TESTIMONY OF

W.F. "ZEKE" GRADER, JR.

EXECUTIVE DIRECTOR

PACIFIC COAST FEDERATION

OF FISHERMEN'S ASSOCIATIONS

BEFORE THE

HOUSE SUBCOMMITTEE ON FISHERIES

CONSERVATION, WILDLIFE & OCEANS

REGARDING THE REAUTHORIZATION OF THE

MAGNUSON-STEVENS FISHERY CONSERVATION

& MANAGEMENT ACT

2 May 2002

Chairman Gilchrest, members of the Subcommittee, thank you the kind invitation for me to provide testimony before you this afternoon on the reauthorization of the Magnuson-Stevens Act and proposed amendments to our nation's principle fishery statute. My comments here today will focus on your discussion draft Mr. Chairman, with some discussion of elements in Mr. Farr's measure, HR 2570 (which we had input into), and some changes we would urge you consider in this reuthorization of Magnuson-Stevens.

The Pacific Coast Federation of Fishermen's Associations (PCFFA) represents working men and women in the west coast commercial fishing fleet, mostly owner-operators of small to mid-size fishing vessels. PCFFA is the largest fishermen's organization on the west coast and was established shortly before the passage of HR 200, the Fishery Conservation & Management Act of 1976. Fishermen belonging to PCFFA member organizations are engaged in a number of different fisheries, including those for salmon, crab, groundfish, swordfish, shark, herring, squid, shrimp/prawns, California halibut, white sea bass, albacore and sea cucumbers. Their gear types are equally as varied ranging from troll to small trawl, gillnet to purse seine, traps to longlines.

I have served as executive director of PCFFA since its founding and, prior to that, worked in and managed fish processing plants while in high school, college and law school. PCFFA has been involved in providing comments and drafting language in past reauthorizations of the Magnuson-Stevens Act and was the first organization to actively work for inclusion of habitat language within the law. I am pleased therefore for the opportunity to comment on proposed amendments in this reauthorization, as well as recommend changes we believe necessary.

Mr. Chairman I would like to use your discussion draft as an outline for my comments. I should add that my members have not yet had an opportunity to review that draft so these comments will be based essentially on past positions of PCFFA on the numerous issues touched on in your draft.

Section 3. Report on Overcapitalization.

Overcapitalization, or "excess harvesting capacity" in the U.S. fishing industry has been written about extensively over the past two decades, including the June 2000 GAO report. A report on overcapitalization, as proposed in the discussion draft, however, could be useful in identifying those fisheries where there is excess fishing capacity and to provide guidance on appropriate measures for addressing excess capacity where it threatens conservation of fish stocks or the economic viability of the fishery. Such a report should include recommendations for funding sources for reducing fleet harvest capacity.

The proposed report identifying the fisheries with "the most severe examples of excess harvesting capacity" should, too, distinguish between those fisheries where: 1) the fleet capacity substantially exceeds the maximum sustainable yield of the fishery; 2) the fleet capacity exceeds the amount of fish currently or foreseeably available for a sustainable harvest in a fishery where the resource decline is attributable to non-fishing impacts; 3) the fleet capacity exceeds the fish available to it, at current ex-vessel prices, for the participants to achieve on average a reasonable income; or 4) the fleet is overcapitalized due to some combination of the first three. I raise this because there are, in fact, at least three different types of overcapitalization and each may require a different remedy.

The first type of overcapitalization (#1 above) clearly would warrant some form of fleet reduction as the correct remedy. Reducing fleet capacity would facilitate the matching of fleet harvest size to the size of the resource.

In the second type of overcapitalization (#2 above) an alternative to reducing the fleet, may be to restore the resource; for example where disease or habitat loss may have taken a heavy toll on the stocks. Indeed, fleet reduction, where fishing impacts are not the cause of the resource decline, could send a fishery into a death spiral. For example, in the west, how will policy makers allocate water in a stream between fisheries and agriculture if the value of the fishery continues in decline due to a shrinking fleet when agriculture has "unmet" water demands? It becomes difficult to argue for the rebuilding of fish stocks if the fleet has been depleted.

In the third type of overcapitalization (#3 above), the remedy may be to look first at the economic factors driving ex-vessel prices down. If there is collusion among processors that is resulting in low prices or if national trade policies are depressing fish prices, should the fleet be reduced - diminishing the gross economic worth the fishery, when perhaps the answer may be with the Justice Department or the U.S. Trade Representative. Alaska's current salmon crisis, for example, is not because there are "too many boats and too few fish," but the result of a spate of cheap farm salmon imports.

The final point I want to make regarding Section 2 of the discussion draft, is that while I agree we should not dump our surplus fishing fleet on foreign nations, there should be some flexibility here. Specifically, I suggest language that would allow vessels removed from the U.S. fisheries to go into the fisheries of other nations if the Secretary finds that the vessels would: 1) not contribute to overfishing in that nation; 2) not be used to fish the same stocks U.S. vessels are fishing (in U.S. or international waters); and 3) contribute to modernization for improved product quality or fisherman safety, or contribute to development of individual, private owner-operator fleets. I bring this up because in places such as the Russian Far East there is a real

need to develop a small coastal fishing fleet that could employ local fishermen and support local fish processing. Some of the surplus U.S. vessels, that are still serviceable, could be used to help with the development of such fleets, where the purchase of new vessels would initially be prohibitive.

Section 4. Buyout Provisions

The discussion draft provisions for fishing capacity reduction programs is an improvement over current law, giving guidance on the conduct of such programs and providing for both the removal of vessels and their permits from a fishery. The two concerns I have with this section of the discussion draft are these.

First, as noted in Section 3, there should be discretion to allow vessels removed from U.S. fisheries to go to the fisheries of another nation if certain conditions are met (as mentioned above).

Second, and most important, a source of funding needs to be established for the buyouts to occur. The impediment right now to some much needed buy-outs, such as for trawlers in the Pacific groundfish fishery (Senator Wyden's proposed legislation, for example) is not a good program but a lack of funds. If Congress can provide massive amounts of subsidies for agriculture, including proposals to buy-out and retire agricultural lands, then certainly some funds are appropriate now to remove vessels whose construction the government encouraged and even helped finance (vessel loan guarantees, for example). Establishing a fund and appropriating the monies needed now for buy-backs would help stop the hemorrhaging in many fisheries and speed the recovery of stocks. A buy-back fund should probably be some mix of public and industry funds - that mix to be determined by the circumstance of each fishery.

Section 5. Data Collection

In a number of U.S. fisheries the recreational catch may equal or exceed the commercial harvest. In some fisheries the recreational impact may be greater as well, including significant bycatch. It is therefore important that a good data collection system be established for the marine recreational fishery. The proposal in your discussion draft could greatly improve recreational data collection. Two recommendations I would to this section are:

First, the data collection program should also be required to gather information on bycatch in the recreational fishing by fishery and gear type. This information will be needed by fishery managers and anglers in addressing those fisheries or types of recreational tackle with significant catch mortalities.

Second, observers should be part of the data collection program to better ensure the quality of the information gathered. This could, perhaps, be tied into the observer program in Section 7 of the discussion draft.

Finally, the discussion draft also addresses the availability of economic data in the commercial fishing sector from fish processors. The problem with some of this data is that it may either be incomplete or inaccurate. Steps must be taken to ensure a system exists, and enforced, for the accurate reporting of all catches and the true ex-vessel price paid for the fish.

Section 6. Ecosystem-Based Management

Some of us have long recognized that it is not possible to conserve and manage fish stocks without considering the habitats of the fish, including water quality, and predator-prey relationships. Fishermen in

my organization, at least, have long been cognizant of the importance of habitats and have been careful observers of predator-prey interactions. For a quarter century now my organization and a few other fishing groups around the country have worked to protect water quality, freshwater flows and fish habitats. They understand the importance of maintaining forage stocks. Commercial fishermen in California, for example, favored conservative quotas for their herring fishery, recognizing those fish were forage for salmon and other commercially and recreationally important species. They also drafted and lobbied the passage of state legislation banning the take of white sharks, a top of the food chain predator, and a prohibition on fishing for krill, an important species near the bottom of the ocean food chain. All of this is to say that the importance of ecosystems have long been understood by many in the fishing industry; this isn't rocket science. And, it makes sense therefore that we should manage fisheries based on an ecosystem approach.

The language in the discussion draft making it U.S. policy to support and encourage ecosystem management is sound. However, I think we need to go beyond just talking about ecosystem management and begin implementing it. To that end, I suggest the Subcommittee look at the language in H.R. 2570 (Section 8) calling for implementation of fishery ecosystem plans. I believe the language in the discussion draft, establishing U.S. policy for ecosystem management and defining the term ecosystem, can be melded with that in H.R. 2570 setting forth the development of ecosystem plans and a new national standard in the Magnuson-Stevens Act.

Finally, let me emphasize with regards to ecosystem management, that lack of information about an ecosystem or the lack of an ecosystem plan should never be an excuse for doing nothing where overfishing, or habitat destruction, or unacceptable levels of bycatch are known to exist. The too often heard phrase in the implementation of the ESA, Magnuson-Stevens and other conservation laws, that "we can't do single-species management," is nothing more than the rationale of those who do not want to act. Yes, we need to make it U.S. policy to support ecosystem management. Yes, we need to put in place a timetable for establishing ecosystem management plans. But in the meantime, we should not let the lack of ecosystem data, or the lack of ecosystem plans, prevent implementation of sound fishery conservation and management measures based on what is known.

Section 7. Observers

There is considerable resentment among many in the fishing industry regarding on-board fishing observers. It is felt by many to be an invasion of privacy - "Big Brother," an inconvenience at best and, at worst, another mouth to feed, someone who is in the way, a potential source of liability, and someone who may not necessarily be recording information accurately or who is engaged in more than just scientific data gathering. At the same time, most recognize the value of on-board observers. On the west coast, information from on-board observers in the Pacific whiting fishery helped to model regulations aimed at avoiding the take of salmon. On-board observers in the Pacific groundfish fishery can provide the independent data on the levels of bycatch among different gear types, as well as the effectiveness of new or modified gear to avoid the take of non-target species. Longline swordfish fishermen in the Pacific are wanting to have observers aboard whose data may quell the allegations made against that fishery regarding turtle and sea bird bycatch and the take of immature fish. Off the north coast of California, salmon trollers will be taking observers aboard this summer to determine contact rates with coho salmon. It is their hope independent observer data will show what the fishermen believe to be true: that the contact rates are low and a liberalized season for chinook salmon can be justified without impacting recovery of the ESA-listed coho.

I don't think there is any question on the need for a national fishery observer program. The issue is what are the needs of such a program. Many of the needs for a national observer program, I believe, are known. For

that reason, I suggest the Subcommittee consider the language in H.R. 2570 (Section 7) that would both develop and fund a national fishery observer program. A study could be useful for further delineating needs, providing it not delay establishment of a national observer program (such as that proposed in H.R. 2570). Many of the recommendations requested in the needs study, proposed in the discussion draft, are for questions I think we already have answers to. However, if a study is to go forward, it should request recommendations for: 1) observers in the recreational fisheries; 2) observer training and salaries; 3) observer usage in the testing of new or modified fishing gear and experimental fisheries; and 4) observers for new coastal and open ocean aquaculture operations. Again, I want to emphasize that we cannot wait for further study to establish a national observer program and I urge your adoption of the observer language in H.R. 2570.

Section 8. Overfishing

The definition of overfishing in the Magnuson-Stevens Act has been particularly troubling to my organization, especially with regard to the way it has been applied to the salmon fishery. Many salmon stocks on the west coast are depressed, some even listed under the ESA, primarily due to destruction of these populations' in-river spawning and rearing habitat. Because there was no other way to describe depressed fish populations, they were categorized as "overfished," leading many to believe - wrongly - that simply by removing fishing effort, stocks would rebound. In developing its own "mini-Magnuson" act, California wrestled with the definition in its 1998 Marine Life Management Act, and developed its own language for a depressed fish stock, which includes under it overfished stocks (see §90.7 and §97.5 in the attachment). I worry, however, with the change in the overfished definition proposed in the discussion draft that it may become an excuse for regional councils or the National Marine Fisheries Service to attempt to blame oceanographic or some other conditions for the cause of stock declines and not address excess fishing effort or develop stock rebuilding plans.

Finally, I would recommend to the Subcommittee the language in H.R. 2570 calling for the elimination of overfishing where it exists. Addressing overfishing, and enacting cutbacks in quotas, reducing days fished and other fishing restrictions can cause severe economic and social hardships in the fishing industry. However, if overfishing is not addressed promptly, the remedy, though delayed, will be even more painful. The hardships that may befall fishing families and communities when overfishing is addressed can be ameliorated in part, I believe, depending on the fishery, with buy-backs (where there is overcapitalization), short-term disaster relief, and engaging fishermen and their vessels in fishery research or restoration programs.

Section 9. Bycatch

The discussion draft improves current law by enacting a one-year deadline to begin enacting a standardized catch reporting system. The concern I have is that the language also provides the regional councils an exemption if they publish a report explaining why they can't comply. The discussion draft also includes seabirds under the definition of bycatch, which really brings makes the law consistent with current practices which treat the hooking or netting of seabirds as bycatch. Indeed, considerable and laudable efforts have been made by longliners in the North Pacific and gillnetters in the Pacific Northwest to modify their deployment or use of the fishing gear to avoid an incidental take of seabirds. In both of these instances, it was the fishermen's associations that led the effort to protect the seabirds.

The language in H.R. 2570 also strengthens the bycatch provisions of the current law. The one area that is of concern to my organization is how bycatch is defined and addressed. Specifically, some fisheries take non-

target fish/shellfish in the course of the fishing operation (female Dungeness crabs in traps, undersized salmon on barbless hooks are two examples) and release them live back into the wild and their survival is high. Some distinction must be made between those types of operations where there is very little mortality associated with the take and release of non-target species and those where most of the bycatch is either dumped dead or will soon die. It is this latter form of bycatch that is problematic and must be reduced.

The discussion draft also acknowledges the need for research and development on fishing gear that will minimize bycatch. I appreciate Congress' attention to this matter and would recommend incorporation of some of the language in H.R. 2570, specifically the utilization of Saltonstall-Kennedy Act monies to help fund this research and development, in the Subcommittee mark-up of Magnuson-Stevens Act reauthorization amendments.

Section 10. Essential Fish Habitat

Of all the provisions in the Magnuson-Stevens Act, the section on habitat is probably the most important to the PCFFA. PCFFA had begun calling for inclusion of habitat language in the FCMA shortly after its passage when both the Pacific Council and NMFS refused to consider the impacts of habitat destruction on salmon stocks. I am concerned therefore with what I read as a constriction on essential fish habitat (EFH) in the Magnuson-Stevens Act proposed in the discussion draft. This language in the draft, I fear, would reverse the progress that has been made in identifying and protecting EFH, as part of finally considering ecosystems in the conservation and management of our fisheries. My organization has been outspoken, and rightfully so, in its efforts to protect fish habitat from many non-fishing impacts. If we do not have strong language to prevent the damage to habitat by fishing gear, how can those of us in the fishing industry argue for protection of habitat from non-fishing impacts? Weakening EFH language in Magnuson-Stevens does not make it easier on the fishing industry by allowing the destruction of the very ecosystems that are critical for abundant fish stocks, and it makes it much more difficult for us to advocate the protection of habitat affected by non-fishing activities. I think the language in H.R. 2570 is preferable here to that in the present discussion draft, Mr. Chairman.

Section 11. Demonstration for Oyster Reproduction Sites

Mr. Chairman, I applaud your effort here to develop a program for the design, construction, and placement of oyster reproduction sites in the Chesapeake Bay. I urge you to expand this program, however, to also establish a similar west coast program for San Francisco Bay. San Francisco Bay, as you may know, is the most important estuary on the west coast of North and South America. This bay is not simply the pathway between the Sierra streams and the sea for chinook salmon, nor simply a spawning or nursery area for Pacific herring and Dungeness crab, it is also habitat for a once significant oyster population. Prior to World War II, San Francisco Bay had a large and thriving oyster fishery. Some native oysters are still found in the Bay, but are currently at such low levels that they may warrant listing under the Endangered Species Act. Rather than waiting for a listing, or the extinction of these remnant populations, I suggest an aggressive program, similar to that being proposed in the Chesapeake, be established for restoring San Francisco Bay native oyster populations. Funding, in part, for a San Francisco Bay program might by achieved by redirecting some of the existing CALFED restoration funds. I would be happy to discuss this matter further with you, Mr. Chairman, and your staff.

Section 12. Individual Quota Limited Access Programs

Despite the hype from a lot of free-market theorists, as well as a few environmental groups and bureaucrats

looking for easy fixes, PCFFA has found most individual fishing quota (IFQ) systems in place in the U.S. and around the world to be unmitigated disasters - mostly consolidating ownership of the fisheries into a few corporate hands and relegating fishermen to sharecroppers. They have had virtually no conservation benefit (over and above normal limited entry programs) and the safety aspects touted for them soon disappear as shoreside interests scoop up the quotas. For that reason, PCFFA supports the continued moratorium on the implementation of IFQ systems in the U.S. fishery.

If, however, the IFQ moratorium is lifted, then specific standards must be imposed, to assure the systems are not abused. NMFS and the regional councils cannot be given *carte blanche* in developing IFQ systems. The discussion draft provides a start on setting out guidelines to the councils for establishing IFQs, however, it does not go nearly far enough. The standards proposed by the Marine Fish Conservation Network, of which PCFFA is a member, we fully support. The following elements, we believe, are critical for IFQs if the moratorium is lifted:

1. ***Referendum.*** Prior to any IFQ program being established a referendum must be conducted among those individuals, who participated in the fishery considered for an IFQ system, with documented landings in that fishery during one of the past three or more years, and who are still eligible to participate or have permits to participate in the fishery in question. A 60 percent approval, as proposed in the discussion draft, is the minimum that should be required for an IFQ system to proceed. The rules for a referendum cannot be left up to either NMFS or the regional councils.

2. ***Eligibility.*** Eligibility for an initial grant of quota in an IFQ fishery should be open to all those individuals or vessels with landings, no matter how small, who participated in the fishery during one of at least three previous years and who are still eligible to participate in that fishery or who have permits to the fishery in question. If free markets are to work then allow those who are eligible trade and sell quota among themselves to determine what amount they need for an economically viable fishery.

3. ***Ownership.*** Ownership of quotas should be limited to individuals holding fishing licenses and who are on board and engaged in the fishery for the quota. Where companies own vessels and may be eligible for quota share based on a vessel's catch history, they should be "grandfathered" in, but any lease or sale thereafter of their quota could only be to an individual licensed and on-board fishing for the quota.

4. ***Quota Caps.*** Any IFQ system must have in place an effective method for controlling the amount of quota owned by any one individual, family unit, partnership or corporation.

5. ***Program Duration.*** Finally, any IFQ system established should be for not longer than five years duration, after which point it may be abandoned or renewed following a review of its achievements for improving fish conservation, safety, product quality, and individual vessel ownership.

Let me also emphasize my organization's, and most fishing organizations, adamant opposition to granting quotas to fish processors. Fish processors who own vessels engaged in fisheries should be considered for eligibility for quota for those vessels, however, with the clear caveat that any subsequent sale or transfer of any or all of that quota can only go to a licensed fisherman operating a vessel in the fishery for which the quota is for. Moreover, the idea of splitting the overall quota for a fishery and giving a portion of it to processors is unacceptable. Mr. Chairman, many of our fisheries in this nation are in horrible shape. Making fishermen sharecroppers or permitting fish processors a cartel controlling a public resource, will just make a bad situation far worse. I strongly urge the Subcommittee and the Congress to reject the issuance of fish quotas to processors, except for those owning vessels that have a catch history in a fishery.

Section 13. Cooperative Education and Research

In addition to that proposed in the discussion draft, I would also urge the Subcommittee consider the language in H.R. 2570 promoting cooperative fishermen-science research programs.

Section 16. Council Membership

Membership on the regional councils is an issue, like habitat, that has been of concern to PCFFA and other fishing groups. In the 1986 reauthorization our organization worked to include language that council members had to be knowledgeable regarding fisheries. What is important to us is not that the public members of regional councils be simply those from the fishing industry, but the individuals, whoever they are be knowledgeable about the fisheries. Fishermen - commercial, recreational and tribal - provide valuable expertise on the councils. But I question whether the lobbyists, the lawyers or the executive directors of those associations have such first hand fishing experience and whether they simply should be prohibited from serving. Moreover, I also believe it is time to examine closely the conflicts of interests that may arise not just among commercial or recreational fishing representatives, but among other interests with an economic stake in a council vote (a promotion or continued employment, for example), including the state fishery directors.

Additional Issues

Mr. Chairman, there are three additional issues, not included, in the discussion draft, that I believe may merit consideration in this reauthorization of Magnuson-Stevens. They are:

Precautionary Approach. I believe a definition of the precautionary principle is needed in the Act and a directive to begin implementing it. H.R. 2570 (Section 11) contains such language. I say this not so much because I believe its implementation now can undo what has been done when we threw caution to the wind and built up, following passage of the FCMA, a fleet with a greater catch capacity than there were stocks to support. But, because I worry greatly about NMFS' and some of the state's fascination with new forms of coastal and open ocean aquaculture that I believe may be the next great threat to our native fish stocks if caution is not adhered to. Proposals for open ocean aquaculture could lead to harm to both ecosystems and endanger the very stocks we are now trying to rebuild. Making matters worse is the biotech industry's push for genetically-modified fish for aquaculture operations. We are working hard to rebuild damaged fish stocks, the nation is spending millions to prevent and control marine invasions, are we going to throw that all away now, because someone has bit into the hype of more fish to feed the world's starving masses. We need, I believe, a precuationary principle, not to correct previous mistakes but to make sure we don't make more mistakes with our fisheries in the future.

Professionalization. A study not included in the discussion draft, but one that I believe is needed, is to examine whether a professionalization program is needed for our nation's fishing fleet. Canada is currently embarking on such a program and other nations have them in place as well. Should we not examine whether and how a program for the education and training of those engaged in the harvest or our nation's fishery resources could or should be established?

Funding Fishing Programs. Last some method needs to be considered to provide for a financial contribution from the industry to help pay for many needed fishery programs that are not adequately funded. Whether it should come in the form of an *ad valorem* tax on all seafood sold in the U.S. or some other means, I don't know, but part of the reason for the crisis we're in is due to our failure to fund the research,

stock assessments, and enforcement needed for the proper conservation and managment of our fisheries.

Mr. Chairman and members thank you again for your invitation to testify here today. I will be happy to answer any questions you may have.

####

ATTACHMENT

California Marine Life Management Act

Definitions

http://www.dfg.ca.gov/fg_comm/mlma/appendix/a.html

§ 90.1. "Adaptive management," in regard to a marine fishery, means a scientific policy that seeks to improve management of biological resources, particularly in areas of scientific uncertainty, by viewing program actions as tools for learning. Actions shall be designed so that even if they fail, they will provide useful information for future actions. Monitoring and evaluation shall be emphasized so that the interaction of different elements within the system can be better

understood.

§90.5 "Bycatch" means fish or other marine life that are taken in a fishery but which are not the target of the fishery. "Bycatch" includes discards.

§90.7. "Depressed," with regard to a marine fishery, means the condition of a fishery for which the best available scientific information, and other relevant information that the commission or department possesses or receives, indicates a declining population trend has occurred over a period of time appropriate to that fishery. With regard to fisheries for which management is based on maximum sustainable yield, or in which a natural mortality rate is available, "depressed" means the condition of a fishery that exhibits declining fish population abundance levels below those consistent with maximum sustainable yield.

§91. "Discards" means fish that are taken in a fishery but are not retained because they are of an undesirable species, size, sex, or quality, or because they are required by law not to be retained.

§7090(b) "Emerging fishery," in regard to a marine fishery, means both of the following:

A fishery that the director has determined is an emerging fishery, based on criteria that are approved by the commission and are related to a trend of increased landings or participants in the fishery and the degree of existing regulation of the fishery.

A fishery that is not an established fishery. "Established fishery," in regard to a marine fishery, means, prior to January 1, 1999, one or more of the following:

A restricted access fishery has been established in this code or in regulations adopted by the commission.

A fishery, for which a federal fishery management plan exists, and in which the catch is limited within a designated time period.

A fishery for which a population estimate and catch quota is established annually.

A fishery for which regulations for the fishery are considered at least biennially by the

commission.

A fishery for which this code or regulations adopted by the commission prescribes at least two management measures developed for the purpose of sustaining the fishery. Management measures include minimum or maximum size limits, seasons, time, gear, area restriction, and prohibition on sale or possession of fish.

§93. "Essential fishery information," with regard to a marine fishery, means information about fish life history and habitat requirements; the status and trends of fish populations, fishing effort, and catch levels; fishery effects on fish age structure and on other marine living resources and users, and any other information related to the biology of a fish species or to taking in the fishery that is necessary to permit fisheries to be managed according to the requirements of this code.

§45. "Fish" means wild fish, mollusks, crustaceans, invertebrates, or amphibians, including any part, spawn, or ova thereof.

§94. "Fishery" means either of the following:

One or more populations of marine fish or marine plants that may be treated as a unit for purposes of conservation and management and that are identified on the basis of geographical, scientific, technical, recreational, and economic characteristics.

Fishing for or harvesting of the populations described in (a).

§8100. "Limited entry fishery" means a fishery in which the number of persons who may participate or the number of vessels that may be used in taking a specified species of fish is limited by statute or regulation. (Note that limited entry is a type of restricted access. See Appendix D.)

§96. "Marine living resources" includes all wild mammals, birds, reptiles, fish, and plants that normally occur in or are associated with salt water, and the marine habitats upon which these animals and plants depend for their continued viability.

§96.5. "Maximum sustainable yield" in a marine fishery means the highest average yield over time that does not result in a continuing reduction in stock abundance, taking into account fluctuations in abundance and environmental variability.

§8586(a) "Nearshore fish stocks" means any of the following: rockfish (genus *Sebastes*) for which size limits are established under this article, California sheephead (*Semicossyphus pulcher*), greenlings of the genus *Hexagrammos*, cabezon (*Scorpaenichthys marmoratus*), scorpionfish (*Scorpaena guttata*), and may include other species of finfish found primarily in rocky reef or kelp habitat in nearshore waters.

§8586(b) "Nearshore fisheries" means the commercial or recreational take or landing of any species of nearshore finfish stocks.

§8586(c) "Nearshore waters" means the ocean waters of the state extending from the shore to one nautical mile from land, including one nautical mile around offshore rocks and islands.

§97. "Optimum yield," with regard to a marine fishery, means the amount of fish taken in a fishery that does all of the following:

Provides the greatest overall benefit to the people of California, particularly with respect to food production and recreational opportunities, and takes into account the protection of marine ecosystems.

Is the maximum sustainable yield of the fishery, as reduced by relevant economic, social, or ecological

factors.

In the case of an overfished fishery, provides for rebuilding to a level consistent with producing maximum sustainable yield in the fishery.

§97.5. "Overfished," with regard to a marine fishery, means both of the following:

A depressed fishery.

A reduction of take in the fishery is the principal means for rebuilding the population.

§98. "Overfishing" means a rate or level of taking that the best available scientific information, and other relevant information that the commission or department possesses or receives, indicates is not sustainable or that jeopardizes the capacity of a marine fishery to produce the maximum sustainable yield on a continuing basis.

§98.2. "Participants" in regard to a fishery means the sportfishing, commercial fishing, and fish receiving and processing sectors of the fishery.

§98.5. "Population" or **"stock"** means a species, subspecies, geographical grouping, or other category of Fish capable of management as a unit.

§99. "Restricted access," with regard to a marine fishery, means a fishery in which the number of persons who may participate, or the number of vessels that may be used in taking a specified species of fish, or the catch allocated to each fishery participant, is limited by statute or regulation. (Note that there are several types of restricted access, including limited entry and individual quotas. See Appendix D.)

§99.5. "Sustainable," "sustainable use," and **"sustainability,"** with regard to a marine fishery, mean both of the following:

Continuous replacement of resources, taking into account fluctuations in abundance and environmental

variability.

Securing the fullest possible range of present and long-term economic, social, and ecological benefits, maintaining biological diversity, and, in the case of fishery management based on maximum sustainable yield, taking in a fishery that does not exceed optimum yield.