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CHALLENGES FACING THE FLORIDA SEAFOOD INDUSTRY

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Introduction

The commercial seafood industry represents an important natural resource-based component of the Florida economy and heritage. Conservative estimates suggest that the seafood industry contributes over $1 billion to the state's economy as a myriad of fishery products moves from "deck to platter". From a social perspective, the industry serves as the cultural heritage backbone for the many coastal communities with which Florida's identity is so intrinsically linked. Although the cultural and economic importance of seafood production has existed in Florida for generations, the industry is currently faced with a complement of policy and regulatory challenges which reflect a more recently changing set of demands associated with the state's marine resources. These challenges may have a profound effect on the nature of an industry long noted for its inherent resilience and independence.

Descriptive Characteristics

The Florida seafood industry is comprised of several key sectors. The harvesting sector is characterized by craft exhibiting a wide range of sizes and specialization. The Florida fleet contains large open-water trawlers and purse seiners with numerous crew members, as well as nearshore hook and line boats and outboard gillnetters employing a crew of as few as one or two people. A wide range of gear types and electronic sophistication also exist. There are approximately 2,300 registered commercial fishing vessels (over 5 net tons) and 9,400 commercial fishing boats (under 5 net tons) in Florida (U.S. Dept. of Commerce, 1994). The size of Florida's commercial fishing fleet is exceeded only by those of Alaska and Louisiana. Florida's fishing craft are crewed by at least 20,000 commercial fishermen. The harvest sector targets over 100 different species (more than any other state) and lands about 170 million pounds of finfish and shellfish annually. These landings are valued at approximately $200 million dockside (value paid to the vessel/boat), which places Florida fourth among all states in terms of annual dockside value (Florida Dept. of Environmental Protection). Florida's seafood industry is noted for being the leading producer of many traditionally important species, such as grouper, snapper, pink shrimp, spiny lobster, stone crab, pompano, black mullet, spanish mackerel, and others. Also, aquaculture has begun playing a more important role in the supply of certain marine and freshwater species.

The seafood processing and wholesaling sector in Florida is comprised of a mix of businesses ranging from small-scale establishments entirely dependent on local harvest of fresh seafood to fully integrated processing and wholesaling operations which produce a wide spectrum of product forms derived from domestic and imported sources. Florida has over 500 seafood processing and wholesaling establishments, employing approximately 5,000 individuals (U.S. Dept. of Commerce, 1994). These processing plants produce a variety of products valued at over $500 million dollars. The value and size of Florida's seafood processing and wholesaling sector exceeds that found in any other state in the southeastern U.S.

Florida also serves as an important node in the distribution and retailing of imported and

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further processed fishery products. Annual imports of seafood products are valued in excess of $700 million, a value which exceeds any other category of imported food product, including citrus products and coffee (Florida Dept. of Commerce, 1994). Some imported seafood is further processed in Florida, while some is trucked directly to markets along the eastern seaboard. The product which stays in Florida is eventually directed to final consumers via a network of marketing channels, eventually leading to restaurants, mobile vendors, retail grocers, and specialty seafood retailers, the latter three of which are represented by 5,300 establishments throughout the state (Florida Dept. of Environmental Protection).

Issues Confronting the Industry

The seafood industry in Florida is currently faced with an unprecedented array of issues. Most are linked with concerns regarding marine resource utilization at the federal and state level. However, concerns regarding the safety and quality of seafood products has brought the entire market spectrum - from vessel to consumer - into the management spotlight. In addition, questions associated with the allocation of Florida's fishery resources between competing user groups may give rise to regional precedents regarding the role of politics in marine resource policy development.

Rights-Based Resource Management

Fishery resources found within the waters of the state of Florida (9 nautical miles from shore in the Gulf of Mexico and 3 nautical miles from shore in the Atlantic) are managed by the Florida Marine Fisheries Commission. The fishery resources accessed by the Florida seafood industry within federal waters (from the state's seaward boundary out to 200 nautical miles) are managed by Regional Fishery Management Councils and the National Marine Fisheries Service. Fishery resources in the Southeast, including those in Florida waters, have historically been managed in an open access fashion. The common property management paradigm has prevailed, with traditional management techniques being the norm. Measures such as seasonal and geographic closures, bag limits, gear restrictions, size limits, and landings quotas have been employed with only limited success and a high cost of enforcement. Indeed, many of the fishery stocks found in state and federal waters in the Southeast continue to be overfished by an industry characterized in many cases as being overcapitalized.

As a result, fishery managers are examining alternatives to the time honored, but problem plagued, traditional management approach. The use of limited access management systems which impose a notion of property rights onto harvesters has recently gained favor in the mid and south Atlantic region. One such alternative involves the use of individual transferable quotas (ITQs). Under this program, a limited number of harvesters are granted the right to harvest a given share of the annual total allowable catch. This share is a function of the harvester's past catch record, while the annual quota is determined by the share and current resource abundance. Harvesters may utilize their quotas how and when they wish. They may also lease or sell their shares. Thus, harvesters are better able to react to market signals. Benefits to such a program include a reduction in market gluts (as harvesters no longer rush to fill an open access quota in a derby fashion), more stable prices (as landings are distributed more evenly over time), reduction in overcapitalization (as fewer, more efficient, harvesters are engaged in the fishery), reduced enforcement costs, and a higher quality product reaching consumers. Disadvantages may include increased concentration in the harvest sector, as fewer harvesters buy up available quota shares.

ITQs have recently been imposed in the commercial wreckfish fishery on the Blake Plateau, which involves a small number of vessels from northeast Florida. ITQs are being considered for king mackerel in the Gulf and South Atlantic, and red snapper and shrimp in the Gulf, each of which are important fisheries to the Florida seafood industry. Possibly other fisheries will be considered as candidates in the near future.

Limited access management may have a significant impact on the future number of harvesters involved in these traditional fisheries. Benefits to the resource and the market may outweigh the costs associated with potential infrastructure changes.

Bycatch

Shrimp trawling bycatch mortality in the Gulf and the South Atlantic is estimated to be approximately ten billion individual finfish annually. Concern has arisen over the potential impact on the stocks of certain economically important species of finfish from the bycatch of juveniles by shrimp trawling activities. In particular, the recovery of red snapper stocks in the Gulf may not be achieved by the target date without at least a 50 percent reduction in the

bycatch of red snapper juveniles, regardless of the restrictions placed on the directed commercial and recreational fisheries (Gulf of Mexico Regional Fishery Management Council, 1994).

Recent admendments to the Magnuson Act provide testimony to a growing Congressional interest in the shrimp trawling bycatch issue in the Gulf and Southeast region. The Magnuson Act, as amended by Congress in 1990, expresses as a policy (in Section 2(b)(3)) to "assure that the national fishery conservation and management program ... considers the effects of fishing on immature fish and encourage the development of practical measures that avoid the unnecessary waste of fish". As a result, the development of bycatch reduction devices (BRDs) is a top research priority in the Southeast region.

Currently, finfish bycatch reduction is achieved at the cost of reduced shrimp landings ... technology has yet to find a way to allow small finfish to escape from trawls while at the same time preventing similarly sized, yet much higher valued, shrimp from escaping as well. When developed, BRDs will be required to be incorporated into shrimp trawls, much as Turtle Excluder Devices (TEDs) are now. Shrimp harvesters may view these devices as a form of "forced" inefficiency, unless shrimp loss can be minimized or eliminated. Red snapper harvesters will likely view successful BRD designs from a slightly different prespective.

Safety and Quality Assurance

Seafood Inspection - During the 1980s, many forms of seafood were being marketed as a healthful alternative to other meat products. Concurrently, per capita consumption of seafoods reached record levels. Consumers' newly formed perceptions of seafood as a healthful alternative, however, were soon challenged by reports of food borne illnesses associated with the consumption of seafoods and economic fraud linked to mislabeling. As a possible result, per capita consumption of seafood fell steadily from 1988 to 1993. Particularly problematic were illnesses associated with the consumption of raw molluscan shellfish. Yet, much of the "bad" reputation associated with seafoods may have been misplaced. Only one in 5 million servings of cooked finfish results in illness, compared to one in 250 servings of raw molluscan shellfish and one in 25,000 servings of cooked chicken (U.S. Food and Drug Administration, 1989).

Even so, much attention has been directed at developing some form of a quality and safety assurance program for seafoods, similar to current USDA mandatory inspection programs for red meat and poultry. FDA has recently proposed a Hazard Awareness at Critical Control Points (HACCP) program for seafoods, similar to that existing for low acid canned food products. Such an inspection program is based on monitoring potential critical control points in the processing operation where safety and quality can most likely be compromised.

Under FDA's proposal, all firms engaged in the handling, storing, processing, packing, or holding seafood will be required to develop an approved HACCP program. Each firm will be required to develop a plan that describes the processing operation, identifies critical control points, and establishes critical limits, monitoring procedures and corrective actions, as well as developing an effective recordkeeping system. The implementation of a HACCP program will be a costly process for many operations. FDA estimates that the average annual costs of implementation for even a "small" business will be $15,000 (Federal Register, 1994).

Oysters - FDA has also focused on the Gulf of Mexico oyster industry regarding more stringent regulatory action concerning food safety. An average of 3 persons have died each year from consuming raw oysters in Florida during the 1982-92 period (Fl. Dept. of Health and Rehabilitative Services). These individuals are typically found to have some form of compromised immune system, which may be the result of liver disease, diabetes, low stomach acid, AIDS, cancer, or any of several other disorders. As a group, these individuals represent an extremely small percentage of all those who consume oysters. The bacteria Vibrio vulnificus, which is naturally occurring in the marine environment, has been found to be the culprit. This bacteria is found within the gut and body tissues of the live oyster. The risk is associated with raw consumption, since cooking kills the bacteria.

Bacteria are more prevalent in the marine environment during the warmer months. Illnesses and death associated with raw oyster consumption are thus concentrated during the months April through October in the Gulf region. FDA has proposed that no harvest for oysters destined for raw consumption be allowed during these months. Such a closure would effect 60 percent of the harvest from Florida. Although the production of shucked product would still be allowed, even moderate increases in product volumes directed to

the relatively thin shucked market may exert strong downward pressure on prices.

FDA has provided the oyster industry in the Gulf region an opportunity to suggest alternatives to the proposed closure. Recently formed industry councils are working with the Interstate Shellfish Sanitation Program to design alternatives, such as increased educational efforts and the implementation of HACCP for oyster dealers. However, the certainty of the costs associated with HACCP looming on the horizon and the spectre of the proposed closure by FDA have together created a hightened level of concern regarding the future of the oyster industry in Florida.

Amendment 3

The November 1994 Florida election ballot will contain several proposed amendments to the state Constitution. Amendment 3 proposes to eliminate the use of fishing nets with a mesh area in excess of 500 square feet in State waters. Nets are utilized to produce species such as mullet, spotted seatrout, pompano, spanish mackerel and others. Proponents of the "net ban" suggest that commercial use of such nets has resulted in overfishing of many species important to both commercial harvesters and recreational anglers. Opponents of the ban counter that eliminating the use of nets is unnecessary and financial hardship will likely result for not only those commercial harvesters who primarily utilize nets, but also the small seafood wholesalers who depend on local production of these nearshore species. Proponents of the ban suggest these negative effects are temporary and outweighed by the positive economic benefits derived from rejuvenated stocks and the resulting enhanced commercial and recreational fisheries.

The use of a public referendum to establish fisheries management policy is unprecedented in Florida. Successful or not, the sole use of the political process to influence policy by circumventing the state agencies appointed to manage marine fisheries in Florida creates important implications regarding the future management of Florida's marine resources.

Summary

A host of issues are confronting the seafood industry in Florida. Many are related to the sustainability of the resource, while others are related to increased consumer demands for quality and safety assurance related to seafoods. In addition, a changing set of demands by Florida residents regarding the use of the state's marine resources has the potential for altering the allocation of the marine fisheries resources among commercial and recreational user groups. The numerous small-scale seafood businesses, both harvesters and purveyors, will likely be impacted the most by any resulting change. With many being located in economically undiversified regions of the state, mitigation of any impacts may be difficult. But while the complement of issues discussed above may bring opportunities, as well as challenges, "business as usual" for many sectors of the Florida seafood industry may be a thing of the past.

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