

Fish or Cut Bait:

How to Participate in the Fisheries Management System

Bonnie J. McCay

Carolyn F. Creed

Steven Gray

The Fisheries Project, Rutgers University

New Brunswick, New Jersey

*"The public participation process,
that's the uniqueness of the Magnuson Act..."*

Our Aim

When the U.S. Congress established regional councils to manage federal fisheries, it set in motion a process for assuring that all those who are interested have a voice in saying how these fisheries will be managed. Our aim is to help you get started and be effective in participating in this process. What we tell you in this document is based on our own observations and on advice from fishermen, the fishing industry, conservation and environmental representatives, fishery management council members and council staff, and government agency representatives. The advice comes from interviews done in 1991-92 and again in 2008. *Quotations come from council members who we asked to help us tell you how to be more effective and helpful in participating in this public choice process instituted by the Magnuson-Stevens Act.*

What is the Magnuson-Stevens Act?

*"Magnuson is our bible when we are sworn into office.
We swear to uphold the law—and Magnuson is that law of the land."*

*"We are concerned about meeting the needs of the recreational and commercial fishermen,
but I will always vote in favor of the fish."*

The Magnuson-Stevens Act (Magnuson-Stevens Fishery Conservation and Management Act) was first passed by the U.S. Congress in 1976 and has been amended several times, most recently in 2006. It specified an exclusive economic zone (EEZ) of 3 to 200 miles from the U.S. coast. This established U.S. control over waters once heavily fished by foreign fleets. It also set up a management system for fishing in the EEZ, the so-called federal waters. States continue to manage fishing out to about three miles but now must coordinate what they do with federal management. The 2006 reauthorization established stronger provisions to prevent overfishing with annual catch limits (ACLs) and accountability measures to prevent overfishing and restore overfished stocks (see nmfs.noaa.gov/msa2007/details.html).

Public Participation and Fisheries Management

One of the special and long-standing features of the Magnuson-Stevens Act is that it encourages local-level participation and representative democracy. This is done through eight regional fishery management councils. Along the Atlantic Coast these are the New England, the Mid-Atlantic, and the South Atlantic Fishery Management Councils. There is a Gulf council and a Caribbean council, and on the Pacific side are the Pacific council, the North Pacific council and the Western Pacific council.

This means *you* have a voice in how fisheries are managed. But this can mean hard work. To be effective, you might have to:

- Read a lot of documents
- Talk to people you may not know
- Go to meetings; speak out in public
- Write letters, send emails, and make a lot of phone calls
- Join or form an association or organization
- Maybe even get appointed to a committee or a management council!

There is a powerful trend toward stricter state and federal regulation of commercial and recreational fisheries in the U.S. Regulations are needed to deal with both “overfished” stocks and stocks that are in the process of being overfished. Overfishing generally refers to removing fish faster than they can replenish themselves, but definitions of overfished and overfishing are technical and specific to particular fish stocks. Many fish and shellfish populations are declining for reasons that include overfishing, habitat degradation, and a lot of unknowns. And more people care about what happens to the fish than just those who fish for a living or have sport fishing businesses. Environmentalists, residents of coastal communities, recreational and subsistence fishers, the tourist industry, consumers of fish products, and scientists also are involved in having a say in how we manage our fisheries. The Magnuson-Stevens Act assures that all these stakeholders must be considered when deciding how to manage commercial and recreational fisheries.

“Fishermen come in and seem to think that they are the only ones with ideas. Unfortunately, there are 27 other people with ideas and we are left to decipher all the ideas and make a decision.”

If you too want to make sure that the rules created to protect the nation’s fish and shellfish are effective and fair and if you are just getting involved, this booklet is for you. We will take you through steps you can take to make a difference.

Step 1: Learn About the System

A Mini-Guide to the Federal Fishery Management System

What follows is a very general outline of the federal fishery management process. You can find more information at the websites of the regional fishery management councils and the National Marine Fisheries Service. Look for a list at the end of this document.

The Magnuson-Stevens Act created power-sharing arrangements between regional management councils and the U.S. Department of Commerce, which is the lead agency for fisheries and marine management through the National Marine Fisheries Service (NMFS) of NOAA (National Oceanic and Atmospheric Administration) ([nmfs.noaa.gov](https://www.nmfs.noaa.gov)). The regional councils write and revise fishery management plans (FMPs) and also make decisions as required by those FMPs. The NMFS provides scientific advice and reviews the plans to make sure that the FMPs fit various legal requirements. The Department of Commerce has the final say on whether the FMPs are approved. The NMFS and the U.S. Coast Guard implement and enforce them. Congress oversees the process, designating funding for the councils, the NMFS, and the Coast Guard.

The states are also involved through their membership on the councils, their legislatures, and sometimes in co-operative data collection, research, and enforcement. There are also interstate fishery management commissions established to help coordinate state and federal management efforts like the Atlantic States Marine Fisheries Commission ([asmfc.org](https://www.asmfc.org)). This is important because many marine animals depend on habitats in both federal and state waters and some move up and down the coasts across management jurisdictions.

Although the system seems complicated, it is not hard to familiarize yourself with the process and to see who the major players are. Many of the same people are involved in several organizations and, once you are familiar with these people, being involved becomes much easier.

The Regional Fishery Management Councils

The eight regional fishery management councils are made up of council members—voting and non-voting, government and citizen—and council staffs: an executive director and secretaries, biologists, economists, and other professionals. Each council also has a scientific and statistical committee (SSC) and other committees, as well as advisory panels of people involved in the fisheries being managed by that council.

The councils' voting members include the NMFS Regional Administrator, representatives of the state fish and game agencies in the region, and citizens nominated by their state governors and appointed by the Secretary of Commerce. These individuals must have some familiarity with the fishing industry or marine conservation or both and they may be commercial or recreational fishers, fishing industry and community representatives, academics and other scientists or environmentalists or just plain citizens. Non-voting members of the councils represent the U.S. Fish and Wildlife Service, the U.S. Coast Guard, regional Marine Fisheries Commissions, the U.S. Department of State, and people assigned as liaisons from other regional councils.

What the councils do is develop fishery management plans (FMPs), amend them, and make decisions like setting annual quotas within the framework of existing FMPs. An FMP is a set of objectives and strategies for achieving a management goal which, if approved, will lead to regulations to be enforced by government agencies. In their decision-making the councils are required to use the best available scientific information and to meet other criteria, especially the National Standards of the Magnuson-Stevens Act (see Appendix). These FMPs must also comply with other federal laws, including the Endangered Species Act, the Marine Mammal Protection Act, the Marine Protection, Research and Sanctuaries Act (also known as the Ocean Dumping Act), the Coastal Zone Management Act, and the National Environmental Policy Act.

Although each council member may be knowledgeable about some of the data and issues, no one can be an expert on everything. They get advice from members of the council's committees, the council staff and from the NMFS. They also rely on public input to help them learn as much as they can before they vote on how to manage a fishery. This is where stakeholder participation plays a vital role and influences the decisions made about how fisheries are managed.

The council members are trustees for the public resources of the sea, which are common property of all citizens. They try to make decisions for the public good while balancing competing interests. One of your challenges is to help them see how your interests and concerns are related to public interests. To do this, you need to know how the management process works.

Step 2: Learn at What Points You Can Be Involved in the Management Process

The Scoping Process and Drafting the FMP

The first step is when the council begins a "scoping process." The council identifies a fishery that should be managed (for example, one that shows signs of "overfishing") and develops a scoping document, which shows the problem to be solved, possible objectives or goals of management, and possible management measures. The scoping process is intended to put the public on notice of the range of possible management measures being considered and to get input from the public. **The scoping process is a critical point for your involvement in defining the problem and possible solutions.** Councils often hold hearings to see if the public has anything to add. Look for information on your council's website about any FMPs they are considering developing or amending. The scoping documents are also published in the Federal Register (gpoaccess.gov/fr/) with an invitation for written comment. (The Federal Register is available in most public libraries, but you can also get the information from your regional council and find it online).

Even before this scoping process starts, there will be discussions at council meetings, and public input may be received at those meetings and in emails, letters, and phone calls to council members and staff. The period between "scoping" and the creation of a draft FMP can range from only a few months to several years. Although much of the public input is informal, coming through speaking out at meetings and talking with council members, council staff, and NMFS employees on the phone and in hallways during meetings, it is extremely important. This is when the problem is defined, goals are set, and the general outlines of the final plan are established.

The staff members play a critical role in actually drafting FMPs (and their amendments). They work closely with the council, its committees, and NMFS people at the regional offices, research centers, and Washington DC offices. Talk to the council executive director and the key staff person involved in an FMP about having input in the process. You can find out who they are through their web-sites or by calling the office. You can discuss your views and attend council and committee meetings (which are all public and include opportunities for members of the public to comment). If you are truly interested, you might ask to be appointed to an advisory panel for that FMP.

Public Hearings and Public Comments Periods

When the Council decides on a "preferred alternative" for a management strategy, a 45-day public comment period begins. The FMP goes to public hearings. You can attend one or all of these hearings and speak for the record. During these hearings you can also submit written comments. By law, the council must consider those comments.

At the end of the period, the council reviews the comments. The council either goes back to the drawing board, perhaps with another set of hearings, or the council votes to approve a management strategy.

The FMP Goes to Washington

If the council approves an FMP or FMP amendment, it is submitted to the Secretary of Commerce in Washington, DC, where it goes through a complicated review process that again includes public input. The time that the proposal is with Commerce is controlled by law, and it includes another 45-day period of public comment, which must begin 15 days after the plan has been submitted to Commerce for "secretarial review." The proposed regulations it would implement are published in the Federal Register, where you can find out about who to write to with your comments. Again, you can also rely on your regional council office for this information.

This is your last chance for public comment.

After the close of the comment period, a period known as "rule-making" begins, when the Secretary of Commerce considers the final decision about whether to approve, disapprove, or partially disapprove the proposed measures. The decision is made on day 95. The final regulations are then prepared and published in the Federal Register. The whole process is complex and it may differ somewhat from one regional council to another and from one fishery management plan to another. Therefore, you should make sure you know what is going on in a particular case. A good way to do this is by setting up contacts. Also, getting to know people is extremely important if you want to influence the outcome.

Step 3: Reach Out

"... go to the council staff to get help in understanding the Plan. They are more than willing to help."

Call the Council Staff

- Use the list of regional fishery management councils at the end of this document to find the council for your region and their contact information, including links to their websites.
- Check your council's website first to prepare what you want to say and decide who you might want to talk to.
- Keep your call short, no more than ten minutes. Prepare an outline of what you will say so you can be brief and to the point
- Explain to the staff person who you are, what your question or problem is, and ask for help in understanding what is going on.
- Before you hang up, ask to be put on mailing lists so you can receive meeting notices and minutes for council meetings and committee meetings.

Contact Your Council Members and Key Committee Members

"All of us ...are accessible. Get a list of the council members; call those in your state and key people in other states. Call more than once.

The first call is about, 'who is this guy, where is he coming from, what is his point of view?'"

"Know who the council members are for your area; get to know them—they know someone you know—and will know whether to trust you. This is important because then when you talk at a meeting, the listener will know how to weigh what you say."

"Be aware of who is on what committee and establish relationships through correspondence and phone calls, so you know who they are and vice versa. Just coming to meetings is lazy; you have to do more than that. This could also lead to your appointment to an advisory position."

Your council members expect to hear from their constituents. Listening to and learning from you is part of their task in making management decisions. It is important for you to become known and trusted by them.

Call Your State and Federal Political Representatives

For some matters you may wish to talk with elected politicians. Ask to talk to the representative's staff person assigned to fisheries or marine environmental issues. People on congressional staffs can be very knowledgeable. They want to know what constituents are thinking, and they will pass on your views to your legislators. Introduce yourself, describe your involvement in fishery and discuss your concerns. Call again when you have new questions or information to pass on to the staff person.

Step 4: Learn More

"Know what the law requires and what it means by best available science— and know what information goes into the assessments and where it comes from"

Your comments will be most effective if they show that you know about the Magnuson-Stevens Act and the National Standards used in evaluating FMPs. Also, be aware of the new, more stringent requirements for incorporating science and other factors when developing FMPs ([nmfs.noaa.gov/msa2007/index.html](https://www.nmfs.noaa.gov/msa2007/index.html)). Try to frame your concerns, objections and suggestions for change in these terms.

Become familiar with the key terms used in the FMPs, such as "overfishing," "maximum sustainable yield," "optimum yield," "catch per unit effort," "acceptable biological catch," "SAFE report (stock assessment and fishery evaluation)," "limited access privileges", "market-based fishery management," "best available science."

Learn other details and requirements of the stock assessments, fishery impact and regulatory impact analyses, and other parts of the FMP. These too can be the focus of your comments about an FMP.

Be aware of the stage of the fishery management process for the FMP that you are interested in so you can tailor what you say to that stage and the issues the council members are dealing with, including deadlines, court orders, shifting priorities, and political pressures.

Learn what the agendas really are and how the different council members see things. This will tell you who might be an ally and how to frame what you say when you talk to council members. This is one of the key reasons to become known and trusted by council staff and committee members.

Ask people where they get their information and check out those sources so you understand some of the different viewpoints that may be presented to the council members and their staffs.

“You just need a little empathy with the council members to realize that we are being pulled in 27 different directions.”

Step 5: Get Active

Write Letters

In your phone calls and at meetings ask for suggestions for sending letters. Depending on the situation and issue you may want to write to individual members of your council, the council chairman, the council’s executive director, the NMFS Regional Administrator, NOAA Administrator for Fisheries in Silver Spring, MD or others. You also may want to write letters to the editors of local papers that feature articles on fisheries and the environment or trade magazines and the publications of organizations that share your interests.

“Using [a national trade journal] to communicate is very effective. Top people at NMFS read every word, especially letters to the editor. Use that as a vehicle for stating industry views, and also judicious use of [their] reporters, if you feel you’re not being treated fairly.”

Attend Committee Meetings

Although councils vary in the number of committees they form, all councils are required to have a scientific and statistical committee (SSC) and advisory panels representing the users. Some councils also have a number of oversight council committees, each of which is assigned to one or more fishery or groups of fisheries, like surf clams and ocean quahogs, highly migratory species, king and Spanish mackerel, and groundfish. In addition there may be special working groups or committees. The council staff can help you decide which are important to you.

It is a good idea to attend committee meetings, which may or may not be held separate from the regular council meetings, because you will learn early on about management issues. By attending and speaking at these meetings, you also have a chance to shape the discussion before it ever gets to a council meeting.

Go to Council Meetings

Council meetings are more formal. Generally the council members and a few key staff sit at a round table in the center of the room and everyone else sits on chairs around the edges of the room or at one end. You will have to walk up to a microphone to make your comments. Look for a speaker’s list when you enter the meeting because you may be asked to sign up in order to speak. What you say will be recorded as part of the meeting notes.

Speak at Public Hearings

These are the most formal meetings, but do not be put off. This is your opportunity to speak “for the record”

about the fishery management plan the council will vote on. Get there a little early, sign up on the speakers' list, and see if you can talk informally with a council member or staff person before the meeting starts. When you are speaking, ask that your written statement be included in the record. Be sure to submit a copy of your remarks to the council staff.

Look for Opportunities for Informal Discussions

You might arrange before the meeting to have lunch with one or more council members, and don't forget to go to the council's "hospitality room" after the day's meetings. This kind of informal gathering is extremely important to effective communication.

Step 6: Get Organized

Join a Group, Start a Group, and Build a Consensus

"If you are not organized, then you are at a disadvantage"

"If what you say represents a consensus, then what you are doing is saving time. We don't have to go out and spend time talking to a lot of people [to figure out whether there is a consensus]."

"Associations can be important places where issues are discussed; they help people meet others in the industry from other ports, or other fisheries. And through the executive director of the association, who is likely to participate in many management meetings, you can get information on what is happening and how you can influence what is going on at the councils, in Washington, and elsewhere."

Organizing and working closely with other people can be critical to your success in influencing fisheries management decisions. Reasoned responses to scientific and other questions take time and effort to develop. A group of people with similar concerns can share the effort of preparing responses; broaden the range of experience and knowledge relative to an issue; and share expenses of participation and, if necessary, of independent analyses of data and assumptions. Check the regional fishery management council's websites for lists of organizations involved in fishery and marine management issues. Links to the councils are at the end of this document.

Step 7: Make Your Voice Heard

How to Talk at a Meeting: Suggestions by Council Members

For some people, talking at a meeting is a new and challenging experience. Council members have good ideas about what you can keep in mind as you prepare to participate this way:

Identify Yourself and Your Experience

"What impresses me personally is when people give some background into the issue and their personal history in the fishery, like, 'I have been in this fishery for 10 years' or 20 years or whatever, and then give their financial commitment, such as 'I own one vessel' or two vessels, or three vessels, and then give their work history. Then I can tell that this person is really involved in this fishery, not just there to create an issue."

"If the person ... seems to be genuine, then he will be effective."

Organize Your Thoughts

"I am ... impressed with someone who seems to have their presentation organized. For example, someone who speaks from prepared notes and is not just rambling on and on. I don't care how the person is dressed one way or the other--that does not impress me."

Provide Written Comments

"This helps organize your remarks, and it also means that you will have a written version of your remarks to follow-up on your spoken comments (particularly at public hearings). You can also submit only written comments, but remember that huge stacks of comments are difficult to read and absorb, and so people will usually pay most attention to that they also heard."

Be Brief and to the Point

"The same rules that are true for making any speech apply for making a presentation before the council: be brief, be succinct, come to the point, know your audience, know what your message is. Say, 'here's the point,' and make it....many people who give testimony to the council talk too long and lose people's interest."

Be Specific and Constructive

"Nine out of ten tell us we're not doing our job right, but they don't offer us any alternatives."

"The first thing is be constructive in giving detailed information. For example, say 'This is going to hurt me because...' and, 'If you do this, this will happen.' That is much better than saying, 'This is the end of the world,' or 'You don't know what you're doing.' Make a presentation; give justifications for your position. Detail specifically why this is your position."

"So often, people will come in front of the council and say, 'I don't like this.' But what they should say is that, 'this will not solve the problem. Here are some things that would solve the problem.' That would be more helpful."

Fit Your Remarks to the Plan's Objectives

"Fit your remarks with the objectives of the plan. Say, 'I have looked at the Plan and I read the objectives and what you are doing won't [or will] fit with these objectives and this is why.' Don't be intimidated by the length of the document. Look at the first part, read the summary of the Plan and read the objectives."

Respect the Science and If You Don't Agree, Provide Credible Evidence

"Accept the science. We're [the Councils] obliged to accept the science. 'I've seen more fish out there than my grandfather told me he saw, and your science is all wrong' is not going to get very far...All that is put over to the side, because we have the law and the requirement of use of science."

"If you are going to tell us that the data are not good, you had better come with data [that are reliable]. The Magnuson-Stevens Act requires us to use the best available data...If you say ours is not the best, then show us things like: personal logbooks [that show CPUE, the squares you worked]; fishing effort records, catch records.... Even better would be 'hard' scientific facts, such as Northeast Fisheries Center documents, that can be used to justify a position."

"If you want to be effective, provide good information. Don't blow smoke. Once your credibility goes down the chute, it is a long puff back. I tell our fishermen, don't get caught not telling the truth, it'll be a long time before anyone ever believes you again."

"The way to be effective is to try to analyze [the hidden agendas]: What people cannot say and do not want to say, but is the real issue or problem. You may be able to say what the council members feel they cannot say. Once it is on the table, people will talk about it."

Avoid Emotional Outbursts

"Avoid simple emotional outbursts and statements such as 'You're going to put me out of business.' Council members have very strong prejudices against this, perhaps because they have heard it so much."

"Avoid using 'you guys,' 'you people up there,' 'they.' Those pronouns don't help, they're bad business."

"Politeness is effective. Don't say to us council members, 'You don't know how to manage a fishery; what do you know?' Instead, say, 'I appreciate what you have done, but I have a suggestion for changes that will be even more effective.'"

"What I tell my fishermen adamantly is, 'when you come into the council, do not open up with a statement that is antagonistic. If you do, what you say from then on falls on deaf ears. You are wasting your time. Be gracious. Be constructive.'"

Appendix

The National Standards of the Magnuson-Stevens Fishery Conservation and Management Act Conservation and management measures shall:

1. Prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery
2. Be based upon the best scientific information available.
3. Manage individual stocks as a unit throughout their range, to the extent practicable; interrelated stocks shall be managed as a unit or in close coordination.
4. Not discriminate between residents of different states; any allocation of privileges must be fair and equitable.
5. Where practicable, promote efficiency, except that no such measure shall have economic allocation as its sole purpose.
6. Take into account and allow for variations among and contingencies in fisheries, fishery resources, and catches.
7. Minimize costs and avoid duplications, where practicable.
8. Take into account the importance of fishery resources to fishing communities to provide for the sustained participation of, and minimize adverse impacts to, such communities (consistent with conservation requirements).
9. Minimize bycatch or mortality from bycatch.
10. Promote safety of human life at sea.

Resources and Links

Latest Version of the Magnuson-Stevens Fishery Conservation and Management Act— Reauthorization 2007:

nmfs.noaa.gov/msa2007/ The Regional Fishery Management Councils

New England Fishery Management Council

50 Water Street, Mill 2
Newburyport, MA 01950
Phone: (978) 465-0492
Fax: (978) 465-3116
nefmc.org

South Atlantic Fishery Management Council

4055 Faber Place Drive, Suite 201
North Charleston, SC 29405
Phone: 1-866-SAFMC-10
Fax : (843)769-4520
safmc.net

Mid-Atlantic Fisheries Management Council

Suite 2115 Federal Bldg.
300 S. New St
Dover, DE 19904-6726
Phone: (877) 446-2362
Fax: (302) 674-5399
mafmc.org

Caribbean Fishery Management Council

268 Muñoz Rivera Ave., Suite 1108
San Juan, Puerto Rico 00918-1920
Phone: (787) 766-5927
Fax: (787) 766-6239
caribbeanfmc.com

Gulf of Mexico Fishery Management Council

2203 N. Lois Avenue Suite 1100
Tampa, FL 33607
Phone: (813) 348 –1630
Fax: (813) 348-1711
gulfcouncil.org

North Pacific Fishery Management Council

605 West 4th, Suite 306, Anchorage,
Alaska 99501-2252
Phone: (907) 271-2809
Fax: (907) 271-2817
fakr.noaa.gov/npfmc

Pacific Fishery Management Council

7700 NE Ambassador Place, Suite 101
Portland, OR 97220-1384
Phone: (866) 806-7204
Fax (503) 820-2299
pcouncil.org

Western Pacific Fishery Management Council

1164 Bishop Street, 1400
Honolulu, Hawaii 96813
Phone: (808) 522-8220
Fax: (808) 522-8226
wpcouncil.org

Interstate Marine Fisheries Commissions

Atlantic States Marine Fisheries Commission:
asmfc.org

Pacific States Marine Fisheries Commission:
psmfc.org

Gulf States Marine Fisheries Commission
gsmfc.org

National Oceanic and Atmospheric Administration:
noaa.gov

National Marine Fisheries Service
nmfs.noaa.gov
Office of Sustainable Fisheries
nmfs.noaa.gov/sfa
Regional Offices
nmfs.noaa.gov/regional.htm

Fisheries Science Centers

Northeast: nefsc.noaa.gov
Southeast: sefsc.noaa.gov
Northwest: nwfsc.noaa.gov
Southwest: swfsc.noaa.gov
Alaska: afsc.noaa.gov
Pacific Islands: pifsc.noaa.gov

Also See...

On Ecosystem Management

nefmc.org/ecosystems/index.html
safmc.net/Default.aspx?alias=www.safmc.net/ecosystem

On Habitat

habitat.noaa.gov

On Incorporating Socio-Economics in Fishery Management Plans

safmc.net/SocioEconomic/tabid/487/Default.aspx

On Marine Recreational Fisheries

nefmc.org/links/index.html

On The Role of Council Industry Advisors

mafmc.org/mid-atlantic/publications/brochures/advisor.pdf

On Navigating the Council Process

pcouncil.org/guide/Guide-intropage.html



Fish or Cut Bait (3rd edition) is a publication of The Fisheries Project, Rutgers the State University, New Brunswick, NJ, 55 Dudley Road, New Brunswick, NJ 08901. It was supported by the New Jersey Agricultural Experiment Station, Rutgers, the State University of New Jersey (Hatch Grant 26107); New Jersey Marine Sciences Consortium/New Jersey Sea Grant (NJSG-09-704), and the Jacques Cousteau National Estuarine Research Reserve, NOAA Ocean and Coastal Resource Management. We thank the many people in the fishing industry and members of management councils and government agencies who helped us learn more about the federal management process and reviewed drafts of the three editions of Fish or Cut Bait. We also thank Mike Danko and Marsha Samuel of New Jersey Marine Sciences Consortium/New Jersey Sea Grant, Shirley Fiske, formerly of NOAA, and Evelyn Pinkerton, Simon Fraser University, for helpful critical reviews, and Nils Stolpe, of the Garden State Seafood Association, for participating in the first edition.