Best Management Practices for Farming Marine Shrimp

Claude E. Boyd Department of Fisheries and Allied Aquacultures Auburn University, Alabama 36849 USA boydce1@auburn.edu

Shrimp farms potentially can cause a variety of negative environmental impacts most of which can be avoided through rejection of unsuitable sites, use of good design and construction procedures, and application of responsible production practices. In some countries, governments have made various environmental regulations, and several organizations have developed "eco-label" certification programs that provide a market advantage. Compliance with governmental regulations and "eco-label" certification standards usually require the application of best management practices (BMPs). Moreover, some producers may adopt BMPs simply as an effort to improve environmental performance. A suite of BMPs usually is required to address a particular shrimp farm activity. Thus, BMPs can be placed into the following categories: site selection; farm design and construction; sourcing broodstock and postlarvae; feeds and feeding; effluents; salinization; pond dry-out and sediment management; predator control; facility operation and maintenance. Record-keeping is important for maintaining control over day-today farm operations and for providing a reference against which to verify improvement in environmental performance resulting from use of BMPs. There presently are no estimates of the percentage of marine shrimp farms that have adopted BMPs. There also is little documentation of the actual environmental benefits that accrue from adoption of BMPs. Nevertheless, an increasing number of shrimp farms are participating in programs that require adoption of environmental BMPs and this trend is expected to continue.