barges traveling the river to the power plant. These operations have now been greatly reduced.

*Response 20:* Our analysis indicates that the existing zones in the Caloosahatchee River do in fact provide appropriate protection over most of the areas on the river where manatees and watercraft are likely to interact. Our final designation has targeted those areas of the river and San Carlos Bay where the best available information indicates that the existing zones do not adequately protect manatees from high-speed collisions. Additionally, our adoption of the existing shoreline buffer zones will enable us to devote Federal funds to improving signage and enforcement.

*Comment 21:* One commentor noted that the most recently documented compliance rates on the Caloosahatchee River are low. The commentor cited this as evidence that the existing regulations are inadequate. Further, the commentor stated that Lee County boater compliance studies indicate the majority of boaters travel outside speed-restricted areas. The commentor concluded from this that manatees are being killed outside the existing zones and that the existing zones are therefore inadequate.

*Response 21:* The commentor does not indicate what percentage this "majority" comprises, or the level of boat traffic within the existing speed zones. Neither does the commentor mention that, while it is true that vessels navigating the Caloosahatchee River spend most of their time in the unregulated center of the river, all vessels navigating this river must pass through regulated waters at some point in their journey. Therefore, the statement is misleading. When the fact that all vessels on the river must travel through manatee speed zones is combined with the above-noted low levels of historic compliance, it is clear that this high volume of (noncompliant) high-speed vessel traffic in existing zones is the most likely contributing factor to manatee take in most parts of the river.

*Comment 22:* One commentor claims that the existing aerial survey data for

the Caloosahatchee are skewed toward the shallower near-shore areas due to the flight path and observer and availability bias.

*Response 22:* We base our regulatory determinations on the best available information. We cannot base our determinations on speculation that manatees occur in areas not identified in the available data unless the data show such inferences to be reasonable. For example, we have determined that improved manatee protection in the vicinity of the Cape Coral Bridge is warranted. The data indicate that the Caloosahatchee River is used primarily as a travel corridor, and because aerial survey data indicate substantial manatee use upstream and downstream of the Cape Coral Bridge, it is reasonable to infer from these data that manatees do regularly occur near the Cape Coral Bridge. Additional protection is warranted due to the funneling effect of both watercraft and manatees that bridges often cause. Conversely, the commentor provides no basis, nor can we identify one, for assuming that manatees make more extensive use of the center portion of the river than is depicted in the available data.

*Comment 23:* With reference to the portion of the Caloosahatchee River from the Railroad Trestle to the Edison Bridge, one peer reviewer noted that aerial survey and telemetry data appear to indicate that manatees are distributed throughout this area, as opposed to concentrating along the shoreline as they appear to do in other areas of the river. The reviewer also noted that the seasonal component of the designation may not be warranted, as telemetry and aerial data do not show a strong seasonal bias. Furthermore, this area experiences generally lower overall watercraft use. Therefore, the reviewer believed that, although the proposed protection area (*i.e.*, slow speed in the channel from November 15 to March 31, 25-mph maximum speed in the channel April 1 to November 14) is justified, allowing a 25-mph maximum speed in the channel year-round may be feasible and justifiable without posing a significant threat to manatees. Another peer reviewer and other commentors also stated that it may be acceptable to leave the navigation channel as 25 mph year-round because this portion of the river has substantially less boat traffic than lower areas of the river. The FWCC stated that manatees are most abundant between Channel Marker "23" and the railroad trestle.

*Response 23:* Based on the comments as well as a more thorough evaluation by our biologists, we have modified our proposed rule to better reflect the best