Maritime Fisheries Enforcement Analysis of the NMFS Northeast Region

John Thomas Davis
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MARITIME FISHERIES ENFORCEMENT ANALYSIS OF THE
NMFS NORTHEAST REGION

BY

JOHN THOMAS DAVIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE PROFESSIONAL DEGREE OF
MASTER OF MARINE AFFAIRS

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APPROVED:
Major Professor

UNIVERSITY OF RHODE ISLAND
1996
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CHAPTER 1
INTRODUCTION

The success or failure of fishery management plans (FMP's) is dependent upon many factors. One of those factors is the level of compliance to the regulations implementing the conservation and management decisions of the FMP's that is achieved. Although compliance with regulations does not guarantee the success of management efforts, failure to ensure adequate compliance with management objectives results in failed conservation and management efforts. Enforcement is a crucial element towards achieving conservation and management goals.

OBJECTIVE

The objective of this paper is to analyze the maritime fisheries enforcement system in the geographic bounds of the National Marine Fisheries Service's (NMFS) Northeast Region. The purpose of this analysis is to identify issues and shortcomings with maritime fisheries enforcement, and recommend feasible solutions to improve the enforcement system.

SCOPE OF RESEARCH

This analysis is focused on the maritime fisheries enforcement system. It is limited to the enforcement of
federally managed commercial fisheries under the Magnuson Act (MFCMA). The MFCMA divides enforcement responsibilities between the U.S. Coast Guard and NMFS. "The provisions of this Act shall be enforced by the Secretary (of Commerce) and the Secretary of the department in which the Coast Guard is operating". The Coast Guard is responsible for at-sea enforcement of the Act, and NMFS is responsible for shore-side enforcement of the Act. Since the focus of this paper is on maritime fisheries enforcement, only issues involving the Coast Guard’s enforcement of the MFCMA will be explored.

Maritime enforcement cannot be viewed solely on the capabilities and effectiveness of the Coast Guard to carry out its statutory responsibilities under the MFCMA. It must be approached as a system. A maritime enforcement system links the capabilities of the enforcement agency to the enforceability of the regulations as well as the prosecution of violators. Conclusions on compliance can only be drawn by analyzing maritime enforcement as a system.

METHODOLOGY

Analysis of each aspect of the maritime enforcement system was conducted by review of professional articles and studies. Issues and hypotheses were validated or expanded by use of current trends obtained from Coast Guard and NMFS databases and reports. The primary sources of database information was from the NMFS Enforcement Management...

1 Magnuson Fishery Conservation and Management Act, Public Law 94-265 as amended through August 4, 1994, sec 311 (a).
Information System (EMIS) database, and the Coast Guard's Abstract of Operations reports and Sighting and Boarding Reports (SABRE) database. The EMIS database is used to track violations of the MFCMA and the results of prosecution. Abstract of Operations reports track the effort expended in different mission areas by Coast Guard cutters, and SABRE tracks vessel sightings, boardings, and violation histories.

GEOGRAPHIC DESCRIPTION

Analysis of maritime enforcement was constrained to the geographic bounds of the NMFS Northeast Region. Although the issues and shortcomings of maritime enforcement are universal throughout the United States, collection and analysis of data nationwide proved too extensive for this research. The NMFS Northeast Region was selected for analysis because the region’s high profile fisheries have an extensive history of management and enforcement troubles to support an analysis of maritime enforcement. In addition, the data necessary for this analysis was provided by two separate agencies, and the NMFS and Coast Guard areas of responsibilities (AOR’s) in this region provide a close match. As can be seen in figure 1, both the NMFS and Coast Guard AOR northern boundaries begin at the United States/Canada border. The NMFS Northeast Region, for which the New England and Mid-Atlantic fisheries management councils (FMC’s) have responsibility, extends southward to

\[ \text{Any Coast Guard vessel 65 feet or greater in length is called a cutter.} \]
Fig. 1. Comparison of the NMFS Northeast Region and the Coast Guard First and Fifth Coast Guard District Areas of Responsibility
the Virginia/North Carolina border. The AOR for the First Coast Guard District (New England) and the Fifth Coast Guard District (Mid-Atlantic) extends southward to the North Carolina/South Carolina border. Although this additional area provides some inaccuracies when comparing NMFS and Coast Guard data, the majority of the domestic commercial fisheries in this area are conducted North of the Virginia/North Carolina border and the inconsistencies in data are insignificant.

To further define the NMFS Northeast Region, an overall description of additional factors and trends that affect enforcement such as the managed fisheries in the region, number of fishing vessels and processors/wholesalers, and off-load ports are provided.

**Number of fishing vessels.** In 1993, there were 23,057 commercial fishing vessels registered in the NMFS Northeast Region. The majority of these vessels (18,475) were small, near-shore fishing vessels less than 5 net tons. Larger, offshore fishing vessels greater than 5 net tons (4,582) accounted for less than 20 percent of all commercial fishing vessels. Trends over the last four years (figure 2) indicate a slight decrease in smaller fishing vessels, while the number of larger, offshore vessels remained constant. Unless a major vessel buy-out or effort reduction program is implemented, the number of commercial vessels requiring

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monitoring and enforcement in the NMFS Northeast Region will likely remain fixed near 23,000 vessels.

Number of processing/wholesaling plants. Similar trends have been observed for processing and wholesaling plants in the NMFS Northeast Region. Although this may appear to affect shore-side enforcement, the number of processors and wholesalers affect the available locations to off-load product.

![Graph showing fishing fleet trends in the NMFS Northeast Region, by fishing vessels greater and less than 5 tons. From National Marine Fisheries Service, Fisheries of the United States (1990-1994).](image)

Fig. 2. Fishing fleet trends in the NMFS Northeast Region, by fishing vessels greater and less than 5 tons. From National Marine Fisheries Service, Fisheries of the United States (1990-1994).

Considering the magnitude of the ocean area to enforce, off-load locations provide "choke points" to narrow and concentrate enforcement effort. Trends since 1985 (figure 3) indicate the number of these facilities will remain relatively constant, with perhaps a slight decline in
processing plants. Regardless, available off-load locations for fishermen in the NMFS Northeast Region are numerous, around 40.

![Graph showing trends in processing and wholesale facilities in the NMFS Northeast Region.](image)

**Fig. 3.** Processing and wholesale facility trends in the NMFS Northeast Region. From National Marine Fisheries Service, *Fisheries of the United States* (1988-1994).

Fishery Management Plans. In the NMFS Northeast Region there are eight federal fisheries management plans that are the responsibility of the New England and Mid-Atlantic fishery management councils. Those management plans that are commercially active and their characteristics are listed in table 1. The Atlantic Salmon and Atlantic Bluefish plans.

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4 Department of Commerce. National Marine Fisheries Service. *Fisheries of the United States (Series)*. Current Fishery Statistics No. (Series). Offload locations were calculated from the Colregs Demarcation Line, significantly reducing the number of ports by consolidating all the offload locations in Chesapeake Bay, Delaware Bay, New York Harbor, Long Island Sound, Narragansett Bay, and Boston Harbor. There is frequently more than one processor or wholesaler in an offload port, depending on the size of the fleet operating from that port.
were not included because they are not commercially active fisheries. The remaining six fisheries listed in Table 1 describe the federally managed commercial domestic fisheries that require maritime enforcement in the NMFS Northeast Region for this analysis.

**TABLE 1**

<table>
<thead>
<tr>
<th>MANAGEMENT PLAN</th>
<th>STATUS OF FISHERY</th>
<th>CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Lobster</td>
<td>Over-Utilized</td>
<td>Value: $150 million Annual Catch: 58 million lbs Vessels: 2,728</td>
</tr>
<tr>
<td>N.E. Multi-Species</td>
<td>Over-Utilized</td>
<td>Value: $144 million Annual Catch: 159 million lbs Vessels: 3,600</td>
</tr>
<tr>
<td>Atlantic Sea Scallops</td>
<td>Over-Utilized</td>
<td>Value: $102 million Annual Catch: 24 million lbs Vessels: 1,265</td>
</tr>
<tr>
<td>Squid, Mackerel, Butterfish</td>
<td>Fully-Utilized</td>
<td>Value: $37 million Annual Catch: 112 million lbs Vessels: 3,643</td>
</tr>
<tr>
<td>Surf Clam/Ocean Quahog</td>
<td>Fully-Utilized (ITQ)</td>
<td>Value: $48 million Annual Catch: 9 million bushels Vessels: 145</td>
</tr>
<tr>
<td>Summer Flounder</td>
<td>Fully Utilized</td>
<td>Value: $24.5 million Annual Catch: 18 million lbs Vessels: 848</td>
</tr>
</tbody>
</table>

Source: USCG Fisheries Enforcement Study and NOAA Our Living Oceans Report

**SUMMARY**

The purpose of this paper is not just to examine the capabilities and effectiveness of the Coast Guard to conduct maritime fisheries enforcement, instead it seeks to examine the entire maritime fisheries enforcement system as it applies to the NMFS Northeast Region. This area is characterized by a large and stable fishing fleet and
processing infrastructure that produces approximately 1,460 million lbs (13% of the nations landings) of commercial fish product annually. Federal domestic commercial fisheries enforcement is directed towards six managed fisheries. Although the U.S. Coast Guard is responsible for maritime fisheries enforcement in the region, a proper assessment of the entire enforcement system is necessary to determine the effectiveness of the Coast Guard’s effort. The maritime enforcement system is comprised of the capabilities of the enforcement agency (U.S. Coast Guard), the enforceability of the regulations, and the prosecution of violators. Each of these components will be examined in the ensuing chapters. Finally, future enforcement challenges in the region will be explored and recommendations made to improve maritime fisheries enforcement.

CHAPTER 2

COAST GUARD FISHERIES ENFORCEMENT

When examining the maritime fisheries enforcement system, it would seem logical to first explore the enforceability of the fisheries regulations and then assess the Coast Guard’s capability to enforce those regulations. That has been the traditional or institutional approach to fisheries enforcement evaluation, and exemplifies a "single-loop" learning approach in analysis. Regulations are first promulgated and later it is learned the enforcement agency does not have the resources or capabilities to enforce those regulations.

A more practical or "double-loop" learning approach involves assessing the enforcement capabilities of the Coast Guard and using that assessment as a limiting factor in the development of regulations. In this way the actual objectives of the regulations will be met. For this reason the chapter on Coast Guard fisheries enforcement precedes the chapter on the enforceability of fisheries regulations.

OBJECTIVE

The objective of this chapter is to examine the policies, capabilities and strategies of the Coast Guard to
meet its statutory responsibilities for fisheries enforcement.

COAST GUARD FISHERIES ENFORCEMENT POLICY

Implementation of specific management measures is the responsibility of enforcement agencies. Management and conservation plans will fail without effective enforcement. These enforcement responsibilities are assigned in section 311 of the MFCMA: "The provisions of this Act shall be enforced by the Secretary and the Secretary of the department in which the Coast Guard is operating". Enforcement responsibility for the MFCMA is divided between NMFS, which is the lead agency for shore-side enforcement, and the Coast Guard, which is the lead agency for at-sea enforcement of management measures. To meet the statutory requirements of the Magnuson Act, the Commandant of the Coast Guard has stated his policy and objective for fisheries enforcement: "To provide the at-sea enforcement necessary to reach the national goals for living marine resource management and conservation".

HISTORY OF COAST GUARD FISHERIES ENFORCEMENT POLICY

Enacted in 1976, the Magnuson Fisheries Conservation and Management Act (MFCMA) was designed to manage fishing effort within the U.S. 200 nautical mile Exclusive Economic Zone (EEZ) and to build the U.S. commercial fishing

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7 Department of Transportation, U.S. Coast Guard. Coast Guard Fisheries Enforcement Study. COMDTINST 16214, Dec 93., p 3-8.
industry. Regional Fishery Management Councils (FMC's) determined optimum levels of fishing efforts for various fisheries and reduced allowable foreign efforts proportional to increasing U.S. fishing effort. In the first decade of the Magnuson Act (1976-1986), the primary concern of fisheries management was on the economic impacts to the U.S. fishing industry. The implementation of the original policy provisions of the MFCMA were successful in that the U.S. fishing industry had developed extraordinary harvesting and processing capabilities, and foreign fishing has been virtually eliminated from the U.S. EEZ.

The successful implementation of U.S. fisheries policy in the first decade under the Magnuson Act created new problems for the second decade (1986-1996) under the Magnuson Act. The maximized U.S. fishing effort in the U.S. EEZ threatens the well-being of the stocks being fished, as well as other marine resources not being targeted, such as protected species. The policy paradigm of investment and development of U.S. fishing effort in the first decade under the MFCMA has given way to the policy paradigm of conservation and management of resources in the second decade.

The Coast Guard’s strategy to execute its statutory responsibility to enforce the Magnuson Act has also shifted to reflect changing emphasis of the Act. In the first decade of the MFCMA, the Coast Guard’s effort was focused on monitoring the presence and activities of the foreign
fishing fleet within the EEZ, consistent with the national fisheries policy at that time to limit and remove foreign fishing activity while developing domestic harvesting capacity. As the national fisheries policy paradigm shifted towards conservation and management in the second decade under the Magnuson Act, Coast Guard enforcement policies have focused on the U.S. domestic fishing fleet.

In the NMFS Northeast Region, there is currently no direct or joint venture fishing activities being undertaken by foreign fleets in the U.S. EEZ. With the exception of protecting the U.S. EEZ from encroachment by foreign fishing vessels, Coast Guard maritime enforcement is directed solely towards the U.S. domestic fishing fleet. Coast Guard fisheries enforcement effort is focused on the U.S. domestic fishing fleet and will continue to do so into the future.

**COAST GUARD CAPABILITIES**

The ability of the Coast Guard to conduct maritime fisheries enforcement operations is limited by budget and

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9 Department of Transportation, U.S. Coast Guard. *Coast Guard Fisheries Enforcement Study.* COMDTINST 16214, Dec 93, p 1-11. The Coast Guard has experienced a shift in the nature of fisheries law enforcement as a result of Americanization. Fishery management and enforcement policy changed from a laissez-faire approach allowing the fledgling U.S. industry to mature, to one where increasingly complicated management measures are necessary to ensure that the overcapitalized U.S. industry does not exceed the harvest quotas.

10 Abstract of Operations reporting indicates that in FY 1995, the Coast Guard directed 30,722 hours of effort towards fisheries enforcement in the NMFS Northeast Region. Of that effort, only 345 hours (1.1%) was directed towards foreign fishing activities.
resources. These limitations are not mutually exclusive; increasing Coast Guard funding will not necessarily increase effort directed towards general Coast Guard operations. The unique nature of the Coast Guard’s budget, as well as the management of enforcement resources (in this case Coast Guard Cutters) must be fully explored to assess the capabilities of the Coast Guard to enforce fisheries regulations.

**THE COAST GUARD BUDGET**

One way of evaluating the Coast Guard’s enforcement capabilities is by examining the Coast Guard’s budget, specifically its operating expenses. The Coast Guard is a multi-mission agency, responsible for the administration and implementation of a vast number of programs. These programs include Drug Interdiction, Search and Rescue (SAR), Aids to Navigation (ATON), Defense Readiness, Marine Environmental Protection (MEP), Marine Transportation, Fisheries Law Enforcement, and other miscellaneous law enforcement responsibilities; such as migrant interdiction.

Traditionally, the Coast Guard has received almost all of its funding through two appropriation accounts: Acquisition, Construction and Improvement (AC & I) and Operating Expenses (OE). The AC & I account generally funds major acquisitions, such as the building of vessels, aircraft and shore facilities. The OE account is used to pay staff and activities (operating costs) for the Coast Guard’s various missions. The Coast Guard received $400
million for AC & I activities and $1.6 billion for OE activities in fiscal year 1983. In comparison, in fiscal year 1993, it received $364 million and $2.6 billion in total funding, respectively, for these activities. These figures show Coast Guard budget increases have been directed towards operating costs and not the construction or improvement of facilities. This increase in operating costs can be attributed to the increased statutory responsibilities being placed on the Coast Guard. The fact that funds for acquisition and construction of new resources has not risen over this time span would indicate Coast Guard resources are being utilized to their maximum potential.

The Coast Guard’s operating expense (OE) account is the discretionary portion of the agency’s budget; the Coast Guard internally funds its programs and missions by the importance and value it places on those programs. Congress does not mandate the apportionment of the OE account to specific mission areas; it is an internal Coast Guard policy determination to set funding levels for its statutory responsibilities. Few, if any government agencies have so much discretion and latitude for such a large portion of their budget. In response to changing responsibilities, work load, and national priorities, the Coast Guard must shift its resources about, increasing funding for some programs and activities and decreasing its funding for

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others. Table 2 shows the change in percentage of OE funds apportioned to each mission between 1983 and 1993.

### TABLE 2

Shift in Emphasis Among Coast Guard Missions, FY 1983-1993

<table>
<thead>
<tr>
<th>Mission</th>
<th>FY 1983</th>
<th>FY 1993</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law Enforcement</td>
<td>28.4</td>
<td>33.2</td>
<td>4.8</td>
</tr>
<tr>
<td>ATON</td>
<td>23.7</td>
<td>21.0</td>
<td>(2.7)</td>
</tr>
<tr>
<td>SAR</td>
<td>26.8</td>
<td>15.7</td>
<td>(11.1)</td>
</tr>
<tr>
<td>Marine Safety</td>
<td>7.6</td>
<td>11.6</td>
<td>4.0</td>
</tr>
<tr>
<td>MEP</td>
<td>7.3</td>
<td>8.8</td>
<td>1.5</td>
</tr>
<tr>
<td>Defense</td>
<td>4.5</td>
<td>5.9</td>
<td>1.4</td>
</tr>
<tr>
<td>Ice Ops</td>
<td>1.8</td>
<td>3.7</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Source: General Accounting Office. U.S. Coast Guard: Improvements Needed in Management of Programs and Activities. 20 April 1993.

A review of the Coast Guard operating expenses for fiscal year 1995 reveals the priorities of various mission areas. The OE account for fiscal year 1995 was $2.631 billion, and accounted for 69% of the total Coast Guard budget. Figure 4 depicts the relative importance of the programs the Coast Guard is responsible for administering by allocation of funds from the OE account. Of the eight general mission areas the Coast Guard is responsible for, fisheries enforcement ranks third with funding levels commensurate with SAR, the Coast Guard’s highest profile mission area.

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12 Congress, House, Committee on Merchant Marine and Fisheries. Reviewing the Programs, Initiatives, and Reductions Represented in the Coast Guard’s Fiscal Year 1995 Budget Request: Hearing before the Subcommittee on Coast Guard and Navigation. 103rd Cong., 2nd sess., 15 March 1994, p 52.
COAST GUARD FY 1995 OE ACCOUNT
ALLOCATION BETWEEN MISSIONS

- Other Law Enforcement (14.7%)
- Fisheries Law Enforcement (15.0%)
- Marine Transportation (11.6%)
- MEP (9.4%)
- ATON (21.3%)
- Drug Interdiction (9.5%)
- SAR (15.2%)
- Defense Readiness (3.3%)

Fig. 4. Coast Guard FY 1995 Operating Expense Account. From: Congress, House, Committee on Merchant Marine and Fisheries, Reviewing the Programs, Initiatives, and Reductions Represented in the Coast Guard’s Fiscal Year 1995 budget Request: Hearing before the Subcommittee on Coast Guard and Navigation, 103rd Cong., 2nd sess., 15 March 1994

COAST GUARD RESOURCES

Coast Guard fisheries policies and capabilities are greatly affected by the functional allocation of a limited number of resources. Coast Guard off-shore law enforcement operations are conducted primarily by high-endurance cutters, medium-endurance cutters, and patrol boats; of which there are a fixed number that are funded by the OE portion of the Coast Guard budget. Much of this fleet is aging\textsuperscript{13}, and new cutter construction funded by the AC & I

\textsuperscript{13} The anticipated service life of a Coast Guard Cutter is 20 years. The average years in service for the following classes of cutters homeported in the NMFS Northeast Region is as follows:

- 378' WHEC: 28.5 yrs
- 270' WMEC: 9.5 yrs
- 210' WMEC: 30.3 yrs
- 110' WPB: 7.5 yrs
- 82' WPB: 32.1 yrs
portion of the Coast Guard budget is directed not towards increasing fleet size but toward replacing old and uneconomical cutters.

The small portion of the Coast Guard budget allocated towards acquisition and construction of cutters has led to a stabilization or slight decline in numbers for the cutter fleet. The capabilities of these assets are generally not limited by funding provided by the OE portion of the Coast Guard budget. Instead maintenance, repair, upkeep and readiness periods limit the effort capabilities of Coast Guard cutters. As cutters age more time is required for maintenance and repair, and less time is available for operations. The Coast Guard sets underway targets for various cutter types; operating budgetary increases will not result in increased time at sea without adding more resources14.

To increase effort in one mission area, the Coast Guard must reduce effort in another mission area, regardless of funding. The increased commitment and effort by the Coast Guard directed towards maritime fisheries enforcement requires an equal reduction of effort directed towards another mission. With a significant portion (over 75%) in

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14 Department of Transportation, U.S. Coast Guard. Cutter Employment Standards. COMDTINST 3100.5, Dec 94. For example, a 110 ft Island Class patrol boat is targeted to provide 1800 underway hours/year. The remaining time is allocated to vessel maintenance and repair, and readiness time for other CG missions.
Fiscal Year 1995) of the Coast Guard operating expenses directed towards SAR, ATON and Law Enforcement, the Coast Guard had to reduce effort in one of these three mission areas. The substantial cut in SAR from fiscal years 1983-1993 and the high public visibility of ATON and SAR made effort reduction in those mission areas politically unfeasible. The Coast Guard made effort reductions where it would be most transparent; with the Law Enforcement mission area as shown in figure 5. Significant increases in fisheries enforcement effort from fiscal years 1989-1993 were compensated by substantial reductions in drug enforcement effort. The rise in general law enforcement effort was compensated by a decrease in fisheries enforcement effort.

Fig. 5. Coast Guard Cutter effort for Law Enforcement Missions; Fiscal Years 1989-1993. From Department of Transportation, USCG Budget Estimates.

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15 Defense Readiness, Marine Environmental Protection, Marine Transportation, and Ice Operations account for the remaining 25% of operating expenses. The small effort base distributed amongst these mission areas does not provide a suitable amount of available effort for reduction.
effort can be attributed to the increase in effort required for Haitian migrant interdiction. A substantial rise in the number of Haitian migrants required increased enforcement effort by the Coast Guard in the Caribbean in fiscal years 1992 and 1993, and was further compounded by a massive influx of Cuban migrants in fiscal year 1994, which had a significant impact on the capabilities of Coast Guard fisheries enforcement in the NMFS Northeast Region.

The fixed number of resources available to the Coast Guard makes its fisheries priorities highly susceptible to functional allocation battles in times of crisis. Medium Endurance Cutters (MEC’s) and Patrol Boat Cutters (WPB’s) are highly mobile by nature and can be re-located to areas where they are most needed. A good example of this can be found by examining the allocation of MEC and WPB resources in the NMFS Northeast Region for fiscal years 1991-1995. Fisheries enforcement was a high policy priority for the Coast Guard in this time frame. However in June of 1994, the nation and the Coast Guard were faced with a crisis. Coast Guard resources were already stretched thin managing Haitian migrant interdiction when an unexpected surge of Cuban immigrants tried to traverse the Straits of Florida and enter the United States. Additional Coast Guard resources were taken from the East and West coasts of the U.S. to interdict this new flood of migrants. Although the use of fisheries enforcement resources for migrant interdiction lasted only a few months, its dramatic affect
on fisheries enforcement in the NMFS Northeast Region can be seen in figure 6. The significant decline in cutter hours available to implement fisheries policies had a dramatic affect on the number of fishing vessels boarded and violations of the MFCMA detected.

Fig. 6. Impact of Crises on Maritime Fisheries Enforcement in the NMFS Northeast Region. Coast Guard Abstract of Operations Report and Sighting and Boarding Report (SABRE) databases.

The fixed number of resources the Coast Guard has available makes its mission priorities susceptible to the needs of crisis situations. Although the Coast Guard is "always ready" to respond to a crisis, this shuffling of resources significantly impacts the Coast Guard's ability to effectively execute fisheries enforcement. While a short term crisis such as the Cuban and Haitian exodus in 1994 had
a short term effect on fisheries in the NMFS Northeast Region, a long term crisis would be devastating.

COAST GUARD FISHERIES ENFORCEMENT STRATEGIES

The Coast Guard’s allocation of OE expenses is not free of external influence. The Commandant dictates how the Coast Guard meets its statutory responsibility by providing guidance regarding the appropriate levels of resource time that should be dedicated to fisheries enforcement. The Commandant makes these determinations based upon interactions with Congress, other agencies in the Executive Branch, the public and the fishing industry16. As a multi-mission agency, the Coast Guard responds to changing concerns and changing mandates from Congress17. Where Coast Guard policy is headed in the future is difficult to predict; however the Commandant of the Coast Guard believes environmental response and fisheries law enforcement will rise in mission priority, while general law enforcement will plateau and it is hoped that migrant interdiction will taper off in mission priority18. In general, Coast Guard fisheries

16 Department of Transportation, U.S. Coast Guard. Coast Guard Fisheries Enforcement Study. COMDTINST 16214, Dec 93., p 3-8.

17 The Anti-Drug Abuse Act of 1988 mandated additional maritime surveillance to enforce drug laws. In 1989 the Defense Readiness mission of the Coast Guard was increased through agreement with DOD to include the defense of harbors and shipping lanes along the U.S. coast in times of war. The Oil Pollution Act of 1990 placed extensive additional responsibilities on the Coast Guard for environmental protection. In 1992 legislation was passed giving the Coast Guard increased authority to remove over 1300 abandoned barges in U.S. waterways. These are just a few recent examples of how the Coast Guard must respond to changing mandates from Congress that may affect the fisheries enforcement mission.

18 Congress, House, Subcommittee on the Department of Transportation and Related Agencies Appropriations, Department of Transportation and Related Agencies Appropriations for 1994. 103rd Cong., 1st sess., 20 April 1993, p 820.
policy regarding budget and resource allocation is at the whim of national priorities and crises.

One way to minimize external impacts on the Coast Guard fisheries enforcement mission is to make better use of available enforcement assets to meet escalating demands for enforcement effort. This is done by employing enforcement strategies. One strategy frequently recommended is to target enforcement efforts on serious, blatant violators. Although this seems to be a practical and simple strategy, the Coast Guard did not establish this policy until December 1995. The purpose of this recent policy is to ensure the use of Coast Guard resources is being optimized by providing the greatest enforcement effort to those violations most damaging to the fisheries resource. This in turn will level the playing field so those harvesters who operate within the regulations will not be at a disadvantage with those that cheat. This new policy identifies three categories of blatant significant violations for enforcement units to focus on:

1.) Violations that cause significant damage or impact to the resource, including:
   - Fishing with a revoked permit or no permit in a limited or restricted access system
   - Fishing in a closed area or during a closed season
   - Blatant fishing gear violations (grossly undersized net or use of a net liner)
   - Circumventing/exceeding days-at-sea limits when effort reduction is in place
   - Retention of gross quantities of prohibited or undersized species
   - Gross underlogging in a quota managed

19 Department of Transportation, U.S. Coast Guard. Domestic Living Marine Resource Enforcement Priorities. COMDTNOTE 16240 (Aldist 242/95), Dec 95.
2.) Violations that cause significant monetary advantage to the violator over his/her competitor, including:
   - Gross overage in a trip limit for a limited species; and
3.) Violations that have high regional interest due to the emotional or political nature of the violation, including:
   - Deliberate/negligent destruction of large quantities of fixed gear,
   - Marine mammal killing or maiming,
   - No turtle excluder devices, or TED's sewn shut.

Detection of these types of violations will be difficult due to the deliberate and usually covert nature of the offense. However, without this type of emphasis enforcement effort is wasted in pursuing minor violations having minimal or no impact on resource conservation.

This new policy supports the national fisheries policy emphasis on conservation and management. Its genesis was brought about by the increasing complexity of FMP's that rely on at-sea enforcement. Realizing budgetary and resource constraints to effectively execute its statutory responsibilities, the Coast Guard implemented a policy it previously rejected to improve enforcement efficiency.

DETERMINING FISHERIES ENFORCEMENT RESOURCE REQUIREMENTS

Fisheries program managers Coast Guard - wide do not use a standard approach or criteria to determine enforcement effort requirements. Frequently historical practices or enforcement asset schedules (conflicts with other missions

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20 Department of Transportation, U.S. Coast Guard. Domestic Living Marine Resource Enforcement Priorities.
or maintenance) rather than zero-based program requirements are used to allocate enforcement effort. Enforcement comprises the most costly aspect of implementing a fisheries management plan and is critical to achieving its objectives. Due to the costs and importance of enforcement, a standardized and quantifiable method of enforcement effort allocation is needed.

In determining resource requirements for fisheries law enforcement, there are several elements to be considered. First is the level of compliance that is to be achieved. Is 100% compliance necessary, or will 80% or less suffice to achieve conservation goals? Second is the cost and effectiveness of various enforcement modes. Resource managers do not want to be constrained to one enforcement mode when developing FMP’s, but they should consider the costs and limitations of various enforcement modes. Finally, a method to quantify these qualitative decisions is necessary to measure the effectiveness of allocation of enforcement resources.

REASONABLE LEVEL OF COMPLIANCE

The goal of enforcement is not necessarily to catch all violators, but to achieve the compliance of a majority of

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21 Department of Transportation, U.S. Coast Guard. Coast Guard Fisheries Enforcement Study. COMDTINST 16214, Dec 93., p 17.

fishermen"). Reasonable level of compliance is a relative term, and generally means that violations in a fishery under regulation are occurring at a rate which is much lower than at which they would occur with no enforcement, is acceptable to the industry and the public, and contributes to the conservation goals established by FMP’s.

The biggest difficulty in allocating enforcement effort is defining the level of compliance to be obtained. Even if a desired level of compliance were defined, the extent of overall compliance is nearly impossible to measure, and therefore it is not known. NMFS and Coast Guard data measures the extent of detected noncompliance which is only a part of overall noncompliance, since a significant proportion of violations will go undetected.

Quite simply, reasonable level of compliance cannot be quantified as such for fisheries enforcement. The FMP’s generated by the FMC’s do not specify minimum enforcement necessary to achieve the conservation and management goals established. The determination of reasonable level of compliance is qualitative, and is delegated by the Commandant to regional operational commanders. This determination significantly influences the outcome of


ENFORCEMENT MODES AVAILABLE, AND THE COSTS AND EFFECTIVENESS OF THOSE MODES

There are three modes of enforcement available to implement fisheries regulations: dockside boardings, cutter patrols and boardings, and aircraft patrols. The Coast Guard is responsible for cutter patrols and boardings, NMFS for dockside boardings, and both agencies jointly conduct aircraft patrols.

The principal mode for at-sea enforcement, cutter patrols, provide the platforms from which boardings are made, but are limited by weather in conducting boardings. Although cutter patrols can search small areas to determine types, numbers, identities, activities, positions, and gear of fishing vessels, it is the capability to conduct at-sea boardings that make cutter patrols an effective compliance technique.

Boardings provide detailed information on catch, gear, processing and hold capacities, and compliance with data collection and reporting requirements. It is the most effective mode of monitoring compliance, for it ensures compliance with actual fishing techniques; something other modes of enforcement are unable to do. Unfortunately this added efficiency has a price; at-sea boardings are by far the most expensive mode of enforcement.
In the NMFS Northeast Region, the Coast Guard expended 30,621 cutter hours to domestic fisheries law enforcement in fiscal year 1995. This enforcement effort resulted in 4,732 U.S. fishing vessels being boarded netting 239 offenses (5.1% of the vessels boarded) of the Magnuson Act. The actual enforcement cost per boarding and cost per offense can be calculated using the Coast Guard’s daily standard platform rate from which the boarding was made. The resulting average cost of an at-sea boarding in fiscal year 1995 was $5,638, and the cost of enforcement effort per offense detected was $111,628. The total cost of maritime enforcement of the MFCMA in the NMFS Northeast Region in fiscal year 1995 was over $26.5 million, nearly double NMFS’ entire enforcement budget for fiscal year 1995. Although the cost of at-sea enforcement is exorbitant compared to dockside enforcement, it is not feasible to consolidate fisheries enforcement to dockside modes. There are an

26 Abstract of Operations Database, U.S. Coast Guard.

27 Sighting and Boarding Report Database (SABRE), U.S. Coast Guard.

28 Department of Transportation, U.S. Coast Guard Standard Rates COMDTINST 7310.1E, 13 Jul 91. Costs were calculated using the hourly standard rate for cutters within government as follows:

WPB 18,505 hrs X $493/hour = $9,122,965
WMEC 11,872 hrs X $1,427/hour = $16,941,344
WHEC 244 hrs X $2,521/hour = $615,124
TOTAL: $26,679,433

Although the purpose of a Coast Guard boarding is to ensure compliance with all federal laws and regulations, these costs were calculated using resource effort dedicated primarily to fisheries enforcement, fishing vessels boarded and MFCMA violations. Other mission areas may be supported by these operations, but on a secondary basis.

inadequate amount of NMFS agents available to conduct all of the enforcement, and fisheries managers do not want to constrain management options by limiting the mode of enforcement.

**QUANTIFYING FISHERIES ENFORCEMENT GOALS**

In the NMFS Northeast Region, the Coast Guard has 14 medium endurance cutters and 20 patrol boats to conduct fisheries enforcement along with other statutory responsibilities of the Coast Guard such as Search and Rescue and other law enforcement responsibilities. Recent trends indicate these resources are capable of providing 30,000 hours of fisheries enforcement effort a year provided fisheries enforcement maintains its mission priority. The important question then follows: is 30,000 cutter hours of fisheries enforcement effort adequate to meet the conservation goals of FMP's, and how should that effort be allocated among FMP's?

The Coast Guard developed an analytical model to determine enforcement effort by FMP in 1992, although its use is not as widespread as planned. It is being used successfully in the First Coast Guard District, but it is used in the Fifth Coast Guard District. The '92 Composite Model was designed to use inputs to estimate the enforcement requirements of each individual FMP within a defined geographic area. The resulting output consists of the

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estimated number of patrol hours required for fisheries law enforcement in the defined geographical area, which is the enforcement effort goal for a particular FMP. This output assists regional operational commanders in evaluating resource allocation for fisheries enforcement within their geographic area of responsibility.

A graphical depiction of the Composite Model is provided as figure (4). The weaknesses of this and any analytical model is that the output is only as good as the inputs. Several of the inputs shown in figure 7 are estimates or assumptions and significantly affect the quality of the output.

Fig. 7. The 1992 Composite Fishery Analytical Model. Source: Department of Transportation, U.S. Coast Guard. Coast Guard Fisheries Enforcement Study. COMDTINST 16214, Dec 93.
VALIDATION OF FISHERIES ENFORCEMENT GOALS

The projected enforcement requirements developed by the model will require validation by regional operational commanders. The resulting resource projections may not be feasible given budgetary and resource constraints. Regardless, the model will provide a baseline for desired enforcement effort, to which attainable effort can be compared.

A second yet equally important validation of the model involves a comparison of actual enforcement results to the model baseline. The data reporting and collection efforts of the Coast Guard and NMFS presently are not capable of this type of validation, and will require modification to validate baseline figures. The detected non-compliance for a specific FMP will shed valuable insight on the validity of assumed inputs to the Composite Model, particularly the breakdown of at-sea versus dockside enforcement and incentive for fishermen not to comply with the regulations. Boarding and violation rates for individual FMP's can be used to justify changes to the assumed inputs, resulting in more accurate outputs in future iterations of model use. The ability to validate the outputs of the Composite Model is essential. This validation will indicate the accuracy of

31 There are three databases used to measure results of fisheries enforcement effort by the Coast Guard and NMFS. The Coast Guard uses the Abstract of Operations database to measure effort expenditure by geographic area and mission, and the Sighting and Boarding Report database (SABRE) to measure boardings and violations. NMFS uses the Enforcement Management Information System database (EMIS) to measure violations and fines. None of the databases are capable of providing information for each individual fishery managed. The information collected by these databases will only be useable if collected for each individual fishery managed.
the model inputs that are estimates, and justify modifications as necessary to those inputs.

CONSULTATION WITH FISHERIES MANAGERS

The model output and validated results should be reported to fishery managers through the enforcement report presented at council meetings by the Coast Guard designee on the FMC. The Coast Guard’s enforcement goals established by the model, the Coast Guard’s ability to meet those goals based on budget and resource constraints, and the results of those efforts should be presented to the FMC’s. The FMC’s will be better able to provide input to the adequacy of Coast Guard enforcement goals, as well as the validity of the estimated inputs to the model. In turn, the Coast Guard will be providing the FMC’s with quantifiable measures as to the enforcement effort available to implement policy decisions. A quantifiable report on the capabilities or lack thereof to enforce new fisheries plans will significantly influence the outcome of fisheries policy.

MEASURING THE EFFECTIVENESS OF ENFORCEMENT

In 1987, 1990 and 1993 the General Accounting Office reported the Coast Guard did not have adequate systems in place to measure the efficiency and effectiveness of its programs. Such systems would help the Coast Guard manage its activities and allocate its resources effectively. Performance measurement systems would also assist both the

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Coast Guard and others - notably Congress - in accurately assessing the Coast Guard’s resource needs. Congress (both the House and Senate appropriations committees) have frequently and severely criticized the Coast Guard since 1984 for more complete justification for the allocation of operating expenses. The need for the Coast Guard to develop measures of effectiveness for its fisheries enforcement mission have never been greater.

The Coast Guard spent 395 million dollars in direct operating costs for fisheries enforcement in fiscal year 1995. Justification for this large outlay of funds is necessary to quantify how much enforcement is being bought. This justification will help fishery managers make management decisions with the costs of enforcement in mind. The resulting policy decisions should bear out the costs and benefits when determining how much or little at-sea enforcement is desired to achieve management objectives. The present attempts at estimating enforcement costs in the regulatory impact analysis of FMP’s are inadequate and unrealistic.

33 Congress, House, Subcommittee on the Department of Transportation and Related Agencies Appropriations, Department of Transportation and Related Agencies Appropriations for 1994. 103rd Cong., 1st sess., 20 April 1993, p 820.

34 Congress, House, Committee on Merchant Marine and Fisheries, Reviewing the Programs, Initiatives, and Reductions Represented in the Coast Guard’s Fiscal Year 1995 budget Request. Hearing before the Subcommittee on Coast Guard and Navigation. 103rd Cong., 2nd sess., 15 March 1994, p 52.
PROBLEMS WITH MEASURING EFFECTIVENESS OF FISHERIES ENFORCEMENT

An effective measure of the quality of enforcement has eluded the Coast Guard for years. This problem is not unique to the Coast Guard; it is common in any natural resource enforcement scheme. Detected non-compliance can be measured, but since no one witnesses or reports infractions to the resource, undetected non-compliance cannot be measured and is unknown. Unlike urban crime, where the actual number of burglaries, auto thefts, homicides, etc. are known and can be compared to the arrest and conviction rates to measure enforcement effectiveness, noncompliance with the MFCMA is not measurable. As a result, the Coast Guard has used effort expenditure and violation counts instead of established goals to monitor and evaluate fisheries law enforcement effectiveness, even though this effort has not been accurately demonstrated to improve effectiveness in protecting resources\(^5\). To achieve better enforcement policies, the question becomes what should be measured?

Optimum yield, the long term goal of any fishery, has frequently been cited as a unit of measuring enforcement effectiveness. In fact the 1980 Fisheries Law Enforcement Program Model II (FLEPM II) attempted to link enforcement effort with a percentage deviation in attaining optimum

\(^5\) Department of Transportation, U.S. Coast Guard. *Coast Guard Fisheries Enforcement Study*. COMDTINST 16214, Dec 93, p 17.
yield with inconclusive results. The problem with this approach is that optimum yield is imprecisely defined and several outside elements influence optimum yield (weather, pollution, economics, environmental conditions, etc.) to establish a link between the two.

To develop a quantifiable method of determining the effectiveness of its fisheries law enforcement program, the Coast Guard should establish enforcement effort goals and allow fisheries managers to provide input whether that effort is adequate to achieve conservation goals. To link enforcement goals with conservation goals, the enforcement goals require some basic characteristics to allow the effectiveness of those goals to be measured. First enforcement effort goals should be allocated by individual FMP’s. The number of participants in a fishery, the status of the fishery, incentive for fishermen to comply/not comply with regulations, and geographic distribution of the fishing fleet are just a few factors that make enforcement of each individual FMP unique. Enforcement goals cannot and should not be set on the sole basis of geographical area. Second, goals for enforcement effort should be validated. Do the enforcement requirements of a particular FMP exceed the capability of the Coast Guard to meet the enforcement goals? If the Coast Guard can meet the enforcement goals for an FMP, is the resulting compliance acceptable to the conservation goals of the FMP? Finally, fishery managers

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should review the goals and validation of enforcement effort, both to provide policy guidance to the Coast Guard regarding enforcement effort goals and to adjust fisheries policies if enforcement requirements for an FMP exceed the enforcement capabilities of the Coast Guard. This iterative nature will keep enforcement effort current to the changes in fisheries technology, enforcement strategies and fisheries policy over time.

SUMMARY

In the NMFS Northeast Region, the Coast Guard is capable of providing 30,000 cutter hours for the purpose of maritime fisheries enforcement. This amount of effort should be considered a ceiling, as it is limited by both budgetary and resource limitations. Without increases in both of these areas, fisheries enforcement effort cannot increase.

The Coast Guard has just 34 cutters in this region capable of off-shore fisheries enforcement, these multi-mission vessels are also responsible for other operations which the Coast Guard has responsibility. Maritime fisheries enforcement is at or nearing a peak in mission priority, competition with existing or new missions mandated by Congress may reduce the cutter effort available for maritime fisheries enforcement. In addition, periods of maritime related crises also reduce cutter effort available for fisheries enforcement.
Increases in Coast Guard statutory responsibilities have resulted in a significant increase in Coast Guard operating costs over the last decade. This is reflected in the Coast Guard's budget, as the operating expense account has seen a significant rise while the acquisition, construction and improvement account has remained relatively flat over the last decade. This has resulted in a stabilization or slight decline in numbers for an aging cutter fleet. The available effort cutters are able to direct towards all Coast Guard missions is limited more by maintenance, repair and upkeep requirements than operating funding. As this fleet ages, less time becomes available for competing Coast Guard missions.

The Coast Guard must address these limitations to two entities: Congress who controls the budget, and fisheries managers that implement increasingly complex FMP's. Congress needs quantifiable input whether the Coast Guard has the resources to carry out its statutory responsibilities. The Coast Guard has been unable to adequately justify its budget to Congress for years. In light of Congressional budget constraints imposed by the Budget Enforcement Act of 1990, the Coast Guard will only be successful in increasing cutter resources if it can quantify and justify the need for more cutter effort. Increasing funding to the AC & I account to modernize and expand the cutter fleet will require quantifying effort needed for all mission areas, particularly fisheries enforcement. It will
also require an established method to measure the effectiveness of fisheries enforcement effort.

To quantify cutter effort and establish measurements of effectiveness for fisheries enforcement, the Coast Guard must establish enforcement goals and link them to conservation goals. This will require consultation with fisheries managers. Different fisheries require different levels of enforcement effort. Allocation of the 30,000 cutter hours amongst FMP’s in the NMFS Northeast Region establishes the enforcement goals. Fisheries managers should be consulted to evaluate whether the enforcement allocation is sufficient to meet the conservation and management goals of the fishery. The fisheries managers are also aware of the scientific, social and economic factors that affect the conservation goals of an FMP, and as such can help the Coast Guard measure the effectiveness of fisheries enforcement effort by validating the outcome of actual fisheries enforcement effort with the enforcement goals.

To quantify the necessary level of maritime fisheries enforcement and measure the effectiveness of that effort, the following actions are recommended:

(1) Make widespread use of the '92 Composite Model. This analytical model is a tool to assist regional operational commanders in establishing enforcement effort necessary for individual FMP’s (enforcement goals - output)

(2) Modify measurement databases (Abstract of Operations, SABRE, EMIS) to measure the outcome of enforcement effort. The data being collected is not useable because it is not collected by
individual FMP's. The ability to measure the outcome of specific enforcement effort by FMP is essential to validate the model outputs.

(3) Validate enforcement goals (output) with conservation goals (outcomes). This may involve increasing or decreasing enforcement effort for a particular plan. Fisheries policy makers (FMC's) should be involved in the validation process. Awareness of the enforcement outputs required by their management decisions as well as the Coast Guard's ability to meet the requirements of those decisions will impact future policies. Inability of the Coast Guard to meet required outputs will result in inadequate outcomes and the eventual failure of management decisions.
In the development of management plans, the regional fishery management councils do not always consider enforcement or compliance when making fisheries policy decisions. This is because the regional fishery management councils are a complex, highly-charged microcosm of the federal government. The demands placed on council members by various interests is great. Development of management plans that meet statutory requirements, conservation goals, and social and economic demands of interest groups strain the management process. It is not surprising that enforcement issues are often set aside or forgotten in the various agendas of council meetings.

Enforceability of management plans and their ensuing regulations significantly affect the maritime fisheries enforcement system. With a limited amount of cutter effort available for fisheries enforcement in the NMFS Northeast Region, the Coast Guard must manipulate the development of fisheries regulations so the available amount of enforcement is sufficient to achieve a reasonable level of compliance. This is done in two ways. First, individual measures within management plans must be enforceable so infractions of those
measures are detectable and prosecutable. Additional enforcement effort is necessary to build a suitable case that will result in successful prosecution of the violator if regulations are difficult to enforce⁷. Second, the overall management plan must not require excessive enforcement to achieve a reasonable level of compliance. Enforcement requirements can be maintained at a very minimal required level if regulations first and foremost are acceptable by the fishermen, leading to a satisfactory level of compliance - voluntary compliance⁸.

**OBJECTIVE**

The objective of this chapter is to examine the Coast Guard’s role in developing enforceable fisheries regulations and the methodologies used to advance the Coast Guard’s agenda. Keeping in mind that fisheries managers will never write management plans from an enforcement perspective, recommendations to improve the Coast Guard’s efforts in developing fisheries regulations will be made.

**THE COAST GUARD ROLE IN DEVELOPING MANAGEMENT PLANS**

Fisheries management is a system that is based on more than one objective. The MFCMA states “A national program

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⁷ A good example of an unenforceable measure within a management plan was the meat count procedure under the Atlantic Sea Scallop FMP (50 CFR part 650). Weighing samples at sea is difficult, and variations in original and thawed weights of shucked sea scallops made it difficult to ensure compliance by both fishermen and enforcement entities. Changing fishing technology further complicated the issue with freezer vessels entering the fishery. The case of United States v. F/V Alice Amanda (987 F.2d 1078, 1993) highlights the frustration of fisherman, the USCG, NMFS, and NOAA General Counsel in failed enforcement effort of meat count regulations. Amendment 5 to the Sea Scallop FMP removed the meat count standard.

for the conservation and management of the fishery resources of the United States is necessary to prevent overfishing, to rebuild overfished stocks, to insure conservation, and to realize the full potential of the Nation’s fishery resources39. This statement broadly defines the national fishery policy for the United States; further definition of specific objectives are provided as national standards within the act. As with many policies, the individual objectives are reasonable but are seldom complimentary when viewed as a whole.

Rothschild (1985) suggests that a unified, carefully constructed fishery policy is essential to achieve the best use of our fishery resources. A unified policy is necessary as a guideline for effective decision making, for without such guidelines organizations will be engaged in activities rather than being charged with specific results40. The Magnuson Act is a unified fisheries policy, and it assigns responsibility for enforcing fisheries policy to the Secretary of Commerce and to the Coast Guard. In the first decade of the MFCMA, the Coast Guard’s initial approach to the fisheries enforcement was analogous to Weimer and Vining’s “old public administration” paradigm. The major objective was efficient execution (enforcement) of a program


(the Magnuson Act) established by the political process. This ideal of sound enforcement insulated from the art of politics resulted in Rothschild’s activity oriented versus a result oriented approach to fisheries enforcement, which was unsuccessful. This failure resulted in a paradigm shift by the Coast Guard in the second decade of the MFCMA to what Weimer and Vining characterized as the “new public administration”: where practitioners (the Coast Guard) seek to influence the adoption as well as the implementation of policies (enforceable fisheries regulations). Effective participation in the political process achieves a result oriented approach to fisheries enforcement: compliance with the regulations. Therefore the Coast Guard must become politically involved even though its primary focus remains operational decision making.

The Coast Guard needs to analyze ways of achieving its objectives. This analysis is needed because in fisheries policy, decisions are continually and typically being made without the decision-makers having other than intuitive ideas about the consequences of their decisions. Consistently good decisions can only arise from an understanding of their consequences, and such understanding can only be arrived at through analysis which is explicitly

41 David Weimer and Aidan Vining, Policy Analysis and Related Professions, p 4.

42 David Weimer and Aidan Vining, Policy Analysis and Related Professions, p 8.
designed to aid decision making"). It is crucial for the Coast Guard to inform decision-makers of the consequences of their decisions to effectively advance the Coast Guard agenda.

The role of enforcement analyst is carried out by the Coast Guard designee to the regional fishery management councils. The Magnuson Act provides the Coast Guard with a non-voting seat on each regional council. The Coast Guard’s role is to advise the Council on matters regarding the enforcement of fisheries regulations at sea and to provide input on the safety impact of proposed council actions.

Because fisheries management is becoming more focused on allocating fish stocks among user groups, several agendas of experience, constituency, and loyalty are at play on the councils. The Coast Guard designee on each council must be able to systematically evaluate the constituencies, loyalties and objectives of various council members. Through this analysis, the Coast Guard designee can shape the Coast Guard’s agenda to influence the development of fishery management plans that meet Coast Guard objectives.

Since the Coast Guard designee has a non-voting seat on the council, that person must be able to persuasively advance Coast Guard objectives with the voting members. As a result, the Coast Guard representative must have the

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44 Department of Transportation, U.S. Coast Guard. Coast Guard Fisheries Enforcement Study. COMDTINST 16214. Dec 93, p 7-4.
credibility, maturity, judgment and personality to represent Coast Guard interests and interact with council members. Although each of these traits are important, credibility is the key issue. The other traits can be manipulated by individual selection of the Coast Guard council designee.

Many factors can affect the credibility of the Coast Guard council designee, and substantial efforts have been undertaken to bolster the designee’s credibility. Several recommendations of the Coast Guard fisheries enforcement study have been implemented:

- The Coast Guard designee is a more senior person, Lieutenant Commander (LCDR) or above;

- The Coast Guard has developed a close working relationship with NMFS management and enforcement since the NMFS Regional Director has the sole federal vote. This coordination bolsters the credibility of the Coast Guard designee;

- The District Commander (Rear Admiral) periodically attends council meetings. The designee’s credibility is bolstered by sending a clear signal to the council that the designee has the District Commander’s ear;

In important fisheries districts, the Coast Guard designee will have post-graduate training in fisheries management or marine affairs.

A major issue of credibility for Coast Guard council designees centers around establishing a Coast Guard vote on the council. Several studies have advanced this recommendation to increase the Coast Guard’s ability to

45 Department of Transportation, U.S. Coast Guard. Coast Guard Fisheries Enforcement Study. COMDTINST 16214. Dec 93, p 7-10.
affect policy decisions". The Coast Guard opposes a voting position on the council for credibility purposes. The reasoning is that the allocation issues now being decided by the councils are of such an emotional and economic magnitude that it would be counter-productive for the Coast Guard to become a voting member. It is more productive for the Coast Guard to continue to remain neutral and be able to speak persuasively to all sides on enforceability and safety issues".

ENFORCEABILITY OF INDIVIDUAL MANAGEMENT MEASURES

One of the Coast Guard's objectives for its fisheries law enforcement program is to ensure the enforceability of fisheries management measures through more effective involvement in the fisheries management process". This objective is being achieved by the Coast Guard designees to the fishery management councils that credibly address enforcement issues and further the Coast Guard's agenda.

The resource managers on the regional councils focus on issues of conservation and allocation, and expect to receive Coast Guard fisheries law enforcement services which support their management plans and objectives". This is one reason

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46 Both the Massachusetts task force and National Research Council are two of the more prominent studies that have advocated a voting role for the Coast Guard on the councils.

47 Department of Transportation, U.S. Coast Guard. Coast Guard Fisheries Enforcement Study., COMDTINST 16214. Dec 93., p 7-7.


49 Department of Transportation, U.S. Coast Guard. Coast Guard Fisheries Enforcement Study., COMDTINST 16214. Dec 93., p 4-7.
why it is imperative the Coast Guard quantify the amount of enforcement effort available for each management plan or proposal. The Coast Guard issue of the enforceability of council measures is related to, but must compete with, the overwhelming issues of conservation and allocation. To bring the issue of enforceability on equal footing with the often conflicting issues of conservation and allocation, the Coast Guard must characterize enforceability in such a way that it reaches the forefront of the political agenda.

Issues in conflict vary along several dimensions, and it depends upon how an issue is defined that has important bearing on the nature and eventual outcome of a conflict. Control over how the issues are characterized means control over the choice of battlefields upon which a conflict will take place. A group will always select a battlefield that gives it an advantage in terms of support. That battlefield can be selected by defining the issues in four ways: (1) specifying the objective, (2) the scope of significance, (3) the degree of precedence, and (4) constituent support.

How specific an objective is depends upon how abstractly or concretely the objective is defined. Objectives need to be concrete and clearly enunciated to effectively define the importance of an issue.

Improving the enforceability of fisheries management measures is a vague and abstract objective, even though from

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past experience the Coast Guard and fishery managers have learned what measures are unenforceable and result in non-compliance. To clarify the objective, the Coast Guard has recently conducted a survey of agencies involved in the enforcement of fisheries regulations to develop a "rules of thumb" enforcement guide for use by all regional fishery management council members and their staff. This "rules of thumb" document will assist council members in evaluating the enforceability of particular management measures as FMP's are being developed. It is not an all-encompassing, definitive guide but a tool available to councils for enforcement analysis.

A condensed version of the preliminary results of the survey are provided in table 3. The Coast Guard is developing a list of specific management options and is providing an evaluation of those measures. These actions will characterize the issue of enforceability of management measures as a concrete, clearly enunciated issue; not as a vague, abstract one.

The significance of an issue refers to its impact. Is the issue peculiar to the immediate disputants, or is there more general significance? The greater the impact and

51 Department of Transportation. U.S. Coast Guard. CG Memo 5700 dtd 28 Jul 95. The Coast Guard distributed a survey to CG District and Group offices on the Atlantic Coast. The survey was also provided to the ASMFC, and input was received from NJ, NH, ME, FL, and MD state enforcement agencies. Preliminary results from the survey were received from CG Atlantic Area Operations, who is compiling the "rules of thumb". Personal communications with LT Beighau.

52 Department of Transportation, U.S. Coast Guard. CG Memo 5700 dtd 28 Jul 95.
number of persons potentially affected by the issue, the more people will seek active engagement in the decision making process". Two significant measures of significance are the amount of money involved and the number of people affected by the proposed program.

Table 3.
Enforceability of Management Measures

<table>
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<tr>
<th>ENFORCEMENT MEASURE</th>
<th>AT-SEA ENFORCEABILITY</th>
<th>DOCKSIDE ENFORCEABILITY</th>
<th>OVERALL ENFORCEABILITY</th>
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Note: Enforceability of measures is ranked from 1 being least enforceable to 10 being most enforceable. DAS stands for Days at Sea, VTS stands for Vessel Tracking System.

One of the major concerns the Coast Guard has about management measures is the impact they have on the Coast Guard itself. Complex, unenforceable regulations tend to tie up law enforcement assets and frustrate law enforcement

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efforts. This can lead to a loss of public respect for the Coast Guard and subject the Coast Guard to unfair criticism if the management measures fail. Although this is a valid concern, it is one that is internal to the Coast Guard and therefore has minimal significance to the FMC’s. The Coast Guard needs to externalize the impacts of management measures by characterizing the effects of un-enforceability to a large number of fishermen.

Enforcement comprises the most costly aspect of implementing a management plan and is critical to attaining its objectives. Although this is an important issue to be considered when developing FMP’s, this impact also has to be externalized to the individuals affected by the management plans. The negative impacts of un-enforceable regulations on those individuals must be characterized.

A good example of this can be demonstrated using the management measures of closed areas versus gear limitations. Closed areas can adequately be enforced by Coast Guard aircraft and vessels, and it is an enforcement activity that does not interrupt legitimate fishing operations. The Coast Guard has identified this as a source of positive customer satisfaction. On the other hand, gear limitations can only

54 Department of Transportation, U.S. Coast Guard. Coast Guard Fisheries Enforcement Study. COMDTINST 16214, Dec 93, p C-5.


56 Department of Transportation, U.S. Coast Guard. Coast Guard Fisheries Enforcement Study. COMDTINST 16214, Dec 93, p 4-5.
be enforced by interrupting fishing operations. Fishing gear must be removed from the water and inspected, resulting in considerable lost fishing time and revenue. This interference with lawful resource users has been identified as the greatest dissatisfier for industry.

By externalizing the negative impacts of un-enforceable management measures to a large constituent groups such as fishermen and environmentalists, the Coast Guard's issue becomes one of significance. Unenforceable management measures do have negative repercussions for large numbers of people. Sensationalizing the negative effects (lost fishing time and revenues, failed conservation efforts) for large groups of individuals (fishermen, environmentalists) will heighten the impact of the issue.

The precedence of an issue refers to the extent to which an issue is a routine matter having more or less clear precedents and probable procedures for its resolution versus the extent to which it is extraordinary. Possible indicators to measure precedence include: the number of similar issues in the past and the degree of success in implementation, the frequency of such programs implemented

57 Department of Transportation, U.S. Coast Guard. Coast Guard Fisheries Enforcement Study. COMDTINST 16214. Dec 93., p 4-5.

in the past, and perceptual knowledge of such precedents by the disputants and relevant or affected decision makers’.

The management of domestic fisheries under the Magnuson Act has been occurring for nearly 20 years. Currently there are over 34 FMP’s in effect. There is nothing extraordinary about developing enforceable regulations. Although every fishery is different and there are several options for management, all have been tried with varying degrees of success or failure.

One problem that may be encountered is the perceptual knowledge of these precedents by council members. Council members are to be knowledgeable regarding conservation and management or the commercial or recreational harvest of fishery resources”. New members may not be knowledgeable in the success or failures of enforcement efforts. With a high turn-over rate of council members, it is probable the perceptual knowledge of enforceability is lacking”.

The Coast Guard must take positive steps towards educating council members in the importance and results of past enforcement efforts. The development of the “rules of thumb” are a major step in that direction. But the Coast Guard must also become actively involved with training new


60 Magnuson Fishery and Conservation Management Act, U.S. Code vol 16 sec 1852 at (b) (2) (A).

61 Magnuson Fishery and Conservation Management Act, U.S. Code, vol 16 sec. 1852 at (b) (3). Council members are limited to terms of 3 years. Members can be re-appointed to the council, but are limited to a maximum of 3 consecutive terms.
council members through the NMFS in-service council training for new council members.

To better ensure results within the council system the Coast Guard must simultaneously work outside of the council system to build support for its objectives through constituent support. This can be achieved through an aggressive public affairs campaign aimed at industry and public constituency groups for fisheries enforcement activities.

One of the recommendations made by the Coast Guard fisheries enforcement study was to expand Congressional and Public support. The study specifically recommended:

Convey Coast Guard concerns and successes in fisheries law enforcement to State and Federal agencies, congressional members, industry and public constituency groups with a high level of interest in Living Marine Resources. Establish a mechanism to receive feedback and manage expectations.

Present the relative importance of the fisheries enforcement mission to in-house public affairs offices for dissemination to field units and the media.

Maintain increased profile and visibility of program managers through participation with appropriate contacts in concerned groups external to the Coast Guard.

Coast Guard public affairs offices should establish contacts with industry media representatives and promote public awareness of Coast Guard enforcement activities.

Program manager needs to be a visible figure in fisheries related meetings, forums and inter-agency activities.

62 Department of Transportation, U.S. Coast Guard. Coast Guard Fisheries Enforcement Study.
By taking action on these recommendations, the awareness of the strategically important political community will be heightened. A well planned and executed public awareness campaign influences the constituency of the decision-makers and will further the Coast Guard’s objectives.

A correlation can be drawn between the public affairs support for the Coast Guard mission of Search and Rescue (SAR) and the Coast Guard mission of fisheries law enforcement. The SAR mission receives extensive public affairs support and the Coast Guard aggressively works at achieving maximum media and constituent exposure. Search and Rescue is often referred to as the Coast Guard’s “bread and butter”, and the Coast Guard is viewed with high esteem and support for its activities. Even with significant policy changes that had a negative effect on its supporters, such as the non-emergency assistance policy, the support for its activities has not faltered. Any proposals that negatively impact the SAR mission are vehemently opposed.

The opposite of the Coast Guard’s “good guy” SAR image is the “bad guy” role as ocean policeman. As implementers of often unpopular management and allocation policies, support for Coast Guard fisheries law enforcement missions

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63 For example, the Coast Guard must follow extensive procedures set forth by the GAO to justify the closure of any small boat SAR station. Any attempts by the Coast Guard to justifiably close underutilized SAR stations as a result of mandated government reductions has resulted in vigorous public and Congressional opposition.
is lacking. Although it is unreasonable to expect equal status for fisheries enforcement as SAR, it is reasonable to expect similar support for fisheries enforcement if similar levels of public affairs exposure were provided.

The negative image of the heavy-handed ocean policeman can easily be overcome by an aggressive public affairs campaign. As in the SAR mission, support must be rallied by characterizing the Coast Guard as rescuers. Only in this case, the Coast Guard is "rescuing" the environment. A great deal of support for fisheries law enforcement can be obtained from many constituent groups by characterizing the Coast Guard as protectors of the environment. The result of external support for the Coast Guard's fisheries law enforcement objectives will be strong, as in the Coast Guard's SAR objectives.

OVERALL ENFORCEABILITY OF MANAGEMENT PLANS

The Coast Guard cannot blindly manipulate individual measures within management plans without considering characteristics of the regulations that affect the degree of voluntary compliance. The more a regulations restricts a person's behavior, the greater the incentive he has to violate the regulations, other things being constant. Considering the costs of, and limited resources for, fisheries enforcement, the Coast Guard must balance the

64 Jon Sutinen, Alison Rieser & Jon Gauvin, “Measuring and Explaining Noncompliance in Federally Managed Fisheries”, Ocean Development and International Law, Vol 21, p. 340. Conservation regulations that permit greater flexibility among fishermen are expected to result in greater compliance, but at the expense of diminishing conservation of the resource and future benefits. This tradeoff may be one of the most difficult problems facing fisheries managers today.
enforceability of individual measures within a plan with industry perspective and acceptance.

Management measures which are simple, understandable and consistent with traditional fishing practices may not require a high degree of governmental enforcement to insure compliance by the industry". Other characteristics of regulations that are important for compliance include their stability, credibility and equity of impact". All of these characteristics may not be attainable, resulting in greater enforcement effort directed at one FMP than another.

Stability of regulations. The more frequently a regulation is changed, the less confidence fishermen have in the conservation measures within the plan and the fisheries managers themselves. A good example of this can be found in the Northeast Multispecies FMP that was first implemented in 1986. That plan required its first amendment the following year, and seven amendments in its first ten years of management. the widespread non-compliance with the Northeast Multispecies Plan reported by Sutinen, Rieser and Gauvin (1990) can certainly be attributed to a lack of stability in the regulations. This trend is certain to continue, as the latest change (amendment 7) is a framework amendment. That is, changes and adjustments to the plan will only require 2 public hearings before submission to

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65 Pat Carroll. "Enforcement and Setting Regulations", p 43.

NMFS for approval, greatly expediting the process of changing the FMP. Although this framework amendment greatly improves the ability of the FMC's to attain conservation goals, frequent changes to the plan will reduce voluntary compliance and burden enforcement.

Credibility is closely linked to the stability of the regulations. Fishery conservation regulations restrict current fishing activity to protect and improve future returns from fishing. If fishermen do not believe the short-term sacrifices will result in long-run benefits, incentive to comply is considerably weakened. Frequent changes to FMP's further restricting fishing activity reduces the credibility of the managers and their regulations to provide future benefits, and reduces the incentive for fishermen to comply.

Equity of regulatory impact involves leveling the playing field amongst various user groups. The most difficult regulatory balance to achieve is between gear groups. The Northeast Multispecies FMP regulates gillnetters, longliners and bottom trawlers that seek an edge over each other in allocation. Additionally there is the competition between commercial and recreational fishermen for a fair allocation of the resource. Equity in regulation is difficult to achieve when scarce resources must be allocated between large numbers of user groups. When one group feels the regulations unfairly reduce its allocation, incentive not to comply increases.
The Coast Guard has expended substantial effort to identify and implement measures to improve the enforceability of management measures. These efforts have focused on direct interaction with the FMC's by the Coast Guard designee to the councils involving enforceability of individual management measures. The Coast Guard must also work outside of the council system to build support for fisheries enforcement activities through and aggressive public affairs campaign.

Enforceability of individual management measures is but one step in developing enforceable FMP's. The overall management plan must also be acceptable to industry and user groups to promote voluntary compliance. FMP's that require excessive enforcement by the government to achieve reasonable levels of compliance are not enforceable.

It may not always be possible for the FMC's to develop FMP's that are widely accepted by industry. The Coast Guard must remain aware of the factors that affect voluntary compliance with management measures, and those FMP's that require greater enforcement effort due to their shortcomings. The "relative incentive for fishermen not to comply with the regulations" input to the 1992 Composite Fishery Analytical Model is not so difficult to quantify if the Coast Guard remains abreast of industry reaction to council actions. The Northeast Multispecies FMP, a fishery with little regulatory stability, lack of industry
confidence in the credibility of management measures, and many user groups competing for allocation, has the least incentive for voluntary compliance and would therefore require the greatest amount of enforcement effort in the NMFS Northeast Region. On the other hand, the Squid, Mackerel, Butterfish FMP has regulatory stability, credible management measures, and few user groups competing for allocation of resources. This plan has high incentive for voluntary compliance and requires the least amount of enforcement effort in the NMFS Northeast Region.
When examining the maritime enforcement system, the most significant factor that influences the compliance, the overall goal of enforcement, is the prosecution of violators. The problem is that fisheries are a common property resource, and individual incentives are incompatible with collective interests. Regardless of the restrictions placed on a fishery, there is an economic incentive for individuals to violate the regulations.

Although economics are not the only factor to be considered when trying to determine what motivates an individual to comply with regulations, once the decision to participate in an illegal activity is made, that decision is rationally based on the potential benefits and costs of the offense. Anti-social or moral codes of behavior are not considerations at this point. The prosecution of these offenses need only to remove the rationality of the decision to partake in illegal activities by increasing the costs of the offense to the point that exceeds any benefits received.

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Although the Coast Guard’s fisheries enforcement study attempts to look at all aspects of the maritime fisheries enforcement system, its conclusions on the importance of these factors to Coast Guard fisheries enforcement has failed to affect the perspective of senior Coast Guard management. As recently as 1993, the Commandant of the Coast Guard responded to Congress’ inquiry into whether the level of penalties should be increased by stating: "...more patrolling is necessary, I have no problems with the level of fines at the present time"", contradicting the recommendations of the study. Increased patrolling is not feasible in the NMFS Northeast Region, and to maximize the effectiveness of current enforcement effort the Coast Guard must influence and increase in penalties for violations of fishery regulations.

The “solution” of raising penalties for violations of fisheries regulations is anything but simple. Complications arise when the civil penalty process is examined, specifically statutory and agency limitations in prosecuting MFCMA infractions. To understand these complications, NOAA’s procedures for prosecuting civil penalty cases must be understood. The administrative hearing process must be reviewed along with the associated problems concerning penalty assessments.

OBJECTIVE

The objective of this chapter is to highlight the problems and constraints of the civil penalty process, and the implications for enforcement and resulting success of fisheries management plans. If the economic benefits of engaging in illegal activities cannot be removed, then other motivating factors must be considered when developing fisheries regulations.

THE CURRENT SYSTEM OF CASE PROSECUTION

The policies and procedures followed by NOAA in prosecuting a civil penalty case are complex and will be examined in detail in this section. A simplified flow chart of the civil proceedings is provided as figure 8.

Fig. 8. NOAA Civil Proceedings Flow Chart
DOCUMENTATION OF VIOLATIONS

The process of civil prosecution of Magnuson Act violations begins with the discovery and documentation of an illegal act by any one of a number of different groups of enforcement officers. Most frequently it is agents of the National Marine Fisheries Service (NMFS) who enforce fishing regulations. The Coast Guard, as well as various state conservation officers\(^6^9\) also document violations of the Magnuson Act. For example, in 1995 there were 599 violations of the MFCMA reported in the NMFS Northeast Region. Of those violations, 420 were documented by NMFS agents and 179 were documented by Coast Guard air and surface patrols\(^7^0\). These agents briefly document the violation on an Enforcement Action Report (EAR), a copy of which is provided to the individual not in compliance with the regulations. A case package is compiled by the issuing enforcement agent, with more detailed information included in the Offense Investigation Report (OIR). This report is very thorough, as it may be the only detailed documentation of the violation. Additional information, such as charts of the area, pictures, net measurements, spade certification and statements may also be included in the case package.

\(^6^9\) State enforcement officers may enforce certain federal regulations provided they are authorized by cooperative agreements. For example, the State of Florida Department of Natural Resources (DNR) has entered into a cooperative agreement authorizing the Florida Marine Patrol to enforce fishing regulations pursuant to the Magnuson Act in the exclusive economic zone (EEZ).

\(^7^0\) Enforcement Management Information System (EMIS)
Once completed, the case package is forwarded to the Law Enforcement Division (LED) of the NMFS regional office where the violation occurred. The LED reviews the case, determining if the accused is a repeat offender as well as ownership of the vessel. Additional information or clarification of facts may be requested from the issuing enforcement agent to ensure the case package is complete before forwarding it to the NOAA Office of General Counsel for prosecution.

REVIEW BY GENERAL COUNSEL

Once the case package is received by the Office of General Counsel (G.C.), it is assigned to an attorney for review. The purpose of this review is to decide whether the G.C. should prosecute the case by determining if all elements of a violation are present. If the case does not meet standards necessary for prosecution, the case is closed as unfounded. NOAA General Counsel declined to prosecute 267 cases in 1995, which accounted for 44.2% of the cases handled by G.C. in 1995. A break-down of cases resolved for 1995 in the Northeast Region is depicted in figure 9. If the case is legally sound, a Notice of Violation Assessment is issued.

THE NOTICE OF VIOLATION ASSESSMENT (NOVA)

The Notice of Violation Assessment (NOVA) is the charging document to the respondent in all cases prosecuted by the G.C. The NOVA specifies the respondent, the statutes and regulations violated, facts surrounding the case,
evidence seized, and amount of penalty. It also provides options for various courses of action the respondent must pursue within 30 days of receipt of the NOVA.

Fig. 9. Disposition of Cases by Office of General Counsel, NMFS Northeast Region. Source: Enforcement Management Information System (EMIS)

An important purpose of the NOVA is to specify the respondent. In most fishing violation cases, both the owner of the vessel and the captain are charged. This practice is intended to encourage accountability and responsibility in both the captain and the owner⁷¹. The intended result is for owners to hire responsible captains for their fishing vessels that will comply with fisheries regulations. Since

the owner of a fishing vessel directly benefits from illicit activities of the captain, this practice is meant to discourage owners from pressuring captains to violate regulations. The captain and owner can be charged individually or jointly and severally, usually depending upon the policy of the regional office of NOAA General Counsel. The advantage of charging owner and captain jointly and severally is that only one judgment is necessary, with the disadvantage being NOAA G.C. must serve both respondents before proceeding with legal action. The difficulty is not with serving the owner of the vessel, it is with serving the captain who is often at sea or otherwise difficult to locate. It is the policy of the Office of General Counsel, Northeast Region to charge the owner and captain jointly and severally.

ASSESSING A PENALTY

Assessing a penalty in the NOVA is perhaps the most important and contentious aspect of the civil violation process. NOAA’s procedures for assessing penalties will be examined in this section. Later these procedures will be compared to penalty and compliance theory.

The regional offices of the General Counsel are responsible for developing penalty schedules for regulations that apply within their region. These schedules, once approved by NOAA General Counsel for Enforcement and

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72 Office of General Counsel, Northeast Region, interview by author, Gloucester, Massachusetts. 29 March 1996
Litigation in Washington D.C., provide a standard for assessing penalties for violations. These schedules must be designed to be equitable and fair, while at the same time providing sufficient deterrence. The impact of the fine on the individual must be balanced against the protection of the resource. These penalty schedules are intended to be flexible, capable of being adjusted upward or downward depending on the number of violations occurring and feedback from various personnel. A sample penalty schedule for the Northeast Multispecies Plan is provided in appendix (1).

Several factors affect the determination of a penalty. Most important is the determination of whether the respondent is a repeat violator. Repeat violators are fined more heavily than first time violators. The statute in question, the nature, circumstances, extent, and gravity of the alleged violation; and respondents degree of culpability are all considered. Aggravating and mitigating circumstances are also considered, particularly cooperation or resistance to enforcement agents 73. For minor violations, a warning may be issued in lieu of a monetary penalty.

More serious violations may result in seizure of the catch or vessel in addition to a monetary penalty. Usually the estimated value of the catch is added to the penalty if the catch is small rather than seizing the catch 74. Vessel


74 Guidance to Coast Guard units is not to pursue catch seizure unless the estimated value of the catch is greater than $3,000. Office of General Counsel, Northeast Region, interview by author, Gloucester, Massachusetts, 29 March 1996 indicates value of catch is always added to the assessed penalty in
seizure is rare, and is usually reserved for third-time violators.

Another penalty option is for the enforcement agent to assess the penalty at the time of the violation. Summary settlement schedules are used to give a minor, first time violator an on-the-spot ticket. Although this is a good tool to quickly resolve minor violations of the MFCMA, its use is infrequent. NMFS data reveals summary settlements were used only 18 times in fiscal year 1995, accounting for only 3 percent of all cases in the Northeast region. In these instances the penalties are low, and the respondent has 20 days to pay the penalty. The average penalty for summary settlement cases in the Northeast Region for 1995 was $141.67. Since enforcement agents are unable to determine prior offense history of the violator in the field, the summary settlement can be withdrawn by the G.C. if it is determined the violator had prior offenses or if further information warrants issuance of a NOVA.

ACTION BY THE RESPONDENT

The respondent is served the NOVA, usually by certified mail, and is provided with a copy of the rules of civil procedure which explain the rights and responsibilities of the respondent. Once the respondent receives the NOVA, he

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75 Enforcement Management Information System. Of the 18 summary settlements issued in fiscal year 1995, 17 were by Coast Guard officers and 1 was by a NMFS agent.

76 Enforcement Management Information System (EMIS).
must respond within 30 days and pursue one of three options. First, he can pay the penalty and the case will be closed upon receipt of the penalty amount. This occurs infrequently, and NMFS reports no cases closed in this manner for fiscal year 1995. Second, he can attempt to settle the case for less than the assessed penalty. 267 cases, or 44 percent of the cases handled in the Northeast region in fiscal year 1995 were settled for an amount less than the assessed penalty. This involves pleading financial inability to pay. The respondent will be provided financial disclosure forms from which ability to pay can be considered. The financial information provided is independently verified before a final settlement is reached. If G.C. is satisfied that the respondent cannot pay the penalty in a lump sum, installed payments may be arranged or a portion of the penalty may be suspended with the respondent placed in a probationary period, running from six months to five years. To induce accelerated payments, the G.C. frequently ends the probationary period upon receipt of the final payment. Any subsequent violation by the respondent during the probationary period will make the suspended portion of any civil penalty immediately due to the government. These actions contribute greatly to the perception of fairness in the penalty process. It is important to note that NOAA’s consideration of a respondent’s ability to pay does not preclude an assessment.

77 Enforcement Management Information System (EMIS).
of a penalty in an amount that would cause or contribute to the bankruptcy or discontinuation of the respondent’s business. Finally, if the respondent cannot agree on a settlement with G.C., or if he is convinced of his innocence, a hearing may be requested before an administrative law judge. 81 cases, or 13.4 percent of the cases handled in the Northeast Region in fiscal year 1995 were forwarded to an administrative law judge for a hearing. If the respondent fails to take action within 30 days of receiving the NOVA, the violation assessment becomes effective as the final administrative decision.

THE ADMINISTRATIVE HEARING PROCESS

The respondent has the option of requesting a hearing before an administrative law judge, which usually occurs because a settlement could not be reached or he is convinced of his innocence. The request for a hearing must be made within 30 days of receipt of the NOVA, and may be as simple as making the statement "I want a hearing". Upon receipt of a hearing request, the G.C. forwards the request to the Office of the Administrative Law Judge (ALJ) in Washington D.C.

PRELIMINARY POSITION ON ISSUES AND PROCEDURES

Four to six weeks after receiving the request for an administrative hearing, the ALJ requires all parties to

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79 Enforcement Management Information System (EMIS).

80 Details of the respondent’s options upon receipt of a NOVA are provided in 15 CFR 904.102.
submit a Preliminary Position on Issues and Procedures (PPIP). The purpose of this document is for both parties to state their legal and factual issues, listing potential witnesses and a summary of their testimony and exhibits. The purpose of this document is to eliminate the need for further discovery.\footnote{Code of Federal Regulations, vol 15 at 904.240(a).}

The PPIP is a simple statement which answers six basic questions:

1. What are the legal issues in dispute?
2. What are the factual issues in dispute?
3. Is the amount of penalty in dispute?
4. Who will be called as witnesses, and what will their testimony be?
5. What exhibits will be used at trial, and how will they relate to an issue at trial?
6. When and where should the hearing be held?

Failure to provide a PPIP within the time frame specified by the ALJ (usually 30 days) will result in a dismissal of the hearing. The ALJ tries to schedule the hearing at a mutually convenient time and location, often near the location where the violation occurred.

\textit{BURDEN OF PROOF}

At the hearing, NOAA General Counsel presents its case first. To prove its case, the agency must only show a preponderance of evidence - meaning it appears more likely than not the violation occurred. This point illustrates a substantial difference between civil and criminal
proceedings. This burden of proof is substantially easier to meet than the beyond a reasonable doubt threshold used in criminal proceedings.

Another application of civil law that simplifies the burden of proof for NOAA General Counsel is the imposition of strict liability when prosecuting individuals for violations of the Magnuson Act. The statutory language of the Magnuson Act states: "It is unlawful to sell, purchase, import, export, or have custody, control or possession of any fish taken or retained in violation of this Act or any regulation, permit or agreement." When the Act was drafted, the requirement for culpability or mens rea was not included, and NOAA interprets this silence as an affirmation of strict liability. However, merely entitling a statute as civil and not criminal does not automatically transform offenses under the Magnuson Act subject to strict liability. Although NOAA has not been challenged on their interpretation of strict liability in applying the Magnuson Act, precedence for NOAA's position can be found in a challenge to its predecessor, the Bartlett Act.

The interpretation of strict liability to the Bartlett Act was challenged in 1976 in the case of United States v. Ayo-Gonzales. Ayo-Gonzales argued that intent need to be proven to result in a violation of the Bartlett Act. In

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82 Magnuson Fishery and Conservation Management Act, U.S. Code, vol 16 sec. 1861 at 185.7(1)j.

83 536 F.2d 651. Ayo-Gonzales was the master of the Cuban F/V E-82HB seized in 1975 for fishing within the U.S. 12 nm limit off the Texas coast.
addition, Ayo-Gonzales argued if the statute does not require at least negligent conduct, then it is unconstitutional as a violation of due process. Justice Gewin reasoned in this case of first impression: “the constitutional requirement of due process is not violated merely because mens rea is not a required element of a prescribed crime”\(^\text{84}\). In regard to Ayo-Gonzales’ challenge to the Bartlett act regarding intent as an element of the crime, Justice Gewin reasoned “whatever the intent of the violator, the injury is the same, and the consequences are injurious or not according to fortuity. Hence, legislation applicable to such offenses, as a matter of policy, does not specify intent as a necessary element”\(^\text{85}\). Proof of culpability or fault is neither statutorily nor constitutionally necessary to sustain a conviction under the Bartlett Act.

The strict liability imposed by the Bartlett Act was tempered by the availability of a wide range of punishments so that sentences imposed could both serve as an effective deterrent and reflect any mitigating circumstances. The Magnuson Act was similarly modeled after the Bartlett Act and requires a wide range of punishments, particularly when considering the culpability of the violator, to serve as an effective deterrent as well as reflect mitigating circumstances. The strict liability nature of the offenses

\(^{84}\) 536 F.2d at 657.

\(^{85}\) 536 F.2d at 658.
was tempered by Congress through its intent that culpability be considered in determining the amount of penalty as opposed to the fact of liability. This strict liability precedent is essential in maintaining NOAA G.C.'s ability to effectively and strictly enforce the Magnuson Act, otherwise it would be next to impossible to prove mens rea as an element of a crime and conservation efforts would be easy to subvert.

In presenting a case, NOAA General Counsel begins with an opening statement outlining its case and how it will be proved by the testimony of its witnesses and exhibits. After the opening statement, the G.C. calls its witnesses and questions them. The agency also introduces exhibits (charts illustrating the position of the violation, seized fishing gear). The respondent or his attorney has the right to cross-examine each witness and examine each exhibit. It is important to note that every respondent has the right to present oral or documentary evidence in support of its case or defense, to submit rebuttal evidence, and to conduct cross-examination as may be required for a full and true disclosure of the facts. Only evidence that is relevant, material, reliable and probative, and not unduly repetitious or cumulative, is admissible at the hearing. Formal rules of evidence do not necessarily apply to the proceedings, hence hearsay evidence is admissible.86

86 Code of Federal Regulations, vol 15 at 904.251 (a) & (b).
After NOAA General Counsel completes its case, the respondent or his attorney may present his case. Approximately 60 percent of the respondents retain legal counsel, the majority being vessel owners and dealers. The vessel captains typically represent themselves or default at civil proceedings. Although not obligated to testify or call witnesses, most respondents do even if it is just to explain their interpretation of the situation. G.C. has the right to cross examine any individuals testifying. The ALJ may ask questions of any witness, and frequently does.

**ADMINISTRATIVE LAW JUDGE DECISION**

In cases involving few parties, limited issues, and short hearings, the Judge may require proposed findings, conclusions and reasoning support to be presented orally at the close of hearing. If cases are lengthy or complex, the ALJ requires post hearing briefs to be submitted within 30 days from service of the hearing transcript. The judge's decision is based on the hearing transcript and post-hearing briefs.

The Administrative Law Judge has a great deal of discretion in deciding cases. He may decide a violation did not occur. In deciding if a violation did or did not occur, the Judge renders a written decision setting forth his findings and conclusions. The material issues of fact, law,

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87 Office of General Counsel, Northeast Region, interview by author, Gloucester, Massachusetts, 29 March 1996.

88 Code of Federal Regulations, vol 15 at 904.261 (b). Parties are notified in advance of the hearing if this is the case.
or discretion, and his ruling on any proposed findings or conclusions presented by the parties are included in the decision". If he decides a violation did occur, the ALJ makes a de novo determination of the penalty based upon the hearing record, and he may raise, lower or endorse the penalty assessed in the NOVA. Few constraints limit the judge’s determination of a penalty. He may not exceed the maximum administrative penalty of $100,000 authorized by the MFCMA, and he must consider ability to pay if credible evidence is provided on that issue. However in 1985 NOAA made a policy decision that significantly altered the de novo appropriate penalty levied by the ALJ. This policy dictated that on review of ALJ decisions, the NOVA penalty assessment based on the penalty schedules would be accepted as the appropriate penalty, rather than an increased amount imposed by the ALJ, unless the ALJ had convincingly articulated his reasons for the increase”.

This policy decision undermines the effectiveness of the civil penalty process. It discourages violators from settling out of court, thus increasing the workload of NOAA G.C. A fisherman is more apt to take his chances with an administrative hearing knowing the assessed NOVA penalty is the upper limit he can be fined, and he stands a decent chance of receiving a lower penalty at a hearing. A repeal of NOAA’s policy would restore the ALJ’s discretion in his


90 In the Matter of William J. Verna, 4 O.R.W. 64 (NOAA App, 1985)
de novo penalty determination. The ALJ’s penalty will only be limited by the statutory maximum, making the administrative hearing a riskier proposition for fishermen. The chances of receiving a penalty higher than the penalty assessed in the NOVA will encourage fishermen to settle and decrease the workload of NOAA G.C.

The decision of the ALJ is significantly affected by the Judge hearing the case. Since the retirement of the Honorable Judge Dolan in 1990, the sole NOAA ALJ for the N.E. Region, all fisheries cases are being heard by Department of Labor ALJ’s. These ALJ’s are not familiar with fisheries law, nor have they been inclined to impose sanctions that would contribute to the financial hardship of the respondent77. This has undermined the effectiveness of the civil penalty process, since violators are less likely to settle out of court and the workload of G.C. is increased. To alleviate this constraint to the system, NOAA has pursued the use of Coast Guard ALJ’s for fisheries cases. It is believed Coast Guard ALJ’s are more knowledgeable in fisheries regulations and the significance of those offenses. Office of General Counsel will be able to pursue higher penalties, and encourage a higher settlement rate. Although Department of Labor ALJ’s are still hearing fisheries cases, G.C. anticipates Coast Guard ALJ’s will be hearing fisheries cases by year’s end.

77 Office of General Counsel, Northeast Region, interview by author, Gloucester, Massachusetts, 29 March 1996.
REVIEW OF DECISIONS

Either side may petition for review of the Judge's decision within thirty days from the date of the initial decision. This petition is directed to the Administrator of NOAA. The review process is discretionary, and not a matter of right; reasons for declining review need not be given. Although no statistics are maintained on the review process, Office of General Counsel, Northeast Region reports request for review are rare; only approximately 50 percent of those requests actually are reviewed; and changes to the ALJ decisions are rare. The only grounds for review are:

1. A finding of a material fact that is clearly erroneous based upon the evidence in the record;
2. A necessary legal conclusion is contrary to law or precedent;
3. A substantial and important question of law, policy, or discretion is involved; or
4. A prejudicial procedural error has occurred.

The Administrator will not consider new or additional evidence that is not a part of the record before the judge. If neither party petitions for review, or the Administrator declines review, the initial decision of the ALJ becomes final. If the decision is reviewed, the modification or endorsement of the decision becomes final.

\[92\] 15 CFR 904.273 (b).

\[93\] Office of General Counsel, Northeast Region, interview by author, Gloucester, Massachusetts, 29 March 1996.
ANALYSIS OF PENALTY ASSESSMENT

Processing speed and severity of penalty are important criteria in the operation of any enforcement system. In the economic theory of crime, the perceived loss from being caught for one violation must be multiplied by the probabilities of apprehension and punishment, and then compared to the perceived gain. If the gain exceeds the discounted penalty, the fisherman will risk violating the regulation. Simply increasing the penalty to a high enough level would seem to resolve any problems with compelling compliance to a regulation, and this is what fisheries managers often advocate 1.

In fact, this approach has been advocated by the Canadian researchers Edwin Blewitt, William Furlong, and Peter Toews in their paper “Canada’s Experience in Measuring the Deterrent Effect of Fisheries Law Enforcement”. They observe that “the commission of illegality in the fishery can be effectively controlled by altering the associated gains and losses”, and conclude that enforcement policies of severe and likely punishment had a strong deterrent effect on violations”. Therefore an analysis of penalty assessments for MFCMA violations must examine the amount of penalties and the timeliness of case resolution.


95 Blewitt, Furlong and Toews. “Canada’s Experience in Measuring the Deterrent Effect of Fisheries Law Enforcement”, p.34.
LEVEL AND TIMELINESS OF PENALTIES

The problem with severe penalties is that NOAA General Counsel has limited resources to prosecute fisheries violations. In the Northeast Region, there are only three attorneys to prosecute violations of not only the MFCMA, but the Marine Mammal Protection Act (MMPA), Lacey Act, and Endangered Species Act. It is not practical with current national budgetary constraints to expect any personnel increases to improve the prosecution of fisheries violations. So the goal of NOAA General Counsel then becomes assessing a fine amount that will yield a reasonable probability of settlement and payment. This is essential to decrease time and money spent prosecuting cases and increases the effectiveness of the enforcement system. In their paper “Fisheries Law Enforcement: An Incentive Systems Perspective”, Timothy Hennessey and David Kaiser illustrate this problem as shown in figure 10. NOAA General Counsel is placed in the difficult position of achieving a level of fines that will actually be paid by fishermen, will deter further violations, and will be acceptable to the fishing industry and other political entities whose constituencies are affected by the enforcement system.

96 Timothy Hennessey and David Kaiser, “Fisheries Law Enforcement, an Incentive Systems Perspective”, p 140.

97 Timothy Hennessey and David Kaiser, “Fisheries Law Enforcement, an Incentive Systems Perspective”, p.139.
Fishery Managers: Prefer stiff fines, rapid payment
Fishermen: Prefer low fines, long time for payment
NOAA G.C.: Must find a balance in the middle

Fig.10. Amount of Fine vs. Probability of Payment and Time

These arguments and the associated problems are well supported by Frailey and Taylor (1987):

"...probabilities (of conviction, punishment) shrink as penalties rise. The prosecutor looks more closely at the evidence in a big-ticket case. A high-penalty case is less likely to be settled before the hearing stage. The higher the stakes, the greater the chances the fisherman will hire an attorney and avail himself of every procedural right, including a petition for review to the Administrator and an appeal to district court. The farther along the case progresses, the less likely the decision maker is to appreciate the significance of the violation or the necessity for a heavy sanction. And all this time, the fisherman has not paid a dime to anyone but his lawyer. If he does have to pay eventually, he has amortized the debt over several years.

In addition, the higher the level of the assessed penalty, the greater the likelihood that the fisherman will exert whatever political influence over the process and level of sanction
he can muster. In some cases, the efforts can be successful. In all cases, agency prosecutors are forced to spend valuable time preparing briefing memoranda and meeting with superiors to explain why the particular penalty was assessed in a specific case."

It is clear that the simple solution of raising the penalty to a sufficient level to remove economic incentive to violate a fisheries regulation is currently not feasible.

To validate the relationship between the level of the assessed penalty and the reasonable probability of settlement and payment of that fine, trends for the NMFS Northeast Regions were examined. Figure 11 compares the annual average penalty assessed in the NOVA to the number of cases that were settled for that year.

![Chart showing assessed penalty vs. cases settled.](chart.png)

Fig. 11. Assessed Penalty vs. Cases Settled, NMFS Northeast Region. Source: Enforcement Management Information System

In cases for the years 1991-1993, the average penalty assessed exceeded $8,000 and few cases were settled. On the other hand, in 1990 and 1994-1995 there were a high number of cases settled (24-39%) as a result of average fines assessed below $8,000. There is an inverse relationship between the amount of the assessed penalty and the probability of settling a case, and it appears for the last five years assessing penalties below an $8,000 threshold has resulted in the greatest percentage of settled cases.

Since it is the perceived penalty that influences compliance with regulations, the relationship between the assessed penalty and the actual negotiated penalty for settlement in the NMFS Northeast Region was examined. Figure 12 compares the average assessed penalty to the average fine paid for settled cases. In fiscal years 1990 and 1991, the actual fine paid was greater than half of the assessed penalty. In fiscal year 1992 when the average assessed penalty skyrocketed to $24,867, the actual fines paid as a result of settlements declined from fiscal year 1991 levels and accounted for just 2.8 percent of the assessed penalty. Lowering of assessed penalties in fiscal years 1993-1995 have resulted in a stabilization of the settled fines to approximately 50 percent of the assessed penalty.
Fig. 12. Average Assessed Penalty vs. Average Settlement Amount, NMFS Northeast Region. Source: Enforcement Management Information System

If regulatory compliance is a function of the perceived penalty, does setting a fine at a level resulting in high settlement rates and decreased workload for NOAA General Counsel achieve adequate levels of deterrence? This is a difficult question to answer, because offenses against the MFCMA do not receive the same punishment. Clearly, some offenses are far more serious than others, and guidance as to the appropriate levels of penalties for different categories of violations is provided by penalty schedules published by NMFS enforcement. Comparing average penalties assessed and average fines settled upon to illegal gains does not reflect variances in the severity of offenses. For example, some violations of regulations do not directly
affect the state of the fishery but are intended more to facilitate enforcement (e.g. the requirement to have a permit onboard or to display vessel numbers properly). It is estimated that these enforcement type violations account for as much as 60% of total violations.

A comparison of fines to illegal gains was attempted by using assumptions, the most important being the average penalties consist primarily of resource-type offenses and a relative insignificant amount of enforcement-type offenses. This assumption could not be validated with Office of General Counsel Northeast Region, citing inaccuracy of the EMIS database. Nonetheless, of the total cases for fiscal year 1995, enforcement-type offenses were either dismissed or handled by summary settlement and accounted for 47 percent of the cases. This figure is relatively close to Frailey and Taylor’s estimate of a 60 percent rate of enforcement-type offenses. It is concluded that the average penalty paid in fiscal year 1995 for settled cases was $2,004.87 and for prosecuted cases $4,183.03; and these penalties most likely apply to resource-type offenses.

How do these fines compare with illegal gains benefited from violating fisheries regulations? Extensive research conducted by Jon Sutinen, Alison Rieser and Jon Gauvin for


100 Office of General Counsel, Northeast Region, interview by author, Gloucester, Massachusetts, 29 March 1996. OGC confirmed enforcement type offenses typically have low penalties assessed and are frequently handled by summary settlement or dismissed to reserve attorney time for resource-type offenses. However OGC refutes the low average penalty value provided by EMIS. The EMIS database is known to have inherent reporting inaccuracies.
the New England Fisheries Management Council (NEFMC) in 1987 estimated the illegal gains for a typical frequent violator of the Northeast Multi-species Fishery to vary from $900 - $10,000 per trip depending on the type of violation, for a total annual illegal gain of $20,000 - $225,000 per year. Although this estimate is 8 years old when compared to 1995 penalties, it can be assumed the illegal gains have remained the same or increased as a result of the declining performance of fisheries from 1987-1995.

Illegal gains will vary from fishery to fishery, but it is expected they will be the highest in overcapitalized, highly regulated, high value fisheries such as Northeast Multispecies, Atlantic Sea Scallop, and Summer Flounder fisheries. Information for individual fisheries is not available to calculate illegal gains or average penalties by each fishery, so the figures used in my comparison will be those calculated from NMFS and the NEFMC report.

To remove the economic benefit of violating the Magnuson Act, the penalty must remove the benefits of committing a crime. With an average estimated illegal gain of $900 - $10,000 a trip, these levels of penalties might discourage illegal activity in fisheries that are not overcapitalized or do not yield significant revenue from illegal activity. However, if the estimated annual illegal

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gain is $20,000 - $225,000, current penalty levels are grossly inadequate to compel compliance.

The limitations of this comparison are significant, but it is the best that can be made with the available information. Ideally the effectiveness of penalties would be measured by comparing the gain from a particular illegal activity to the penalty schedule, as well as the resulting penalty paid by the respondent. Until EMIS is modified to provide this information reliably, the effectiveness of the penalties can only be estimated through sketchy data and reasonable assumptions.

PERMIT SANCTIONS

Sanctions on a vessel's federal fisheries permit are expressly authorized in section 308 of the MFCMA. "In any case in which a vessel has been used in the commission of an act prohibited under section 307, the Secretary may -(I) revoke any permit issued with respect to such vessel or person, with or without prejudice to the issuance of subsequent permits". Permit suspensions and revocations can be a highly effective form of penalty assessment.

Permit sanctions can be relatively swift, becoming effective immediately upon completion of review by NOAA G.C. (before an administrative hearing takes place). The offender faced with a permit sanction would have to obtain an injunction to prevent it from coming into effect. Permit sanctions also have an economic impact greater than the

maximum penalty that can be assessed under the MFCMA. The fisherman not only loses profits; he must continue paying fixed costs (mortgage and insurance payments, docking fees, etc.). The terms of a permit sanction usually prohibit fishermen from using their vessels in any fishery or using the suspension period to perform maintenance on the vessel (annual dry-docking, etc).

A problem identified with permit sanctions is that they impose a financial hardship on individuals other than the owner or master who are not the target of the permit sanction. The unintended effect of a permit suspension may result in placing crewmembers out of work. This is mitigated by the fact that many crews are paid on a percentage of the vessel’s trip landings, and as such there are many instances where the crew pressures the captain to commit violations to increase their share of the trip earnings.

The increased use of permits in federal fisheries makes permit sanctions an increasingly viable option. Since administrative hearings are not required before implementing a permit sanction, this is a way to implement swift and severe punishment. As such, it should be reserved for use on the most frequent or flagrant violations of the MFCMA. To do otherwise would result in well-organized fishermen associations protesting the use of permit sanctions, and probable legislative changes to the MFCMA requiring
administrative hearings before implementing permit sanctions.

SUMMARY

The present levels of penalties assessed is not sufficient to remove the economic benefits of non-compliance with fisheries regulations in the Northeast Region. The levels of penalties assessed to fishermen violating the Magnuson Act must be raised significantly to remove the economic rationality of non-compliance. Raising the assessed penalties, however, significantly increases the amount of cases contested at administrative hearings. To keep the civil penalty process flowing, the Coast Guard should pursue the following recommendations.

First, increased use of summary settlement should be used for minor infractions of the MFCMA. This method of quickly assessing a small fine should be targeted towards enforcement-type offenses. The low fines and rapid case resolution will improve the fisherman’s perception of the fairness of the system and reduce case workload for NOAA General Counsel.

Second, the policy of limiting the Administrative Law Judge’s de novo penalty to the penalty assessed in the NOVA should be eliminated. The possibility of receiving a higher fine as a result of an administrative hearing will be incentive to settle out of court. This too will reduce NOAA General Counsel’s workload, which will be needed to implement the next two recommendations.
Third, NOAA General Counsel should prosecute the frequent and flagrant violators to the fullest extent permissible by law. This will take significant time and resources for NOAA General Counsel, but it will remove the economic incentive for resource-type violations. Publicizing the successful prosecution of resource-type offenses will serve a two-fold purpose; the perceived fairness and credibility of the system will increase and resource-type offenses will decrease because the perceived probability of severe penalties will influence rational people’s compliance decisions. The initial investment of resources by NOAA General Counsel to implement this recommendation should pay-off in a decreased future case-load.

Fourth, NOAA General Counsel should judiciously make greater use of permit sanctions for frequent or flagrant violators of resource-type offenses. This swift and severe form of penalty must be exercised with caution, for abuse of this powerful sanction could result in its loss. A fisherman that flagrantly commits resource-type offenses has abused his right to fish; as such he should lose that right.

Finally, the EMIS database used to track the status of fisheries violations should be overhauled to better provide the data necessary to measure the effectiveness of the penalty process. Average fines for individual fisheries plans and types of offenses should be extractable to provide
a reliable comparison to illegal gains of those illicit activities.

Even if every infraction of the MFCMA were documented, reasonable compliance cannot be achieved without an effective system to sanction the offenders. Inadequate compliance with fisheries regulations results in failed management measures. Unfortunately increased resources to deal with these fisheries problems are not forthcoming. The apparent chasm separating the disparity between the benefits of illicit activities and the levels of penalties must be better measured and evaluated.
CHAPTER FIVE
FUTURE FISHERIES ENFORCEMENT CHALLENGES

Future fisheries management demands on Coast Guard maritime enforcement assets will come on two fronts; increased use of quota management systems and a drain on fixed domestic enforcement assets for international fisheries enforcement as a result of implementing legislation for U.S. participation in the Northwest Atlantic Fisheries Organization (NAFO). Successful implementation of these management regimes, without compromising management goals, will have to come from increased efficiency within the enforcement system. It has been shown that efficiency in the enforcement system must be improved in the following three areas: (1) development of enforceable regulations; (2) capabilities of the Coast Guard; and (3) prosecution of violators. As New Zealand's fisheries experience demonstrates, only when enforcement is effective enough to convince potential violators that they will be caught and prosecuted will compliance reach satisfactory levels.

\[103\] Public Law 104-43. The Fisheries Act of 1995 amended the Fishermen's Protective Act and included implementing legislation for U.S. participation in NAFO

\[104\] Congress, House, Committee on Merchant Marine and Fisheries, The Use of Individual Transferable Quotas in which Individual Fishermen are Allocated Fixed Quota Shares which Entitle them to Catch a Percentage of the Total Allowable Catch. Hearing before the Subcommittee on Fisheries
OBJECTIVE

The purpose of this chapter is not to debate the merits or shortcomings of the United States' participation in NAFO or the use of quota management systems. Instead, it acknowledges that the dynamic nature of fisheries management will likely result in the implementation of these management regimes. The objective of this chapter is to identify issues involving maritime enforcement for these management regimes, and propose possible solutions for the successful implementation of these measures.

TRENDS TOWARDS QUOTA MANAGEMENT SYSTEMS

In the 1990's, four federally regulated fisheries under the MFCMA have changed to quota management systems; Atlantic surf clam/ocean quahog, wreckfish, Pacific halibut, and Pacific sablefish. Various forms of quota management systems are in use, such as individual transferable quotas (ITQ's), individual fishery quotas (IFQ's), individual vessel quotas (IVQ's), and community development quotas (CDQ's). Each has unique aspects, but all will be collectively referred to as a quota management system. The increased use of quota management systems in the 1990's can be expected to continue as a result of policy and political momentum. Policy momentum is reflected in Vice President Al Gore's National Performance Review (NPR) and the NMFS Strategic Plan. The NPR specifically tasks NOAA with

developing and implementing controlled-access plans that include individual harvesting rights, such as ITQ's, in accordance with provisions of the Magnuson Act. This direction is reflected in the NMFS Strategic Plan. In addition political momentum towards use of quota management is evident on both the House and Senate re-authorization bills of the MFCMA.

The Coast Guard has identified as a future trend that resource managers will implement quota management and license limitation regimes in all major fisheries. This is not likely in the NMFS Northeast Region. Quota management systems work best for single species with a narrow geographic range harvested by a single gear type. Many of the commercial fisheries under federal management in the NMFS Northeast Region have characteristics that make them unsuitable for quota management systems. The exceptions are Atlantic sea scallops and summer flounder which are well suited for future quota management.

The National ITQ Study Report concluded the Atlantic sea scallop fishery is well suited for a quota management program and significant benefits are likely to accrue to industry and the public if an appropriately designed program

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106 Department of Transportation, U.S. Coast Guard. Coast Guard Fisheries Enforcement Study. COMDTINST 16214, Dec 93, p5-7.
were implemented. The fishery is geographically constrained to two offshore fleets of vessels, one working out of New England ports and the other out of Mid Atlantic ports. The fishery is harvested primarily by one gear type (dredges), although nets are occasionally used. There is only one species managed, but it is unresolved whether sea scallops should be managed as one, two or three separate stock units. These characteristics make Atlantic sea scallops well suited for quota management.

Much like Atlantic sea scallops, summer flounder is another fishery characterized by a single species, single gear type (bottom trawl), single commercial jurisdiction (federal), and limited geographic range (summer flounder migrate inshore/offshore, and are harvested by one fleet of vessels operating primarily from mid-Atlantic states). As such, summer flounder is another federally managed fishery suited for quota management.

Other federally managed fisheries in the Northeast Region are not likely to be managed by a quota system due to jurisdictional, multi-species or multi-gear issues. It is feasible that half of the commercially active federal fisheries in the Northeast Region may be managed by a quota system in the future.

MARITIME ENFORCEMENT ISSUES

It has been found that unless a quota management system is instituted in a relatively restricted economic environment (such as in Iceland or New Zealand), the amount of required enforcement dramatically increases. The economic environment of the United States is relatively unrestricted, and as such the success of quota management programs is heavily dependent upon law enforcement. There are two basic maritime enforcement problems for quota management systems that must be addressed: (1) safeguarding the program from non-participants, and (2) enforcement of the program itself in order to obtain compliance.

SAFEGUARDING FROM NON-PARTICIPANTS

To achieve a reasonable level of voluntary compliance, the fishing industry must "buy off" on proposed management programs. In many instances world-wide, the requests initiating quota management programs have originated from the commercial fishing industry. The petitioning fishing industry usually cites economic concerns such as decreasing harvests, increasing numbers of participants, and marketing difficulties as primary reasons for initiating a quota

108 Department of Transportation, U.S. Coast Guard. Coast Guard Fisheries Enforcement Study COMDTINST 16214, P5-8.

management program. Many of these same economic concerns exist with fisheries in the NMFS Northeast Region.

Industry support for quota management systems in the Northeast Region is lacking compared to other localities where quota management has been implemented. Table 4 represents the fishermen, fishing organizations, and fishing industry representatives that have recently been active in voicing their opinions on this issue to Congress. Non-support of quota management by industry can be attributed to many reasons; review of Congressional testimony reveals allocation of quotas to be the common issue cited amongst non-supporters. If a quota management system is implemented in the NMFS Northeast Region, lack of support for the management regime by the allocation "losers" will likely result in a rise in illegal activity by non-quota holders. Increased maritime enforcement will be necessary, at least initially until the fleet re-structures or re-directs, to protect from non-participants. Without adequate protection from poaching and smuggling by non-participants, there will be little incentive for program participants to comply. Participants must be confident that others cannot beat the system and thus diminish the value of their quota rights.

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111 Department of Transportation, U.S. Coast Guard. Coast Guard Fisheries Enforcement Study. COMDTINST 16214, p 5-9.
Table 4
Organizations Politically Active Regarding ITQ’s

<table>
<thead>
<tr>
<th>ORGANIZATION</th>
<th>FOR ITQ’s</th>
<th>AGAINST ITQ’s</th>
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<td>Fisher Foods, Inc</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Mid-Atlantic Foods</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Mr. Rita, F/V Odyssey</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>MA Inshore Lobster Fishermen</td>
<td></td>
<td>X</td>
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<tr>
<td>Maine Sardine Council</td>
<td></td>
<td>X</td>
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<tr>
<td>Gloucester Fishermen’s Wives</td>
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<td>Assoc</td>
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<td>Maine Lobstermen’s Assoc</td>
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<td>X</td>
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<td>Mr. Ames, Fisherman</td>
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<td>X</td>
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<tr>
<td>Ms. Didriksen, F/V owner</td>
<td></td>
<td>X</td>
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<tr>
<td>Seafarer’s International Union</td>
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<td>X</td>
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<tr>
<td>Associated Fisheries of ME</td>
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</table>

Source: Multiple Congressional hearings, 1994-1995

ENFORCEMENT OF PROGRAM TO OBTAIN COMPLIANCE

Enforcement is not only essential to keep non-participants out of the fishery, it is also necessary to maintain management integrity by ensuring adequate compliance by participants. Due to the nature of quota management, these programs can add incentives to under-report and/or misreport actual catches by individuals in the fishery. The nature of potential violations would shift from illegal harvesting to misreporting catches. Therefore

\[112\] Testimony before the following hearings regarding re-authorization of the MFCMA and ITQ’s and user fees under the MFCMA were reviewed, and industry comments were compiled. Non-industry comments (i.e. Greenpeace, WWF, Center for Marine Conservation, etc.) were discounted.

“S.39, Hearing on the Reauthorization of the MFCMA”, Rockport ME, 4 March 95
“S.39, Hearing on the Reauthorization of the MFCMA”, Boston, MA, 4 March 95
“Fisheries User Fees Under the MFCMA”, 29 Jun 94.
“Transferable Quotas Under the MFCMA”, 9 Feb 94.
it is presumed that enforcement emphasis must shift from maritime to shoreside detection efforts. The Coast Guard’s presumption that quota management systems will shift enforcement effort shoreside and significantly reduce or eliminate maritime enforcement is flawed. Although it is true that shoreside enforcement effort must increase, it is the supplemental regulations necessary in a quota managed fishery that requires continued maritime enforcement. Quota management does not eliminate the need to protect fish during spawning, prohibit destructive gear, restrict the size of fish caught, or mitigate user conflicts.

Depending on the fishery, management goals must supplement quotas with time and area closures, gear restrictions, and limits on discards. In New Zealand, quota fisheries retained many of the regulatory controls of closed areas, minimum sizes and gear restrictions which were at the heart of the pre-ITQ regime. TAC’s and ITQ’s were in fact superimposed on that regime rather than replacing it. The need to incorporate previous management measures in quota fisheries only adds another layer of complexity for enforcement: shoreside monitoring and compliance. The level of maritime enforcement will at a minimum remain at the pre-

113 Department of Transportation, U.S. Coast Guard. Survey of District Fisheries Enforcement Branches, CG Atlantic Area (Aoo-2) Memo 5700 dd 28 Jul 95. As part of the implementation of the Atlantic Area Fisheries Enforcement Strategic Plan, all CG District fisheries law enforcement offices were surveyed to develop a “Rules of Thumb” guide to assist Council members to evaluate the enforceability of particular management measures as FMP’s are being developed. All CG District fisheries law enforcement offices reported ITQ/IFQ management measures as not applicable to maritime enforcement.

quota management level. Increased effort will be necessary to prevent non-participants dissatisfied with initial allocations from compromising the system, and as quota management opens fisheries for greater periods of time (as in the surf clam/ocean quahog and Pacific halibut and sablefish fisheries), greater periods of at-sea presence and enforcement will be necessary.

U.S. PARTICIPATION IN NAFO

A second and perhaps simpler challenge to fisheries enforcement in the NMFS Northeast Region results from the United State’s participation in NAFO. Once again, the purpose is not to debate the merits or shortcomings of this decision; it is merely to identify the implications of this decision on maritime enforcement in the NMFS Northeast Region.

Seventeen nations are members of NAFO, which manages all fisheries in its defined area of jurisdiction (figure 13) with the exception of salmon, swordfish, tuna and marlin which are managed by other international organizations. Due to extensive overfishing in both the Canadian EEZ and the NAFO regulatory area, most high value species are under moratorium. The only species assigned TAC’s for 1995 were illex squid (statistical areas 3 and 4), redfish (divisions 3M, 3L, 3N), and cod (division 3M). The poor condition of


fisheries in the NAFO regulatory area has significant implications for U.S. enforcement.

MARITIME ENFORCEMENT ISSUES

New England fishermen have lobbied successfully against U.S. accession to the NAFO convention since 1983. Although several factors account for this success, maritime enforcement is the only remaining issue. New England fishermen have argued that the obligations for enforcement incurred by participating in NAFO would reduce the number of Coast Guard assets available for domestic fisheries enforcement. This position is correct; the Coast Guard has a limited amount of enforcement effort available for fisheries enforcement in the NMFS Northeast Region. Any increased effort directed towards international fisheries enforcement would result in a proportional decrease in domestic fisheries enforcement. The Fisheries Act of 1995 does not provide additional funding or resources for international fisheries enforcement.

What will be the Coast Guard’s obligated effort for enforcement of NAFO rules? The NAFO Conservation and Enforcement Measures states: "where, at any time, more than 15 vessels of any one Contracting Party are engaged in fishing operations or in the processing or transferring of

117 There were three primary factors besides enforcement that prevented the passage of implementing legislation for U.S. participation in NAFO. First, it could not be agreed upon which federal agency should represent the U.S. at NAFO and select U.S. commissioners. Second, U.S. fishermen had little interest in NAFO fisheries given the renewed interest in fisheries within the U.S. EEZ with passage of the MFCMA. Finally, U.S. fishermen were concerned that NAFO would seek to manage other fisheries. Today these issues are no longer relevant, and the need to become a participant in NAFO to maintain
international stature for support of high seas fishery treaty negotiations has overridden the enforcement issue.
fish in the Regulatory Area, that Contracting Party shall, during that time, have an inspector or other designated authority present in the Regulatory Area...to receive and respond, without delay, to notice of apparent infringements”\(^{118}\). The objective for the United States should be to limit the participation of its fishing vessels in the NAFO regulatory area to less than fifteen a year, so that the Coast Guard will not have to reduce domestic fisheries enforcement in the NMFS Northeast Region to meet international fisheries enforcement obligations.

This objective should not be too difficult to achieve. In 1984 the International Court of Justice resolved a maritime boundary dispute between the United States and Canada, giving nearly one-third of Georges Bank to Canada in the establishment of the Hague Line. As a result of this action, a limited number of U.S. vessels fished the NAFO area on the “nose” and “tail” of the banks with marginal profit results\(^{119}\). Since 1983 the declining stocks in the NAFO regulatory area has resulted in no directed fishing for

\(^{118}\) NAFO Conservation and Enforcement Measures (NAFO/FC Doc 96/1), Dartmouth, Nova Scotia, Canada Jan 1996. Part IV, para 3, p 21. There are two interpretations of this document. One is that enforcement presence is required only when there are 15 or more vessels present in the regulatory area at one time. The other is that enforcement presence is required when 15 or more vessels fish the regulatory area in an annual period. The Canadian government advocates the second interpretation, and in the interest of fishery relations with Canada the U.S. should interpret this document similarly.

the high value species pursued in 1983\textsuperscript{120}. The long voyage and poor fishing opportunities resulted in only 6 U.S. vessels fishing the regulatory area in 1994; no U.S. vessels fished the regulatory area in 1995, nor have U.S. vessels indicated a desire to fish the regulatory area in 1996 when the U.S. receives a quota, of which we presently have none\textsuperscript{121}. This lack of interest by U.S. vessels to fish the NAFO regulatory area is due to economics, and in the short-run will result in a voluntary limitation of U.S. fishing effort in the NAFO regulatory area.

It is also unlikely the U.S. will receive a significant quota to support the effort of fifteen vessels. Canadian Fisheries Minister Brian Tobin stated “this will not be in the short term the source of major new fishing opportunities of U.S. fleets”\textsuperscript{122}. The seventeen members of NAFO have taken substantial reductions in quotas over the last five years. Further reduction of those quotas to provide the U.S. with a substantial quota is very unlikely. Until stocks rebound and quotas increase, NAFO will not be a significant factor in maritime enforcement for the NMFS Northeast Region.

**SUMMARY**

Due to a limited and fixed number of resources to conduct maritime enforcement in the NMFS Northeast Region,

\textsuperscript{120} NAFO Annual Report, 1994. No directed fishing for high value species except for a small cod quota in division 3M.

\textsuperscript{121} William J. Quigley, LCDR, USCG. U.S. Department of State, interview by author 12 April 95.

\textsuperscript{122} Pamela Glass, “NAFO: What Will it Mean for U.S. Fishermen?”, *National Fisherman*, vol 76, no 9, p52.
the Coast Guard must be creative and proactive to meet future challenges to fisheries enforcement. In the NMFS Northeast Region, these challenges will materialize as a result of the United State’s participation in NAFO and the increased use of quota fisheries as a management measure.

NAFO

In the short run, NAFO will not pose a serious challenge to maritime enforcement due to economics. As the condition of the stocks of high value species improve in the long term, interest to fish in the regulatory area by U.S. fishing vessels will also increase. Since the Coast Guard has limited capabilities to enforce the regulatory area without compromising its domestic enforcement, specific measures are recommended to keep U.S. fishing effort below fifteen vessels so the Coast Guard is not required to conduct enforcement patrols\[123\].

The Fisheries Act of 1995 directs the Secretary of Commerce to issue permits to U.S. fishing vessels engaged in harvesting on the high seas\[124\]. The Secretary is given the discretion to place conditions and restrictions on permits issued. The Coast Guard should lobby NOAA to restrict the number of high seas fishing permits that allow fishing within the NAFO regulatory area by either a limitation of high seas fishing permits that allow fishing in the NAFO

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\[123\] Occasional and brief enforcement presence by a Coast Guard cutter in the NAFO regulatory area would not disrupt domestic enforcement, and is recommended although it is not required for the interests of maintaining an international image of a responsible fisheries nation.

regulatory area or by implementing a high seas IVQ program for the future U.S. share of the NAFO quota. The Coast Guard and NOAA must be proactive on this issue, while fishing interest is minimal. The most difficult part of managing a limited entry management system is the allocation of the rights to fish. By acting now, when stocks are low and the U.S. has no quota, the allocation issue is minimized. If the Coast Guard and NOAA wait until the stocks improve and the U.S. has a significant TAC, the economic viability of fishing the NAFO regulatory area will increase U.S. fishing interests in NAFO. Allocation of fishing rights will be a major point of contention, and it may be impossible to limit the number of U.S. vessels with access to the NAFO regulatory area to less than fifteen vessels. Action must be taken now, before allocation becomes an impediment to limiting U.S. fishing vessel access to NAFO.

**QUOTA FISHERIES**

Although there is a definite trend towards the use of quota fisheries systems in fisheries management, political polarization of the issue in the NMFS Northeast Region by fishing interests makes it difficult to predict if, when and which fisheries will be quota managed in the future. Nonetheless, the Coast Guard must be proactive on this issue and be prepared to advise decision makers on the capabilities of enforcement to successfully implement these new regulations.
To begin, any quota management system must have enforceable regulations to succeed. Fisheries managers will never draft a management plan strictly from an enforcement standpoint. They do have the responsibility to draft regulations within the capabilities of enforcement agencies to ensure adequate compliance. It is the responsibility of the Coast Guard designee to the FMC’s to provide “expert advice” on proposed plans and regulations. If that advice is poor, the success of the proposed plan is compromised. The Coast Guard position that maritime enforcement is not applicable or necessary to quota management regimes compromises the success of those plans. As demonstrated in New Zealand’s enforcement systems before and after ITQ’s, traditional physical surveillance activities are still a vital part of the enforcement regime. The Coast Guard must reverse its position on enforcement of quota management systems and provide the necessary expert advice to ensure enforceable management measures.

Equally important to the success of maritime enforcement of quota management systems is the deterrent effect of successful prosecution of violators. Although the Coast Guard has no direct control over the civil penalty process exercised by NOAA’s Office of General Counsel Northeast Region, their capabilities to prosecute violations significantly affect compliance and maritime enforcement.

In New Zealand quota fisheries it was found that strong incentives to cheat were coupled with a strong incentive to mount a very vigorous defense against prosecution if charged with a serious offense. This has led to longer and more complex investigations followed by longer and more expensive court cases in New Zealand quota fisheries. The Office of General Counsel Northeast Region currently does not have the resources to adequately prosecute violations of traditional management measures. The higher fines, complex investigations and drawn-out court cases associated with quota management systems will overload an already beleaguered system. Without additional prosecutorial resources, adequate compliance for quota fisheries will be unobtainable and management plans will fail.

As the expert advisors to the Fisheries Management Councils on matters involving maritime fisheries enforcement, the Coast Guard can prevent quota management systems from becoming a challenge to maritime enforcement. The Fisheries Management Councils will not implement a Fisheries Management Plan they know will not succeed. If the Coast Guard designee to the Councils presents the fixed enforcement capabilities of the Coast Guard as a limitation to enforcing the additional complexities of quota management systems along with Office of General Counsel’s assessment of their difficulties in prosecuting violations to achieve

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adequate compliance, the Fisheries Management Councils will be less inclined to implement additional quota management systems in the Northeast Region. An honest assessment of capabilities by the Coast Guard and NOAA coupled with proactive action should be sufficient to meet future maritime enforcement challenges.
CHAPTER SIX
CONCLUSION

The objective of maritime fisheries enforcement is to achieve an adequate level of compliance with fisheries regulations so the conservation and management goals of management plans are achieved. The greatest obstacle to achieving this objective is the separation of responsibilities for functions of maritime fisheries enforcement amongst different organizations and agencies. These functions: development of enforceable regulations, enforcement of those regulations, and prosecution of violators make up the maritime fisheries enforcement system. As with any system, maritime fisheries enforcement is only as strong as its weakest link.

Presently the weak link for maritime fisheries enforcement in the NMFS Northeast Region is the prosecution of violations of the Magnuson Act. Responsibility for this function of the maritime fisheries enforcement system lies with NOAA, specifically the Office of General Counsel, Northeast Region. Well written regulations and adequate enforcement effort will fail to achieve adequate levels of compliance if the system does not adequately sanction violators.
The present levels of penalties assessed for MFCMA violations is not sufficient to remove the economic benefits of non-compliance with fisheries regulations in the NMFS Northeast Region. This shortcoming can be attributed to two factors: lack of manpower to prosecute cases, and policies reducing the capabilities of the Office of General Counsel to sanction violators. To remove the economic rationality of non-compliance, the levels of penalties assessed to fishermen violating the MFCMA must be raised significantly. To do so, the following actions must be taken:

- Increase the use of summary settlement for minor infractions of the MFCMA. Low fines and rapid case resolution will improve the fisherman’s perception of the fairness of the system and reduce case workload for NOAA General Counsel.

- Eliminate the policy of limiting the Administrative Law Judge’s de novo penalty to the penalty assessed in the Nova. The possibility of receiving a higher fine as a result of an administrative hearing will be incentive to settle out of court, reducing NOAA General Counsel’s workload.

- NOAA General Counsel must prosecute the frequent and flagrant violators to the fullest extent permissible by law, removing the economic incentive for resource-type violations.

- NOAA General Counsel must judiciously make greater use of permit sanctions for frequent or flagrant violators of resource-type offenses. Fishermen that flagrantly commit resource-type offenses have abused their right to fish; as such they should lose their rights to fish.

Although prosecution of violators is the system component of maritime fisheries enforcement in most need of
improvement, the actual enforcement of regulations can also be improved. Responsibility for this function of maritime fisheries enforcement lies with the U.S. Coast Guard. Improving the detection of violators raises the level of compliance provided those violators are adequately sanctioned.

Maritime fisheries enforcement is the most costly method of ensuring compliance with regulations. Its use should be judiciously limited lest the cost of achieving compliance become exorbitant. In the NMFS Northeast Region, annual Coast Guard effort for fisheries enforcement is 30,000 cutter hours provided by 34 Coast Guard cutters. This maritime fisheries enforcement effort is haphazardly limited by budget and resource limitations.

The problem with Coast Guard fisheries enforcement effort in the NMFS Northeast Region is twofold. First, it is unknown what level of enforcement effort is necessary and towards which fisheries it should be directed. Second, the Coast Guard is unable to measure the effectiveness of its enforcement effort. These issues must be resolved so maritime fisheries enforcement effort can be judiciously controlled by the Coast Guard and the FMC's in the development of regulations rather than haphazardly controlled by budget and resource allocation priorities.

Quantifying enforcement effort and measuring the effectiveness of that effort requires evaluation of required
enforcement by individual FMP's. To do so, the following actions must be taken:

- Make widespread use of the '92 Composite Model. This analytical model is a tool to assist regional operational commanders in establishing enforcement effort necessary for individual FMP's (enforcement goals - output)

- Modify measurement databases (Abstract of Operations, SABRE, EMIS) to measure the outcome of enforcement effort. The data being collected is not useable because it is not collected by individual FMP's. The ability to measure the outcome of specific enforcement effort by FMP is essential to validate the model outputs.

- Validate enforcement goals (output) with conservation goals (outcomes). This may involve increasing or decreasing enforcement effort for a particular plan. Fisheries policy makers (FMC's) should be involved in the validation process. Awareness of the enforcement outputs required by their management decisions as well as the Coast Guard's ability to meet the requirements of those decisions will impact future policies. Inability of the Coast Guard to meet required outputs will result in inadequate outcomes and the eventual failure of management decisions.

Ten years ago, developing enforceable fisheries regulations would have been the weak link in the maritime enforcement system. Today it is the strongest. Although responsibility for this function of the maritime fisheries enforcement system lies with the regional fishery management councils, NOAA, the USCG, NMFS and various state enforcement agencies participate in this process. All responsible parties for the enforcement system interact in the council process, overcoming the obstacle of separation of
responsibilities. The improvement in enforceable regulations can be attributed to this interaction.

Development of management plans involves consideration of statutory requirements, conservation goals, social and economic factors as well as enforceability. It is therefore unreasonable to expect fishery managers to develop a perfectly enforceable management plan. Improvements to enforceability can still be made through measures that promote voluntary compliance.

The Coast Guard must encourage development of management plans that are acceptable to industry and user groups to promote voluntary compliance. FMP’s that have high levels of voluntary compliance require minimal enforcement, freeing additional enforcement effort for fisheries with high levels of non-compliance. To do this, the Coast Guard must:

- Quantify enforcement effort necessary by FMP, and advise the FMC’s how changes in management measures result in trade-offs in enforcement allocation.

The completion of the Coast Guard Fisheries Enforcement Study indicates the Coast Guard is beginning to accept maritime fisheries enforcement as a system. Maritime fisheries enforcement is no longer viewed solely on cutter hours, boardings and violations. Although it will take time for the Coast Guard to divorce itself from these institutional measures of outputs, recent effort and success
in developing enforceable regulations and in enforcement effort allocation is a trend that shows the Coast Guard acknowledges the other factors that affect fisheries enforcement.

To date the Coast Guard has only influenced components of the enforcement system over which it has control. Fisheries management and enforcement is dynamic; future trends in management, such as quota management measures and participation in NAFO, will strain the capabilities of the enforcement system to achieve reasonable compliance. The Coast Guard must be resourceful and creative in expanding its influence into areas it has limited influence, such as the prosecution of violators. It is in this way the fisheries enforcement challenges of the present and future will be overcome.

This analysis of maritime fisheries enforcement in the NMFS Northeast Region recommends improvements to all components of the enforcement system. The weakest link in that system is the sanctioning of violators, as such action on those recommendations are the most important. Keeping in mind that the objective of fisheries enforcement is to achieve an adequate level of compliance with fisheries regulations so conservation and management goals are achieved, the Coast Guard must abandon the emphasis on patrol effort, boardings and violation counts. Instead, the Coast Guard should ensure its enforcement effort results in compliance by ensuring adequate sanctioning of violators.
To do so, the Coast Guard must cross institutional boundaries, even at the expense of fisheries patrol effort. To accomplish this, the Coast Guard should create new billets assigning qualified personnel (Coast Guard lawyers or officers knowledgeable in fisheries management and law) to the Office of General Counsel to improve the capability of swiftly and severely sanctioning violators. Current staffing levels at the Office of General Counsel is inadequate to handle the caseload provided by NMFS and Coast Guard enforcement agents. To continue to place emphasis on detecting violations is a waste of effort and resources; emphasis should be placed on improving the certainty and severity of sanctions to achieve compliance objectives.
## Violation

<table>
<thead>
<tr>
<th>Violation</th>
<th>First</th>
<th>Second</th>
<th>Third</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Minimum Mesh Size</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-- &lt;1/2 inch</td>
<td>1-2.5**</td>
<td>2.5-10**</td>
<td>5 Plus**</td>
</tr>
<tr>
<td>-- &gt;1/2 inch</td>
<td>20-35 **@</td>
<td>35-60 ** -</td>
<td>60 Plus **@</td>
</tr>
<tr>
<td>and/or use of liner,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>illegal net strengthener</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>or other net obstruction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>**Dump fish or other matter (including nets</td>
<td>20-35</td>
<td>35-60</td>
<td>60 Plus</td>
</tr>
<tr>
<td>or other gear)**</td>
<td>**@</td>
<td>** -</td>
<td>**@@</td>
</tr>
<tr>
<td><strong>Closed Area</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-- &lt; 1/4 mile</td>
<td>Warning</td>
<td>1-5</td>
<td>2-5-10**</td>
</tr>
<tr>
<td>-- &gt; 1/4 mile</td>
<td>20-35**@</td>
<td>35-60** -</td>
<td>60 Plus **@@</td>
</tr>
<tr>
<td><strong>Possess or import groundfish smaller than minimum sizes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dealers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-- &lt; 5% (of fish sampled)</td>
<td>.1</td>
<td>.5*</td>
<td>1-5 *</td>
</tr>
<tr>
<td>-- &gt; 5% (of fish sampled)</td>
<td>.5-10*</td>
<td>2-30*</td>
<td>5 Plus*</td>
</tr>
<tr>
<td><strong>Fishermen</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-- &lt; 5% (of fish sampled)</td>
<td>.1*</td>
<td>.5-1*</td>
<td>1-5 *</td>
</tr>
<tr>
<td>-- &gt; 5% (of fish sampled)</td>
<td>.5-15*</td>
<td>2-30* @</td>
<td>5 Plus* @@</td>
</tr>
<tr>
<td><strong>Exempted Fisheries Program (EFP)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-- False accounting/failure to acct</td>
<td>5 Plus #</td>
<td>10 Plus ##</td>
<td></td>
</tr>
<tr>
<td>-- Fishing before receipt of permit</td>
<td>1-2.5</td>
<td>2.5-5 *</td>
<td>5-20 *#</td>
</tr>
</tbody>
</table>

* Plus forfeiture of illegal catch or value of illegal catch
** Plus forfeiture of entire catch or value of entire catch
@ Plus 60-day permit suspension
@@ Plus revocation of permit and/or vessel seizure
# Plus loss of eligibility for program for one year
## Plus permanent loss of eligibility for program
+ Plus value of excess regulated species
- Plus 120 - day permit suspension

Please Note: -- Maximum fine per violation is $100,000 (as of 11/28/90)
-- Owner and Master may be charged separately (with separate fines) for the same offense

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### NOAA ENFORCEMENT OPERATIONS MANUAL

**Northeast Multispecies Fishery - continued**

<table>
<thead>
<tr>
<th>Violation</th>
<th>First</th>
<th>Second</th>
<th>Third</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Catching Excess Regulated Species</strong> (Not meeting % terms)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-- &lt; 5% over allowance</td>
<td>1-5</td>
<td>5-25+</td>
<td>10-25++</td>
</tr>
<tr>
<td>-- &gt; 5% over allowance</td>
<td>5-25+++</td>
<td>10 Plus</td>
<td></td>
</tr>
<tr>
<td><strong>Fishing outside EFP area</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>While enrolled in EFP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-- &lt; 1/4 mile</td>
<td>warning</td>
<td>1-5</td>
<td>2.5-10 **</td>
</tr>
<tr>
<td>-- &gt; 1/4 mile</td>
<td>2.5-25 **</td>
<td>5-50 **#@</td>
<td>10 Plus **##</td>
</tr>
<tr>
<td><strong>Fishing without permit</strong></td>
<td>2-5</td>
<td>5-10 *</td>
<td>10-20 *</td>
</tr>
<tr>
<td>-- without permit on board</td>
<td>1-2</td>
<td>2-5</td>
<td>5-10</td>
</tr>
<tr>
<td><strong>Failure to report change in permit information (other than renewal)</strong></td>
<td>1-2</td>
<td>2-5</td>
<td>5-10</td>
</tr>
<tr>
<td><strong>Making false statements to an authorized officer or the designee of the Regional Director</strong></td>
<td>5-10</td>
<td>10-20</td>
<td>20-40</td>
</tr>
<tr>
<td><strong>Falsify or fail to keep records or reports</strong></td>
<td>5-10</td>
<td>10-20</td>
<td>20-40</td>
</tr>
<tr>
<td><strong>Failure to affix/maintain proper vessel markings</strong></td>
<td>.5-2</td>
<td>2-5</td>
<td>5-10</td>
</tr>
<tr>
<td><strong>Interfere with lawful investigation</strong></td>
<td>5-20</td>
<td>20-50 @</td>
<td>50-100 @@@</td>
</tr>
<tr>
<td><strong>Failure to permit inspection of gear or records</strong></td>
<td>5-10</td>
<td>10-50@</td>
<td>50-100 @@@</td>
</tr>
</tbody>
</table>

*All figures X $1,000*

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NOAA ENFORCEMENT OPERATIONS MANUAL
Northeast Multispecies Fishery - continued

<table>
<thead>
<tr>
<th>Violation</th>
<th>First</th>
<th>Second</th>
<th>Third</th>
<th>Fourth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dealer Failure to maintain records on all transfers, purchases and receipts</td>
<td>2-10</td>
<td>10-20</td>
<td>20-40</td>
<td>40-100</td>
</tr>
<tr>
<td>Possession, custody, control, shipment, transportation, offering for sale, selling, purchasing, landing, importing or exporting groundfish taken in violation</td>
<td>.5-15 *</td>
<td>2-30 *</td>
<td>5 Plus **</td>
<td></td>
</tr>
<tr>
<td>Failure to maintain gear or gear markings</td>
<td>2-5 *</td>
<td>5-10 *</td>
<td>10-20 *</td>
<td>20 Plus *</td>
</tr>
</tbody>
</table>

Aggravating or mitigating circumstances: The following factors will be considered in choosing a penalty within, above, or below the ranges set forth in the penalty schedule and the permit sanction schedule:

1. Biological impact of the violation
2. Mental state: willful or intentional nature of the violation
3. Attendant circumstances:
   a. extraordinary cooperation, or lack thereof
   b. due care standard
   c. attempted concealment of illicit conduct or, alteration, disposing, destruction of evidence
   d. evasion
4. Prior record:
   a. time since last violation
   b. seriousness of prior violation(s)
   c. proven knowledge of the law based on prior record
5. Impact on visibility of the regulatory regime

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BIBLIOGRAPHY


Ballew, Carol, "The OMB Perspective on Fisheries Management", Rethinking Fisheries Management, Center for Ocean Management Studies, 1986.


Department of Transportation, U.S. Coast Guard. *Coast Guard Fisheries Enforcement Study.* COMDTINST 16214, Dec 93.


Department of Transportation, U.S. Coast Guard. *Fisheries Enforcement Strategic Plan.* LANTAREAINST 16200.1, April 14, 1995.


Enforcement Management Information System (EMIS). National Marine Fisheries Service, Silver Springs, MD


Sighting and Boarding Reports (SABRE). U.S. Coast Guard, Washington, D.C.


