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FISH STOCKING ACTIVITIES

The Department of Natural Resources' fisheries management program is responsible for protecting and developing fish populations and aquatic resources in Wisconsin's lakes, streams, and rivers, as well as portions of the Great Lakes and the Mississippi River. In fiscal year (FY) 1995-96, the Department, which operates fish hatcheries throughout the state, spent \$6.4 million on fish propagation and stocking, and an additional \$11.8 million on related activities such as research and habitat development.

Between 1986 and 1995, the Department reduced the number of fish stocked by 58.9 percent, and it plans further reductions for 1997. There has been concern that such declines may jeopardize high-quality fishing opportunities, which could both harm the tourism industry and reduce state revenues from license sales. For example, the Department's most recent random survey of fishing license holders throughout the state indicates significant dissatisfaction with the quality of fishing for walleye, the state's most popular game fish.

Decreased Fry Stocking Has Most Affected Walleyes

In 1986, the Department stocked a total of 73.0 million fish of varying sizes in 1,062 bodies of water. By 1995, this number had declined to 30.0 million, a reduction of 58.9 percent. In 1997, the number of fish approved to be stocked is 26.4 percent below the 1995 stocking level, although the actual reduction may be somewhat less if production exceeds approved goals.

The decline has been most pronounced in the stocking of fry, which are recently hatched fish that have not started feeding on their own. The species most affected by decreased fry stocking has been the state's most popular game fish, the walleye, for which total stocking decreased 62.8 percent between 1986 and 1995. Changes in the stocking of larger fish have been more modest. For larger cold-water fish, such as trout and salmon, stocking levels decreased from 7.0 million in 1986 to 6.7 million in 1995. For larger warm-water fish, primarily walleye, northern pike, and muskellunge, the 1995 stocking level was approximately one-half the 1992 peak of 6.3 million.

Stocking Has Declined for Policy Reasons

According to staff in the Department, research indicates some past practices, such as stocking large numbers of fry and stocking some bodies of water annually, were relatively inefficient and may not have significantly affected the overall population of mature fish. In addition, the Department believes that improvements to fish habitat encourage natural reproduction, and thereby reduce the need for stocking, and that both more restrictive bag limits and more "catch-and-release" fishing by anglers can ensure that high-quality fishing opportunities will be maintained. However, over 60 percent of respondents to the Department's 1995 survey of 2,000 randomly selected fishing license holders indicated they were "not at all" or "not too" satisfied with walleye fishing. Similarly, resort owners and fishing guides indicated to the Department that one of their top three concerns was insufficient stocking of walleye. Further, many anglers, resort owners, and guides indicated their support for managing lakes and rivers to provide "keep and eat" fishing.

Reduced Production Contributes to Excess Hatchery Capacity

The Department's stocking reduction decisions have coincided with recent expansions at several of the State's major fish hatcheries. Since 1990, the State has invested over \$18.4 million in hatchery renovation and expansion. Based on past production levels and added capacity through expansion, we estimate the Department's warm-water facilities,

which produce fish such as walleye and muskellunge, are currently operating at approximately 40 percent of capacity, and that cold-water facilities, which produce trout and salmon, are operating at approximately 81 percent of capacity. To use its facilities more efficiently, the Department should develop long-range stocking and production goals, an estimate of needed capacity, and options for closing unneeded hatcheries or deferring planned improvements to existing hatcheries.

Relations with Private-Sector Hatcheries Could Be Improved

The Department's official policy is increased cooperation with the private sector to reach fish management goals. However, the Wisconsin Aquaculture Industry Advisory Council concluded there was insufficient interaction between the Department and the industry and passed a resolution in 1996 calling for the privatization of the State's fish hatcheries. Since 1996, the Department has taken limited steps to improve communications with private hatcheries and has restated its policy that there is a role for private hatcheries in the State's fish management activities.

The Department could increase private hatchery involvement in stocking activities through steps such as contracting to provide eggs in exchange for a certain percentage of hatched fish, with the remainder of fish being available for sale by the private hatchery. To be more business-like in transactions with private hatchery operators, the Department will need to take steps to develop effective contracts that address issues such as resolving questions concerning the health of delivered fish, contamination rates with other species, and measuring the quantity of fish received. In addition, the Department could purchase privately raised fish for stocking in waters where genetic qualities and long-term survival concerns are minimal. However, in order to evaluate private contract bids to provide fish for stocking, the Department will need to maintain and update the cost accounting system for its own fish that was developed during this audit.

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