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THE MENHADEN FISHERY CONTROVERSY:
A CONVENING ANALYSIS

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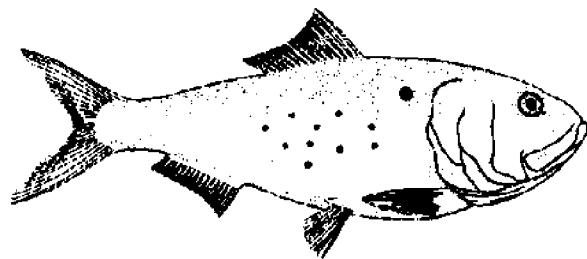
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THE MENHADEN CONVENING ANALYSIS

This paper assesses a dispute between the menhaden fishery industry and opponents to certain practices of the industry in Virginia. The assessment is based principally on interviews with representatives of the menhaden commercial fishing industry, leaders of a sportfishing association, Virginia legislators, state agency officials, and resource and fishery scientists. These interviews were supplemented by reviews of published material.

Many observers believe that consensus-building, or collaborative problem solving processes are central to successfully addressing many critical natural resource and environmental issues. The President's Council on Sustainable Development (itself a consensus-building group composed of industry, environmental and social policy leaders) in a 1995 report entitled *Sustainable America: A New Consensus* observed:

"What has become clear is that the conflicts over natural resources increasingly are exceeding the capacity of institutions, processes and mechanisms to resolve them. Adversarial administrative, legal and political processes are common venues for challenges to many interests in natural resources. These processes typically stress points of conflict, dividing communities and neighbors What is usually missing from the process is a mechanism to enable the many stakeholders to work together to identify common goals, values, and areas of interest through vigorous and open public discussion The Council endorses the concept of collaborative approaches to resolving conflicts."

The National Research Council (NRC) has expressed similar concerns in its 1995 report entitled *Science, Policy and the Coast*. The NRC reported that a major contributor to coastal conflicts was the lack of appropriate settings and processes for communication among interested parties.² The menhaden fishery dispute in Virginia appeared to be a candidate for developing a forum for improved communities and dialogue. A convening analysis was one way to test that candidacy.

The assessment was conducted by the Institute for Environmental Negotiation (IEN) at the University of Virginia with financial support from the Virginia Sea Grant program. The IEN undertook the assessment to determine whether a consensus-

building or dispute resolution process could be convened with the support of the principal disputants. If the most important stakeholding parties—the menhaden industry and sportfishing interests—were willing to participate in such a forum, the IEN planned to invite other interested parties and individuals with scientific or policy expertise to join in such a forum.

The convening analysis is an initial scoping of the issue and of stakeholder attitudes. It is similar to the scoping process conducted for a major project that may require an environmental impact assessment (EIS) under the National Environmental Policy Act. It frames the issues, characterizes the attitudes of the parties, and highlights issues that need further analysis.

Usually, convening analyses are authorized by a government agency to assess whether a negotiation-dialogue process would help the agency in developing a policy or adopting regulations.

This assessment will refer to "menhaden industry supporters" and the "menhaden fishery challengers" or simply "supporters" and "challengers" rather than attribute the findings to particular individuals. The reader should be aware—as the author is—that this device may distort diverse and relevant differences among individuals.

As per the contract between Sea Grant and the Institute for Environmental Negotiation, a written report follows, including comments on both the specific conflict and broader, related issues. The survey of the substantive aspects of the dispute might be useful for those interested in Virginia fisheries policy, if not in dispute resolution specifically.

RESOURCE CONFLICT AND COLLABORATIVE PROCESSES

An environmental conflict assessment or convening analysis is utilized by the U.S. Environmental Protection Agency (EPA) as well as other federal agencies to determine whether a regulatory negotiation can be usefully substituted for the formal rulemaking process. A convening analysis is undertaken when the EPA believes that a proposed rule will provoke strong opposition from different stakeholders. EPA knows that strong

¹ The President's Council on Sustainable Development, *Sustainable America: A New Consensus* (Feb. 1996) p. 113.

² National Academy of Science, *Science, Policy and the Coast, Improving Decision Making*, (National Academy of Science, 1995) p. 1.

opposition to a rule can lead—and frequently does lead—to litigation and long delays in rule adoption and in later implementation.

The regulatory negotiation alternative—often called a reg-neg—can be an effective alternative to the usual rulemaking process. Such negotiations often produce better information, generate consensus-based rules and lead to improved implementation because the parties feel a sense of responsibility for the rules they have helped to craft.

The reg-neg is actually convened if the analysis indicates that the key stakeholders are willing to participate and that the issues dividing them appear to be tractable. If the reg-neg produces consensus, the agency can use it as a basis for public notice and comment and adoption.

A convening analysis is also conducted by environmental mediators or facilitators for consensus-building activities that may or may not lead to legislative or administrative rulemaking. These consensus-building activities may be called forums, round tables, policy dialogues, or special task forces, but they all aim to establish conditions for disputing parties, policy adversaries, or diverse interests, to deliberate and seek consensus on matters of public policy importance.

Some characteristic features of these consensus-building processes are. . .

- A fair representation of all the interested parties who agree to meet and deliberate in good faith on a particular issue under appropriate ground rules.
- The use of consensually developed decisions and rules, rather than results derived by voting.
- The use of a professional neutral, sometimes called a facilitator or mediator, to assist the group in convening the meetings, establishing processes and agendas with their concurrence, and facilitating meetings.
- The reporting of the consensus findings and recommendations to the public and decision-makers.

This is not the place to elaborate on the strategies, tools and processes that are conducive to finding consensus, but there are many examples of the successful use of collaborative processes in the environmental and resource policy arenas.

THE VIRGINIA MENHADEN CONFLICT

The most important, contentious, and public element of the menhaden dispute stems from legislation introduced in several recent sessions of the Virginia General Assembly that would limit menhaden fishing in some near-shore sections of the Atlantic Coast and the Chesapeake Bay. This legislation has been strongly opposed by the menhaden industry on the grounds that it would limit fishing opportunities that are critical to the industry's economic viability.

A public forum held in Virginia Beach in 1996 sponsored by some state legislators to discuss this legislation was reported by the *Richmond Times Dispatch* and publicized the acrimonious nature of the dispute between the menhaden industry and supporters of the bills that would restrict menhaden fishing.

Following this newspaper report, the Institute for Environmental Negotiation interviewed individuals involved in the menhaden fishery issue. Based on these interviews IEN requested support from the Virginia Sea Grant Program to conduct a convening analysis.

The specific rules of the proposed near-shore fishing limits turned out to be of lesser interest to the parties than it was initially assumed. The parties were less interested in negotiating the specific features of such a bill, than addressing a broader set of concerns that marked their relationship and which spilled over into areas of fishery policy. As this convening analysis demonstrates, the near-shore legislation is only the most publicized and contentious aspect of a larger and more complex set of issues. As this paper will further suggest, the real value of a collaborative process would be concerned with the relationship of the menhaden industry with sportfishers, environmental groups, and fishery management institutions. The near-shore legislation issue can only be resolved by a better understanding among the parties.

However, the practice of the Atlantic coastal states restricting menhaden fishing reaches beyond the particulars of the proposed Virginia bills. Several Atlantic states have restricted menhaden fishing in

near-coastal waters. Industry representatives claim that about 45% of the Atlantic states near-shore waters have been closed to menhaden fishing.

The Atlantic States Marine Fishery Commission (ASMFC), which is described more fully in a later section of this analysis, has developed a menhaden plan to guide the management of this fishery in the Atlantic coastal states. This plan takes the position that near-shore fishing restrictions are not necessary to protect menhaden, and objects to such legislation by the states.

The ASMFC holds that the menhaden restrictions are really driven by "social issues, and are not justified on the basis of resource conservation." The sportfishers in Virginia challenge this position and maintain that there are legitimate resource issues at stake. Whether there is, or is not, a legitimate resource element to the dispute, is the key to a possible resolution of the issue.

Consider these other issues which have recently involved disputes between the same stakeholders.

- A study of menhaden by-catch conducted by the Virginia Institute of Marine Science (VIMS) was heavily criticized by sportfishers and their supporters. Critics alleged that the study was too limited and incomplete and the interpretation of the data, too selective. Pressure was generated to review and revise the VIMS report. A second report was issued that emphasized the methodological limitations of the study, and presented the data in a form which menhaden challengers felt was more balanced.³
- The Atlantic States Marine Fishery Commission (ASMFC), which is described in a later section of this report, was created by an interstate compact in 1942. The 15 Atlantic coastal states use this commission's auspices to cooperatively manage the fish species in this portion of the Atlantic Ocean. The ASMFC has developed a menhaden plan for these states. This plan is the principal source of general public knowledge about the

science and policy issues related to menhaden. The planning document asserts that near-shore fishing restrictions are not required for menhaden fishing protection. This position is challenged by sportfishers in several states.⁴

- The ASMFC role in managing fish species in state waters has become an issue within Virginia. The Virginia General Assembly has authorized Virginia's withdrawal from the ASMFC on the grounds that powers granted to it by the Atlantic Coastal Fisheries Cooperative Management Act exceed the initial compact agreement. Essentially the law allows the ASMFC to appeal to the U.S. Secretary of Commerce to declare an individual state in noncompliance of an approved fishery plan. Some interviewees believed that though it is unlikely that Virginia would ever withdraw from the ASMFC, the state action symbolizes the state's concern about cooperative regional management of many fish species.⁵
- Menhaden are considered a keystone species in the food chain. A scientific research proposal that would have developed a trophic model to better understand the menhaden role in the ecosystem was denied funding by the Virginia Marine Resource Commission (VMRC) after a controversial vote. Sportfishers and some conservation groups alleged that the study was rejected for funding, not because of a lack of scientific merit or of policy relevance, but because the menhaden industry was concerned about the potential impact of the findings.
- Sportfishing groups have proposed far reaching changes in the menhaden fishery management policies of the Commonwealth. For example, they have advocated a reduced role for the

³ Austin, H., Kirkley, J. and Lucy, J., *By-catch and the fishery for Atlantic Menhaden (*Brevoortia tyrannus*) in the Mid-Atlantic Bight, An Assessment of the Nature and Extent of By-catch*, (Virginia Institute of Marine Science, Jan. 1994).

⁴ Austin, H., Kirkley, J. and Lucy, J., *By-catch and the fishery for Atlantic Menhaden (*Brevoortia tyrannus*) in the Mid-Atlantic Bight, An Assessment of the Nature and Extent of By-catch*, (Virginia Institute of Marine Science, Jan. 1994).

⁵ See H.B. 374 repealing Article I (28.2-1000) of Chapter 10 of Title 28.2 of the Code of Virginia and authorizing renunciation of the Compact. Note that H.B. 390 postpones giving notice to the ASMFC of the proposed renunciation.

General Assembly in menhaden management and an increased role for the VMRC. These suggested changes have not been accepted by the General Assembly.

THE ATLANTIC MENHADEN FISHERY

The core issue in the menhaden dispute centers around the fact that these fish school near the shore. The overwhelming percentage of menhaden are captured in large schools by purse seines within a mile or two of coastal land. This same near-shore coastal area is used intensively by sportfishers, charter boats that cater to sportfishers, and to recreational boaters. Officials and business professionals who represent tourist areas, such as Virginia Beach, are concerned about uses that would adversely impact the aesthetics of the beach and near-shore waters—they do not want to drive away tourists. Likewise, home owners with water access are also concerned about near-shore activities that affect their enjoyment of their property. The social and economic aspects of the menhaden fishery issue flow from these concerns.

But menhaden are also important ecologically. Menhaden have been described as a "keystone species" in the flow of energy and nutrients within coastal and estuarine waters. Menhaden are filter feeders and their filtering capability contributes to water quality. Menhaden biomass affects the biological and physical health of Chesapeake Bay.

Menhaden migrate up and down the Atlantic coast seasonally. They occupy estuaries, as well as near-shore and offshore ocean locations during their lives. The size and numbers of menhaden vary by location and time of year. These variations affect the economic capacity of the fishery as well as the efficient and responsible harvesting of the fish.

The typical menhaden fishing methods contribute to the dispute. Menhaden schools are located by spotter airplanes; a mother ship is dispatched to the school's location. Purse seine boats towed by a large mother ship are dispatched to encircle the school of fish. The fish are caught in the purse seine and then pumped by pipe to the mother ship. The fish are pumped onto a grate

which captures them while the pumped water is discharged back into the ocean. The fish are then transported to the processing plants where they are "reduced" to their component parts.

Predators are attracted to large populations of menhaden; from the perspective of fish predators and the sportfishers, menhaden are principally valuable as "forage" fish. Predators, such as rockfish, are often important to other commercial fishers as well as to sportfishers. Resolution of the menhaden dispute rests in part upon an understanding of the fish's behavioral features and its ecological role, not just upon economic or political dimensions.

Historically, menhaden has constituted an important commercial fishery on the East Coast. The Atlantic and Gulf menhaden are distinct fisheries, but the combined Atlantic and Gulf menhaden fishery catch comprises approximately 45% of the total commercial finfish harvest in the United States. The Atlantic Coast harvest is the largest single-species fishery on the Atlantic Coast. It is also the most concentrated fishery in Chesapeake Bay.

Menhaden is oily and bony; it is not a table fish. The processed fish meal "reduced" from menhaden is commercially important as food supplements used for the production of hogs, turkey, and chickens. It is also used in pet food. Although the industry hopes to market menhaden oil for direct human consumption in food products and some is exported for that use, there is still no substantial U.S. market for it.

Although some menhaden are caught and used for bait to catch other marine species, the dominant menhaden catch is for the "reduction fishery." The reduction plants and their locations are the linchpin of the entire menhaden fishing enterprise. There are only three menhaden processing plants on the Atlantic Coast. As recently as 1981 there were eight processing plants on the Atlantic coast, but the others have closed because of "international market conditions affecting the prices of menhaden products" and due to "localized social problems involving menhaden processing plants and neighboring residential areas."⁶

Two of the three menhaden plants on the Atlantic Coast are located in Reedville, Virginia, and they process 70% of all Atlantic menhaden. These plants are located on the Northern Neck of Virginia,

a peninsula bounded by the Potomac and Rappahannock Rivers and the Chesapeake Bay. The Northern Neck is still largely rural, and the menhaden plants contribute significantly to the region's economy. Approximately 500 jobs are attributed to menhaden processing activities on the Northern Neck. The plants have recently been unionized after a difficult organizing struggle, and a considerable number of menhaden fishers and process plant workers are Afro-American.

The Reedville processing plants are owned respectively by Zapata Proteins, Inc., a publicly traded company located in Houston, Texas, and AMPRO, owned by American Proteins, Inc., a privately held company headquartered in Roswell, Georgia. Zapata and AMPRO are vertically integrated firms. These two firms not only own and operate the two processing plants, they own the fishing boats, employ the fishers and market the products. These companies manage the entire process, from the planes that initially locate the fish schools to the sale of the fishmeal as it leaves the reduction plants.

This high concentration of menhaden processing capability on the western side of Virginia's Chesapeake Bay is important. The companies prefer to catch the menhaden as close to their plants as possible in order to reduce fuel, refrigeration and labor costs. If menhaden can be caught in large numbers in the Chesapeake Bay or in near-shore Virginia waters, it is less costly for them. The market for fish supplements and fish oil is quite competitive.

It is estimated that approximately 230,000 metric tons are processed at the Reedville plants annually. Approximately 68% of the total Atlantic menhaden catch come from Virginia waters, with approximately half of this 68% taken from the Chesapeake Bay.⁷

The concentration of the menhaden processing jobs in Virginia influences the politics of menhaden fishing in other Atlantic states. The main economic benefits of menhaden fishing are realized near the plant locations. Those states without processing plants have fewer menhaden fishermen and fewer processing jobs. Consequently, if menhaden

restrictions are proposed in other states, there are fewer economic reasons to oppose it.

MENHADEN FISHERY MANAGEMENT _____

The Atlantic States Marine Fisheries Commission is an organization formed by 15 Atlantic coastal states to cooperatively plan for and implement fishery plans. State jurisdiction extends to three miles off their respective coasts. The ASMFC observes that regulatory "authority over the Atlantic menhaden fishery is vested in the various state management systems, not in the federal government."

The Atlantic Menhaden Fishery Management Plan, like other ASMFC fishery plans, depends upon cooperation from the individual states for its effective implementation. Although recent amendments to the Magnuson Act have authorized U.S. Government involvement if a state is found out of compliance with an ASMFC plan, such an action would be extreme.

*The ASMFC menhaden plan is the single most important source of scientific information and policy direction on menhaden. This plan provides the scientific and policy recommendations that the menhaden fishing industry supports and the sportfishing interests sometimes challenge. Revised in 1992, this plan's main purpose is to "manage the fishery in a manner that is biologically, economically, and socially sound, while protecting the resource and its users."*⁸

The menhaden plan declares that "*The Atlantic menhaden stock is healthy and continues to rebuild, with improved spawning stock, good levels of recruitment during the 1980s and a broader range of ages.*" But the plan also notes that a large percentage of the recent average catch of 341,000 metric tons of menhaden are caught in the Chesapeake Bay, rather than in the mid-Atlantic where more fish were caught prior to the "depressed condition" of menhaden populations in the 1960s.

The plan also notes that there is "sufficient capacity" to harvest the "available resource." In other words, the plan discourages foreign fishing in U.S. waters for menhaden, and implicitly supports

⁶ ASMFC op.cit. p. 2.

⁷ Ibid. p. iii.

⁸ ASMFC p. ii.

the current structure and size of the menhaden processing industry. But the plan also says that "because most of the harvest is of young, sexually immature fish which could provide a greater yield if harvested when older and larger, *Atlantic menhaden are growth-overfished*." Growth overfishing is defined as a situation where too many fish are undersized. *Recruitment overfishing* is defined as a situation where too many fish are taken to maintain a maximum sustainable yield.⁹

The menhaden fishery catch data are assessed against six indicators—or triggers—to determine the state of the fishery. Two such triggers are the number of fish recruited, and the total biomass removed by fishing. These triggers provide a somewhat more sophisticated assessment of the state of the fishery than a simple maximum sustainable yield measure might provide. If the triggers are exceeded, a closer review is conducted. Restrictions on fishing can be introduced if the ASMFC determines that this is appropriate. The plan estimates the maximum sustainable yield to be about 480,000 metric tons per year.

The plan contrasts the good condition of the fishery "compared to its severely depressed condition during the 1960s, when extremely heavy fishing pressure during a period of poor reproduction greatly reduced the total stock as well as the spawning stock." In effect, it says that the menhaden stock has recovered from recruitment overfishing, and that although the catch is not quite as great as it was at its peak, there is now a good match between the current menhaden fishing capacity and a sustainable menhaden fishery.

Some Atlantic coastal states have prohibited menhaden fishing entirely in their jurisdictional waters. Other states have limited menhaden fishing in certain areas or have placed other restrictions which limit the industry's preferred fishing methods.

The Atlantic Menhaden Advisory Committee (AMAC) noted in a report issued in the Summer of 1996 that it has "a major concern . . . with continued incremental closure of areas to purse seine fishing for reasons other than stock conservation."¹⁰ This has been a continuing source of concern to the

AMAC. The 1992 planning document alleges that "*biological claims were cited as justification for those closures when social conflicts were the real basis*." The menhaden plan is probably the only instance where the ASMFC has complained that the states have been too restrictive in fishery management rather than too lenient.

The ASMFC menhaden plan also criticizes menhaden challengers for allegedly exaggerating the amount and impacts of by-catch from the menhaden purse seines. Although it is generally conceded that purse seines are indiscriminate in fish captured, most observers believe that by-catch is not as serious an issue with menhaden as it is with some other fisheries. Yet, at the same time, the ASMFC has urged a close monitoring of by-catch on Russian menhaden boats off the Maine coast.

The plan also criticizes the menhaden challengers for allegedly misleading the public with claims that "game fish are dependent on menhaden as forage to the exclusion of other abundant forage species." The challengers have maintained that the removal of millions of tons of menhaden in the Chesapeake Bay must have some effect on predators and other marine life. The planning document infers that the challengers have not been evenhanded on this matter, because predators may simply shift their diet to other available species, such as anchovy.

An ASMFC fishery plan is organizationally complex. Each species plan has its own planning group and advisory committee. The plan is reviewed each year as new data is evaluated, and assessed against the triggers. But the plan is the most authoritative and complete assessment of the state of the menhaden fishery. Those who would challenge it carry a substantial scientific and policy burden.

The menhaden challengers concede that the menhaden plan has substantial scientific input, but they claim that the plan is functionally a policy document and that the policy is dominated by the menhaden industry and its supporters. The challengers further claim that their own statements on the status of the menhaden fishery are consistent

⁹ Ibid. p. 22.

¹⁰ Ibid. 10 Memorandum from Ellen B. Smoller, Chairman, Atlantic Menhaden Advisory Committee to William A. Pruitt, Chairman, Atlantic Menhaden Board (May 22, 1996) p. 6.

with scientific data; it is their interpretations of the data that sometimes differ from the plan.

This completes the description of the background, fishery conditions, economics, and fishery management of the dispute between the menhaden supporters and challengers.

THE PRINCIPAL STAKEHOLDERS _____

Personal interviews with industry representatives from the two major Virginia menhaden companies were conducted to ascertain the industry's position on the menhaden fishery and on a possible consensus-based forum. The National Fish Meal and Oil Association (NFMOA) represents the menhaden fishery industry's view on many issues as well. Both of these sources contributed to the assessment made here. There was an overall similarity of views on the menhaden fishery situation.

The challengers' view is aggressively promoted by the Coastal Conservation Association of Virginia (CCA/VA) which describes itself as the leading saltwater angling and conservation organization in Virginia. CCA/VA is affiliated with the national Coastal Conservation Association, which has state affiliates in several Atlantic coast states. The CCA/VA proclaims that its "mission is to conserve, protect, and restore marine fish populations so future generations can enjoy the fun of marine sport fishing and the satisfaction of tasty Virginia saltwater fish on the dinner table."¹¹

THE MENHADEN INDUSTRY SUPPORTERS _____

The image of the menhaden fishery promoted by the NFMOA is well depicted in one of its informational brochures, "Menhaden: America's Bountiful Renewing Resource." The brochure emphasizes that the menhaden resource can be "harvested in a manner compatible with other uses of the marine environment."¹² This is a major theme of the industry in its public pronouncements.

¹¹ Coastal Conservation Association of Virginia, "Statement of Purpose and Organizational Structure" p. 1 (no date).

The NFMOA maintains that the menhaden resource is abundant and that the commercial menhaden fishing companies carefully manage the resource, because they depend upon the resource for long term economic success. The NFMOA maintains that the menhaden fishery is a "clean" fishery; by this it means that there is very little "by-catch" of nontarget species. The industry further contends that its economic viability depends upon the opportunity to fish in those near-shore areas where its activities are challenged. The industry claims that restrictions on near-shore fishing or in some parts of the Chesapeake Bay would have catastrophic economic effects.

The industry views itself as under siege from sportfishing and some tourist related interests that aggressively pursue legislation that would ban menhaden fishing in near-shore areas. It claims that the alleged incidents of beach-fouling or of aggressive behavior by industry vessels against sportfishing boats is infrequent and unfortunate. The Reedville based companies claim that they have self-imposed "guidelines" that are designed to reduce incidents between their vessels and other boats or activities.

The industry points to the ASMFC plan as firm scientific evidence that it is not threatening the menhaden resource or harming other fishery resources. Industry also points to the close cooperation that it has established with the National Marine Fishery Service (NMFS) to encourage close monitoring of the fishery resource.

THE SPORTFISHERS AND OTHER MENHADEN CHALLENGERS _____

The menhaden dispute in Virginia is commonly framed as a dispute between the menhaden commercial industry and sportfishing interests. In this view, the dispute is a "social" issue in that it pits the interests of sportfishers against commercial fishers over the use of the near-shore water. The contest is also framed as a "win-lose" proposition, with the sportfishers cast as the aggressive party

¹² See *American Menhaden Industry: A Success Story*, a video available from the National Fish Meal and Oil Association (no date).

which wins by banning menhaden fishing from areas that they have fished historically.

The sportfishers do not accept this framing of the issue. They don't deny that they represent sportfishing interests, and that there is some self-interest in restricting menhaden fishing in certain areas. But they claim that the near-shore issue is only one aspect—and not necessarily the most important aspect—of their continuing disputes with the menhaden industry. They claim that their principal organizational "interest," as distinct from their "position" on menhaden, is to help conserve all fish species. They maintain that they are not only interested in catching fish, but in modifying the policy and management capacity for fisheries in the Commonwealth. Their policy documents support this statement: there is considerable emphasis placed on ecological principles, economic theory, and public management processes.

But they do claim that recreational fish catches are dropping, and they suspect that some of this is due to menhaden fishing. They claim that this decline has had negative impacts on marinas and those businesses which depend upon boating manufacture and use as well as sportsfishing activity. They claim that the legislation they have supported, which would restrict menhaden fishing in certain areas, would not have the adverse economic effects claimed by the industry. Further, they believe that if an acceptable compromise could be reached on the menhaden issue, it would open opportunities for more effective collaboration in fishery policy in general.

The CCA/VA does not challenge all aspects of the ASMFC plan nor all the views of the menhaden industry representatives. They do not necessarily disagree with the proposition that menhaden can be harvested in a manner compatible with other uses of the near-shore area. They claim that the industry is unwilling to consider alternatives, preferring to "stonewall." They assert that they wish to discuss several options on menhaden fishing, including non-regulatory measures.

However, the CCA/VA does vigorously challenge the menhaden industry in communications with its members and in public

statements. For example, the quotation below was in a letter sent by CCA/VA to a Delegate of the Virginia General Assembly:

"During the summer months, hundreds of thousands of Virginians and visitors use the waters of the Chesapeake Bay and near-shore Atlantic Ocean. Many if not most, of those people would object to sharing the near-shore waters with a big factory ship discharging thousands of gallons of water fouled by blood, scales, and body parts from the fish. There is always the possibility of a net breakage or release due to accidental mammal capture or excessive by-catch, resulting in a fish kill and spill ending upon the beaches."¹¹

The menhaden issue figures prominently in CCA/VA documents and public statements. Challengers allege that the menhaden fleet, in effect, intimidates sportfishers who are attracted to menhaden because predator fish—such as rockfish—will be in the vicinity. Challengers also cite instances of menhaden boats fishing near beaches during the tourist seasons which, in their view, conflicts with other recreational uses, and is aesthetically unappealing. The CCA/VA representatives showed this writer photographs of beaches sullied by what they allege to be "gurry water" from menhaden boats, just after the city of Norfolk had cleaned the beaches before a summer holiday.

Commercial and recreational fisheries often find themselves in opposition over fishery policy. But the menhaden issue is distinctive and maybe prophetic because the two interests are not competing over their respective allocations of a single fish species. The menhaden fishery dispute is a symbol of the increasing ecological awareness of our society. Although there is an obvious distributional aspect in the menhaden dispute, it is reflected in the competition for fishing space and not for competition for a share of a total species catch limit.

¹¹ Letter from Bob Pride, May 29, 1995.

REFRAMING THE MENHADEN ISSUE

The most immediate and controversial aspect of the menhaden issue revolves around the efforts by challengers to restrict the timing and spatial aspects of menhaden fishing. The high visibility of the near-shore issue not only dominates the relations between the parties, it shapes the public's perception of what is at stake in the dispute. This dispute requires that this perception be reconsidered.

In a masters thesis submitted for a degree in anthropology at the University of Virginia in 1988, Barbara Garrity studied the public controversy that surrounded a campaign to restrict menhaden fishing within one mile of the North Carolina coast. Ms. Garrity's thesis, later published as a book, has been influential in public perceptions of the issue. Ms. Garrity summarizes her position:

"This cultural analysis examines the conflict in terms of the contradictory meanings which the opposed groups attach to the maritime environment that they share. Working the environment for a living, according to commercial menhaden workers, constitutes the vital and productive relationship between man and nature. For sportsmen, however, the industrial exploitation of nature for profit is a destructive and reprehensible activity. As coastal areas become "non-work" places of recreation and retirement, menhaden fishing as an industrial enterprise is little tolerated: *fishing for commercial profit is pollution when it occurs within a coastal zone marked sacred by recreationists who adhere to the principles of environmental conservation.*"¹⁴ (My emphasis.)

Garrity's analysis asserts that menhaden fishing constitutes no real threat to "the balance of nature." She essentially ignores the claim that there are important ecological or conservation issues in this dispute. She frames the issue as a cultural dispute which is essentially the same assertion made by the ASMFC, that limitations on menhaden fishing are "social" disputes in spite of the environmental

arguments. *This convening analysis suggests that the current framing of the menhaden fishing issue in Virginia which ignores the ecological component is too limited in scope.*

Garrity's menhaden framing of the issue in North Carolina must be modified in the Virginia context. A framing of the menhaden issue must consider the current context of menhaden fishing within the concentrated fishing in Virginia waters and in the Chesapeake Bay. When the environmental or ecological aspects are effectively dismissed from the issue framing, then the dispute appears. *This is a view propounded by some menhaden industry sources, and it is a view generally accepted by those interviewed for this report.*

Several political scientists have noted that beginning about 1970, "post-material" values, or "quality of life" issues have added a new dimension to American interest group politics. *The dispute over limiting menhaden fishing in the near shore area is similar in most every respect to what are generally defined as environmental disputes, and not just interest group politics, between environmental advocates and loggers and grazers on public lands. These conflicts also pit different types of users against each other, but it is noteworthy that "clear-cutting" and "overgrazing" are categorized as environmental issues, while the use of the near-shore waters is not categorized that way.*

Environmental groups have typically challenged accepted uses of public resources. Their opponents also normally claim that they are elitists who try to fabricate environmental concerns as a cover for their true goal: gaining a monopoly over the use of the resource. However, unlike bird watchers or hikers on public land who do not cut trees or graze animals, sportsfishers harvest fish and sometimes are major contributors to overfishing. This element may account for the different framing of the menhaden fishery issue from other public resource disputes. The CCA/VA is attempting to change the perception of sportfishers as competitive exploiters with the commercial fishing industry to resource conservationists.

The CCA/VA sportsfishers note that fisheries, public forests, and other public land issues share common characteristics: a public resource is being utilized, historical practices favor extractive, commercial uses and that the traditional users

¹⁴ Barbara Jean Garrity, *Fishing For Fun or Profit: The Conflict Between Commercial Menhaden Fishermen and Recreational Sport Fishermen in the Southeast United States*. Thesis presented to the Department of Anthropology, (University of Virginia, 1983) p. iii.

possess economic power and political influence. The challengers charge that "overcutting," "overgrazing" or "overfishing" are alike in their tendency to over-utilize a resource and threaten ecological values. The menhaden challengers favor forums in which these concerns can receive more public attention and more consideration by public authorities.

The menhaden fishery dispute in Virginia is not generally perceived as possessing a natural resource or environmental component. But that is changing, and is one possible reason for encouraging more public discussion of the issue. But as long as the dispute between the CCA/VA and the menhaden fishing industry is framed as only a "social" or "cultural" dispute, the less likely there is going to be a change in the "win-lose" character of the current dispute.

BEYOND THE MENHADEN NEAR-SHORE FISHING DISPUTE _____

In order to properly re-frame the issue, less publicized or understood aspects of the menhaden fishery issue must be evaluated. Second only to the near-shore restrictions for menhaden in terms of public controversy is the by-catch issue.

By-catch is the term for nontarget species that are caught in pursuit of a target species. Menhaden purse seines will capture whatever fish are mixed with the menhaden schools. In Virginia, menhaden by-catch is limited by law to 1% of the target fish, and by-catch is not sold or kept for personal use of the party catching it. Arguably, the law requires that if the by-catch in any one "menhaden set" exceeds 1%, the entire catch should be released.

The amount of by-catch associated with the use of purse seines in the near-shore area has been a controversial topic. VIMS researchers, with the cooperation of the menhaden industry, recently examined this issue. For this analysis it is enough to note that the research did not satisfy all of the stakeholders.

But, the menhaden challengers agree with the industry that the menhaden fishery by-catch is not a major problem compared to by-catch in some other fisheries. The challengers emphasize that even 1% of 480 million tons is a lot of fish. But in a

communication to a legislator following the second VIMS by-catch report, CCA's Executive Director wrote, "After reviewing the VIMS study, and the re-visitation of that study, CCA agrees overall, by-catch is probably not a big problem in the menhaden reduction fishery."¹⁵

The sportfishers interviewed for this report said that they were more concerned with long-line, trawling, and gill nets, which they consider to be even more indiscriminate in their catch and more threatening to marine fisheries. So the by-catch dispute, although not completely resolved, is not an obstacle to discussions on other matters.

FISHERIES AS A PUBLIC RESOURCE _____

Virginians are worried about the status of marine resources. The publicity associated with the rockfish moratorium, declining oyster populations, and blue crabs has caught the public's attention. The National Marine Fisheries Service estimates that many species are overfished and many others are fished to their capacity.

The challengers vigorously maintain that the menhaden issue is an example of a more widespread fishery resource concern that is not being addressed with the urgency that it requires: the characterization of fish species as publicly owned resources and the need for devising conservation strategies that will protect these resources in the face of rising demand and increasing ecological threat.

Fishery issues present a classic case of what economists call "market failure." A "market failure" exists when the conditions necessary for a free market to work effectively are absent. Fishing presents a classic case of a "market failure" category that can lead to what is called the "tragedy of the commons."

In a competitive economy, no market mechanism ordinarily exists to reward individual forbearance in the use of commonly owned resources and to which there is free access. Since there is no restriction on access to the commons, each individual will "rationally" (that is to say, with market-based economic rationality) exploit a resource for private

¹⁵ Letter from Bob Pride (no date).

gain even if that pushes the resource beyond its capacity to maintain itself. In fisheries this means that the resource will be overexploited unless there is some form of limitation on access or use. The "rationality" for each individual lies in the estimation that the individual will receive the benefit of the particular catch, but share a smaller portion of any loss from the resource's depletion. Worse, if the individual acts responsibly and limits his catch, it does not avert the "tragedy of the commons" because others will, acting rationally, deplete the resource.

CCA/VA leaders believe that Virginia needs to address "the tragedy of the commons" by developing market or governmental measures to avert this outcome. But the menhaden fishery, unlike some other fisheries, does not now include all of the elements needed to have a classic "fisherman's problem" or a "tragedy of the commons." The Atlantic menhaden may be "growth overfished" (which is not to be dismissed as of no public concern), but the current information presented in the menhaden plan shows a relatively healthy menhaden population. To the extent that challengers claim overfishing in this classic sense, they are arguing against what appears to be a scientific consensus that the resource is being managed appropriately.¹⁶

And, unlike the classical fishery situation where there is either overcapitalization (too many fishers and/or capacity to harvest) or easy access to the fishery by new entrants, the relatively high social and political costs of siting and constructing menhaden processing plants effectively limits new domestic entrants to the menhaden fishery. The ASMFC species plan provides the authority to assure that one state does not deplete migratory fish, such as menhaden.

The ASMFC plan for Atlantic menhaden is not governed by a simplistic maximum sustainable yield (MSY) formula either. The relatively sophisticated "trigger" review process, combined with what appears to be a high degree of industry cooperation in providing timely information to scientists, suggests

that the fishery is better understood and protected than other fish species.

So, although the menhaden challengers evoke some sympathetic response when the menhaden "overfishing" issue is addressed, the Atlantic menhaden situation seems sufficiently different to justify the industry's claim that the challengers are exaggerating the threat to this particular species.

The challengers maintain that menhaden fishing numbers may not eliminate the species, but the concentration of menhaden fishing in the Chesapeake Bay particularly may affect that "commons." *From the CCA/VA point of view, the "commons" is not the menhaden, but the ecosystem of the Chesapeake Bay.*

Some of the acrimony and charges that the various parties and their allies levy against each other arises from a lack of mutual understanding about the general relevance of the "tragedy of the commons" to both commercial and sport fisheries, and more specifically to the menhaden fishery.

The CCA/VA claims that the management of Virginia's fisheries does not reflect the type of evaluation of economic and ecological interactions that will lead to long term sustainable fisheries. Nearly all scientific fishery analysts agree that fishery problems are "commons problems" and that appropriate responses include a combination of ecology, economic strategies, and public management.

FISHERY SCIENCE AND RESOURCE MANAGEMENT ISSUES —

Challengers assert that traditional fisheries research does not often address the types of concerns that menhaden present. On this point, the United States National Research Council has observed that:

"Fisheries scientists and managers have given virtually no consideration to consequences of removing target species on the structure, dynamics, and productivity of the ecosystem of which the target species are a component."¹⁷

Another fishery scientist observes that, "Part of

¹⁶ For a particularly good account of the fishery commons problem see McEvoy, Arthur E., *The Fisherman's Problem: Ecology and Law in the California Fisheries 1850-1980*. (Cambridge University Press, 1986.)

¹⁷ National Research Council, "Improving the Management of U.S. Marine Fisheries." (Washington D.C.: National Academy Press, 1994) p. 28.

the problem with fisheries management is the tendency to manage one species at a time. Marine communities are diverse and their food chains are complex. In many instances, one fishery is targeting a predator while another is targeting its prey, yet there is no management coordination between the two."¹⁸

On this same note, it has been observed that "sustainable fish populations depend on the biological integrity of marine ecosystems, which is undermined by overfishing. Coordinated multi-species management, based on recognition of the interaction among fisheries, seabirds, mammals, and their habitats, should be developed and implemented."¹⁹

Scientific concerns about the interaction between fishery science and fishery management are gaining strength. Even under the best of circumstances, scientific studies of the desired type are difficult to conduct. The challengers and some resource managers interviewed for this report feel that the current menhaden management system in Virginia complicates cross-species scientific research and management.

RESOURCE MANAGEMENT CONCERNS _____

The challengers note that the menhaden fishery is essentially controlled by the political process in the General Assembly. In effect, they claim that the VMRC has been essentially barred from managing the menhaden fishing process because of the General Assembly's position. This situation, it is argued, limits the role of scientists and resource managers in integrating species management in Virginia. They claim that this arrangement also limits the capacity of Virginia fishery resource managers to work collaboratively with other Atlantic coastal states and the ASMFC planners.

CCA/VA has introduced and promoted legislation that would confer on the VMRC the sort of planning and management discretion for

menhaden that it exercises over other marine species. It is not clear to this writer whether there is active opposition to this proposal, or if the legislation has been tabled for lack of interest or understanding.

REPRESENTATION OF SPORTFISHERS IN THE MENHADEN PLANNING PROCESS _____

The menhaden industry is well represented on the ASMFC menhaden planning groups. But there is no direct representation for sportfishing groups. Although it should be noted that there are forums and opportunities for challengers to present their views in the menhaden planning process, the challengers assert that the process is stacked against a conservation and sportfishing interest.

As this report noted earlier, the ASMFC menhaden plan is the primary source of information on the menhaden fishery. But the plan is a policy document, not a scientific treatise. The sportsfishers claim that the planning process is dominated by industry representatives and excludes membership of sportsfishers. It is worth observing that similar claims of exclusion in planning decisions have been made by environmental groups in planning for the use of public lands. Changes in federal law have provided much more opportunity for public input in forestry and grazing plans.

ECONOMIC ASPECTS OF PUBLIC RESOURCES _____

Menhaden and other marine resources in Virginia's coastal waters belong to the people of the Commonwealth. Public agencies, like the General Assembly and the VMRC, act as stewards for these resources.

Assuming for a moment that a win-lose situation existed between the menhaden fishing and recreational fishermen, whose claims should prevail in the public interest? And what standards should be employed to evaluate the claims?

This analysis indicates that there are ecological elements as well as those which can be lumped together as political, including concerns for jobs,

¹⁸ Camhi, Merry, "Overfishing Threatens Sea's Bounty," FORUM, University of Tennessee, Energy, Environment, and Resources Center, (Vol. 11 No. 2, Summer 1996) p. 9.

¹⁹ Ibid. p. 13.

distribution of benefits geographically, the costs of changing technologies, etc.

Another way to evaluate which side should prevail in a theoretical win-lose situation is to favor the side that provides the greatest economic benefits to the people of Virginia. However, studies show that both commercial fishing and sportfishing offer substantial economic benefit to the Commonwealth.

But it is implausible to think that the menhaden near-shore fishing issue is simply win-lose. An appropriate accommodation of the issue might shift costs, but at this time there does not appear to have been any disinterested study of the economic aspects of different menhaden fishing options.

Challengers assert that consideration of some type of tax or fees for those who take fishery resources requires some immediate consideration. They claim that the money gained from additional taxes or fees could be dedicated to improving the marine environment and fishery management. The challengers claim that both commercial and sportfishing interests should pay for the opportunity to use the fishery resource and express a willingness to consider such options.

These broader concerns are stressed by the CCA/VA, and to some extent these same concerns are expressed by industry, scientific and resource managers. Whether these concerns are being addressed currently is unclear to this writer.

THE MENHADEN SUPPORTERS' PERSPECTIVE ON A FORUM _____

The various individuals interviewed in this convening analysis were specifically asked whether they believed that a "roundtable" or "forum" focusing on the menhaden fishery issue would be productive, and whether they would be willing to participate in collaborative problem-solving.

The menhaden supporters think that such a forum would be untimely and unnecessary. They maintained that there are a number of existing forums and settings for sportfishers to express their concerns or to share information. They note that legislative committees invite testimony and information on matters of interest to them.

Menhaden supporters maintain that they always have been willing to meet with representatives from CCA/VA or other groups at any time to discuss common issues and concerns. They assert that the channels of communication between them are more open than they might appear to an outsider. They express some concern that a formal dialogue may "set them up" so that they would be in a poor public relations and negotiating position.

The industry supporters indicated that it would be difficult to convene a fair and representative process, in any case. They question whether the CCA/VA is really the most legitimate voice for sportfishers. They note that the CCA/VA membership is very small compared to the total number of saltwater fishers. Additionally, they question whether the leadership of the CCA/VA is not "more radical" than its own rank and file membership.

The supporters also express skepticism whether a forum would be productive, since the challengers, in their view, refuse to accept scientific data and engage in political grandstanding.

Supporters are concerned that a special forum focusing on menhaden would lead to an expectation that the industry could, or would, make concessions. They allege that the CCA in other states has consistently worked towards eliminating commercial fishing.

Industry sources expressed some concern that a convened forum might give legitimacy to groups or to arguments that were already discredited or that did not enjoy any substantial public support. On the other hand, supporters emphasized that they had strong support in the General Assembly and they did not think that their opponents would be successful in advancing their anti-menhaden or anti-commercial fishing policies in that arena.

Nevertheless, supporters indicated that they were sensitive to the public image of menhaden fishing and that they had taken steps to reduce friction between them and sportfishers and coastal property owners. They said that the industry had introduced some "voluntary practices" that would reduce the likelihood of conflicts. Industry spokespersons said that they were reluctant to publicize their voluntary practices because this could

lead to mandatory controls which they felt were unnecessary.

Menhaden industry supporters indicated that they might be open to informal or nonofficial contacts with CCA/VA and other groups. However, they felt that any structured discussions among the parties would have to be encouraged by parties or individuals who had experience in fishery matters and the confidence of both commercial and sportsfishing groups.

One must conclude that a convened dialogue or policy forum on the menhaden issue which would utilize the services of a professional facilitator or mediator would not have the support of the menhaden industry supporters at this time.

THE CHALLENGERS' PERSPECTIVES

The CCA/VA leads the opposition to the current menhaden policy framework and to industry practices. The CCA/VA position is that representatives of the menhaden industry believe that they have the economic and political power to effectively forestall any change in industry practices. This opposition, in their view, extends even to "win-win" options.

Challengers believe that the industry's attitude precludes opportunities for enhanced communications and negotiations with the menhaden industry. They hold that this attitude can only be altered by continuing to highlight the negative aspects of the menhaden industry. They maintain that the menhaden industry leaders—as distinct from the working fishers—are out-of-state firms that take their profits elsewhere.

CCA/VA representatives believe that they are an authentic voice for sportfishers. They hold that their concerns about the menhaden industry are shared by others, including beach owners, tourist hotel and service groups, some charter boat captains, and a growing number of conservation groups.

Challengers maintain that the leaders of CCA/VA are accurately reflecting the expressed interest of their membership. They provided this writer with the results of recent membership polls that seemed to confirm the nexus between their public positions

and their members' opinion.

CCA/VA leaders concede that they have taken and will continue to take a hard line with the menhaden industry. But they claim that the public shouting match results from the industry's unwillingness to participate in discussions aimed at reconciling or compromising to achieve their mutual interests.

They deny that they intend to destroy the menhaden fishing industry, and claim reasonable adjustments could be made to resolve immediate spatial issues without serious economic impacts on the menhaden industry. Without stating it explicitly, it is the convener's feeling that the challengers would be willing to consider several options to their legislative proposals to limit menhaden fishing in near shore areas.

The challengers feel that their concerns are gaining increasing support, and that it would be better to work collaboratively than to continue to joust before the General Assembly or in the media. They are interested, almost eager to participate in a proposed forum or in any setting in which their resource concerns could receive a fuller hearing and consideration.

REACTIONS FROM POLICYMAKERS AND SCIENTISTS

Fishery scientists have an indirect interest in menhaden because the issue affects the allocation of money, time and skills of people. Those scientists that were interviewed for this report generally supported the convening of a policy dialogue on the menhaden fishery issue because they felt that the dispute between the industry and sportfishers was having a negative effect on the scientific enterprise, as well as on scientific laboratories and individual scientists.

Scientists and managers interviewed for this assessment exhibited a wider range of opinions than industry or sportsfishing members. A scientist at the NMFS said that more research on the ecological role of menhaden would be desirable, but given existing resources it would divert attention from more pressing issues. This same scientist noted that the menhaden commercial fishing industry provides

better information than nearly any other fishery, and that more is known about the menhaden resource than for other important species that may be threatened by overfishing.

Yet, the scientists contacted for this report generally agreed that the intensity of the menhaden conflict had been increasing, and that this affected scientists and managers. Scientists felt that it was difficult to perform effectively in such a hostile policy environment. They said the intense political climate surrounding the menhaden issue has made it difficult to conduct, or in some cases even to propose, scientific studies that are based on well-formulated research priorities.

Resource managers generally reported that menhaden's special management status in Virginia made them somewhat uncomfortable, but they were not sure that a separate forum would resolve that particular issue.

However, there was virtual unanimity among all parties interviewed that fishery issues were of increasing concern and that efforts to improve dialogue among scientists, policymakers, resource managers, and fishery interests would be in the public interest.

THE CONVENER'S PERSPECTIVE _____

A formally convened forum to address the menhaden near-shore fishing issue would not have the requisite level of support needed to make it effective at this time. The main stakeholders—the menhaden fishing corporations and the CCA/VA—would appear to be polarized because of the controversy surrounding the near-shore fishing legislation.

The interviews and information gathered for this report suggest that if an accommodation could be made on that specific issue, and an accommodation seems possible, then the broader issues that surround Virginia's fishery resource policies could be advanced.

The General Assembly committees with jurisdiction over marine resources, the Governor's office, or the VMRC might consider convening a forum or roundtable on fishery resource issues, rather

than focusing on menhaden issues separately. Representatives from the menhaden industry and sportfishing groups could be included in the process. Opportunities for discussions formally or informally connected with this forum could determine whether an acceptable compromise on the near shore fishing issue could be reached.

INTERVIEW SOURCES _____

Personal interviews were conducted with John Barnes of AMPRO, Parks Rountrey and Robert Pride of the Atlantic Conservation Association of Virginia, Jack Travelstead of the Virginia Marine Resources Commission, and James Kirkley of the Virginia Institute of Marine Science. The author did not attribute direct statements to these individuals in this report. However, the author owes them a large debt for their time and assistance.

Telephone interviews were conducted with many other individuals associated with organizations such as John Merriner, Joseph Smith and others of the National Marine Fisheries Service, Bill Goldsborough of the Chesapeake Bay Foundation, Tim Hayes, a Commissioner of the Virginia Marine Resources Commission, Judy Wiedersham of the Bait Fish Alliance in New Jersey, George La Pointe, Lori Rosa and Tina Berger of the Atlantic States Marine Fishery Commission, Shirley Estes of the Virginia Marine Products Board, Steve Jones of Zapata Proteins Inc. Delegate Tayloe Murphy and Marty Farber of Legislative Services, Andy Loftus of the American Sportfishing Association, Nancy Butkowski of the Maryland Department of Natural Resources, Sonja Fordham of the Center for Marine Conservation, and Ken Himan of the National Coalition for Marine Conservation.

Many of these individuals provided the IEN with written material in addition to the information provided in the interviews.