# **Executive Director's Report**

#### SSC nominations

Two nominations for agency seats on our SSC need to be approved by the Council at this meeting. For the State of Alaska, Mr. Robert Clark is being nominated (<u>Item B-1 (a)</u>). Mr. Clark is Chief Fisheries Scientist for the Sport Fish Division of ADF&G and has a strong background and extensive experience in fisheries research. He would begin his SSC service in October of this year.

<u>Item B-1(b)</u> is a nomination from the State of Oregon for Mr. Troy Buell, a Marine Fisheries Research Biologist for ODF&W. Mr. Buell is attending this meeting of the SSC as Oregon's interim appointment, and would become the permanent SSC member for Oregon after Council approval.

We have an Executive Session scheduled on Thursday to approve SSC nominations, and to discuss recent litigation issues.

#### Plan Team nominations

We also have three Plan Team nominations for Council consideration. <u>Item B-1(c)</u> is a nomination from USFWS for Ms. Leslie Slater, seabird biologist, to replace Kathy Kuletz on the BSAI/GOA Plan Team (Kathy is now an SSC member). <u>Item B-1(d)</u> is a nomination from ADF&G for Mr. David Barnard, Regional Fisheries Biometrician, to replace Ivan Vining on the BSAI Plan Team. <u>Item B-1(e)</u> is a nomination from NMFS for Mary Furuness (who took over Andy Smoker's position at in-season management – congratulations Mary!) to replace Andy on the BSAI Plan Team. All of these Plan Team nominations will be reviewed by our SSC at this meeting.

#### White House Memo on Proposed Regulations

Item B-1(f) is a memo dated May 9, 2008 which outlines White House policy on proposed regulations on the cusp of a new Administration. Essentially, this memo says that any proposed regulations, by any agency, should be proposed no later than June 1, 2008, and any final regulations should be issued no later than November 1, 2008. I do not know how this might affect potential Council actions, but NMFS representatives may be able to shed additional light on the implications of this memo.

### Update on MSA issues

At our recent CCC meeting we discussed a number of national issues, budget issues, and MSA implementation issues. We will have presentations from NOAA Fisheries Headquarters representatives, under our B-2 agenda item, on two very important MSA reauthorization issues – (1) review of a proposed rule to implement the revised NEPA compliance measures, and (2) review of potential proposed rule provisions relating to the requirement for annual catch limits (ACLs) and associated measurement requirements. Mr. Steve Leathery will present the NEPA revisions, and the Council may wish to provide additional comments on this issue. We are also coordinating over the summer with the other seven regional Councils to submit collective comments on this proposed rule.

For the ACL presentation, we do not have an actual proposed rule published, but Dr. Rick Methot will provide us a presentation on the essential elements of that proposed rule. It is anticipated that a rule will be published this summer. While the Council may have comments based on Dr. Methot's presentation, I

suggest that we reserve the opportunity to provide more detailed comments once the rule is published. In the event that comment period does not overlap our October Council meeting, I suggest that the Council consider requesting a subcommittee of our SSC to work with staff (David and I) and the Council Chair to develop more specific comments once that proposed rule is published.

## Marine Protected Areas Q&A

You will recall at our April meeting that I drafted comments on the proposed Marine Protected Area Framework, which included some significant concerns about that process. This was also discussed at our recent CCC meeting where other regional Councils expressed similar concerns. Item B-1(g) is a recent 'Q&A' document prepared by the MPA Center to address some of the primary concerns expressed by Regional Fishery Management Councils. I am providing this to you as informational, but I do not believe this Q&A document adequately addresses the concerns we and other Councils have raised.

#### Fisheries Leadership and Sustainability Forum

Item B-1(h) is a letter received in our offices, addressed to a former Council member, from the Fisheries Leadership and Sustainability Forum, which is a "joint effort among four of the nation's leading academic and policy institutions". Attached to that letter is a subsequent email which contains additional information. It appears this group envisions an initial workshop in September, specifically aimed at educating Regional Fishery Management Council members. I am attempting to gather additional information and confer with our Council Chair, other Councils, and NOAA Fisheries Headquarters (who is responsible by statute for Council member training programs) to assess potential participation in this forum. I also need to know which of our Council members have received invitations to this forum.

### Marine Ecosystem Management – another initiative?

Item B-1(i) is an email I received last week from the Ocean Program of the Environmental Law Institute, exploring the potential for an "integrated marine ecosystem management pilot program" in Alaska, specifically in the Bristol Bay and Arctic regions. I am not quite sure what exactly is envisioned by this effort, but I am scheduled to meet with Kathryn Mengernick on June 12 to discuss their initiative, and to further inform them of existing governance structures (including our Council of course, our developing Arctic FMP, and our Alaska Marine Ecosystem Forum). This is obviously an issue of extreme interest to us and I will keep you informed as I learn more about it.

#### Events this week

Tuesday evening will be busy with two choices on the menu – (1) the USFWS will host a listening session regarding Sea Otter critical habitat designation here in the Council meeting room from 7 to 9 pm, and (2) the Minerals Management Service will hold a scoping session on the proposed North Aleutian Basin Oil and Gas Lease Sale in the AP meeting room (Elks Lodge) from 7 to 10 pm.

Wednesday evening we have an open reception here at the hotel in the restaurant/bar area on the second floor (food provided and a no-host bar available), in honor of John Bundy for whom this will be the last meeting of his long Council career. The reception will start around 6 pm and go until around 9 pm. Bring your kudos and your barbs!

On Thursday evening the City of Kodiak and the Kodiak Island Borough are sponsoring a reception at the Kodiak Fisheries Research Center on Near Island (across the bridge) from 6 to 8 pm. Details are available on flyers being distributed to the Council, AP, and SSC. We'll have a van available to shuttle Council members, staff, and others needing a lift.

Commander Ragone and I are loosely organizing a do-it-ourselves, outdoor BBQ (depending on weather and our ability to scavenge some grills and other necessary infrastructure) for 'Council family' on Sunday evening, June 8, at the Coast Guard's Buskin Beach House, near the mouth of the Buskin River. Details will be available as plans evolve this week. If you think you want to participate in this very informal gettogether, please let Lisa or I know this week (so we can provide further details and tell you what your contribution to the effort will be!).

# DEPARTMENT OF FISH AND GAME

OFFICE OF THE COMMISSIONER

May 15, 2008

N.P.F.M.C.

P.O. BOX 115526 JUNEAU, AK 99811-5526 PHONE: (907) 465-4100

FAX: (907) 465-2332

Mr. Chris Oliver **Executive Director** North Pacific Fishery Management Council 605 W. 4th, Suite 306 Anchorage, AK 99501-2252

Dear Mr. Oliver:

I would like to nominate Robert A. Clark to serve on the Scientific and Statistical Committee (SSC) of the North Pacific Fishery Management Council as my preferred replacement for Mr. Ken Pitcher, who retired from the SSC last year. Bob is our Chief Fisheries Scientist for the Sport Fish Division. He has responsibility for scientific and statistical oversight of all research projects pertaining to recreational fisheries for salmon, groundfish, and freshwater fish species for ADF&G.

The attached resume demonstrates that Dr. Clark has a strong background in fisheries research across broad areas of the state. Based on his tenure with the department, I anticipate that Bob will be a strong addition to the SSC and that he will become a valued participant.

Thank you for considering this nomination.

Sincerely.

Denby S. Lloyd Commissioner

Robert A. Clark, Fisheries Scientist II
Alaska Department of Fish and Game
Division of Sport Fish, Research and Technical Services
333 Raspberry Road
Anchorage, AK 99518
voice: 907-267-2222

fax: 907-267-2422

email: bob.clark@alaska.gov

# **Education History:**

Degree	School/Major
MS – 1985	University of Alaska, Fairbanks - Fisheries Science
BS – 1981	University of Connecticut, Storrs – Biological Sciences

Relevant Work History

Relevant Work Histo	<u></u>
Dates	Position & duties
3/2007 to present	Chief Fisheries Scientist for Sport Fish Division. Lead supervisor of the
	Research and Technical Services unit, with statewide responsibility for
	scientific, statistical, and technical consultation on all salmon, groundfish, and
	resident species research projects funded through Sport Fish Division. Senior
	technical and policy advisor to statewide salmon escapement goal reviews.
	Member of the Technical Review Committee for the USFWS Office of
	Subsistence Management Fisheries Information Service; Expert Panel to the
	Pacific Coastal Salmon Recovery Fund west of Cape Suckling; Science Panel
1	of the Southeast Sustainable Salmon Fund. Scientific and technical peer
	reviewer for research proposals to the EVOS, NPRB, and AYK-SSI processes.
11/2002 to 3/2007	Fisheries Scientist I for Sport Fish Division in the Research and Technical
	Services unit. Supervision of the Biometrics Section of Sport Fish Division,
	with statewide responsibility for statistical and technical consultation on all
	projects funded through Sport Fish Division. Supervisor of statewide habitat
	research programs, including technical services for fish passage, fish
	distributions surveys and database, habitat restoration, bank habitat
	assessment. Technical advisor to statewide salmon escapement goal reviews
	and the joint federal/state escapement goal protocol team. Member of the
	Science and Technical Committee for the regulatory review of the Forest
	Resources and Practices Act. Member of the GEM Habitat Subcommittee.
11/2000 to 11/2002	Regional Supervisor for Sport Fish Division in Southcentral Alaska.
	Supervision, administration, and program direction for an \$8 million program
	that encompasses research, management, and enhancement activities on
	salmon, groundfish, and resident species in the northern Gulf of Alaska,
	including the Aleutian Islands and Alaska Peninsula, Kodiak Island, Cook
	Inlet, the north Gulf Coast, and Prince William Sound
11/1995-11/2000	Regional Research Supervisor for Sport Fish Division in Southcentral Alaska.
	Supervision, administration, technical oversight, and program direction for a
	\$3 million program that encompassed research activities on salmon,
	groundfish, and resident species in the northern Gulf of Alaska, including the
	Aleutian Islands and Alaska Peninsula, Kodiak Island, Cook Inlet, the north
	Gulf Coast, and Prince William Sound

8/1990-11/1995	Senior Research Project Leader for Sport Fish Division in Interior Alaska.  Supervision, technical oversight, and program direction for a \$350,000 research program on Arctic grayling and whitefish species in interior Alaska
	lakes and rivers.

### **Peer Reviewed Publications:**

Clark, R.A., Bernard, D.R., and S.J. Fleischman. In press. The role of stock-recruitment analysis in escapement goal development. In C.C. Kruger and C.E. Zimmerman (editors). Sustainability of Arctic-Yukon-Kuskokwim Salmon. Fisheries American Fisheries Society Symposium. Bethesda, MD.

Bernard, D. R. and R.A. Clark. In press. Importance of marine-derived-nutrients in establishing escapement goals for Pacific salmon. In E. Knudsen, H. Michael, and C. Steward (editors). Pacific Salmon Environment and Life History Models: Advancing Science for Sustainable Salmon in the Future. American Fisheries Society Symposium. Bethesda, MD.

Hasbrouck, J.J., S.L. Hammarstrom, J.A. Carlon, and R.A. Clark. 2000. **Two methods to estimate abundance of salmonids using biotelemetry.** Pages 129-137 in J.H. Eiler, D.J. Alcorn, and M.R. Neuman (editors). *Biotelemetry 15: Proceedings of the 15th International Symposium on Biotelemetry*. Juneau, AK.

Clark, R. A. 1994. Population dynamics and potential utility per recruit of Arctic grayling in Fielding Lake, Alaska. North American Journal of Fisheries Management 14:500-515.

Clark, R. A. 1992. Influence of stream flows and stock size on recruitment of Arctic grayling (Thymallus arcticus) in the Chena River, Alaska. Canadian Journal of Fisheries and Aquatic Sciences 49:1027-1034.

#### **Recent Government Publications:**

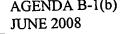
Clark, R. A. 2005. Stock status and recommended escapement goals for coho salmon in selected waters along the Juneau road system, 1981-2004. Alaska Department of Fish and Game, Special Publication No. 05-21, Anchorage.

Clark, R., M. Willette, S. Fleischman, and D. Eggers. 2007. **Biological and fishery-related aspects of overescapement in Alaskan sockeye salmon** *Oncorhynchus nerka*. Alaska Department of Fish and Game, Special Publication No. 07-17, Anchorage.

Clark, R. A., A. E. Bingham, G. B. Jennings, K. H. Sundet, R. Lafferty, M. G. Miller, W. J. Romberg, K. P. Brogdon, R. P. Ericksen, T. R. Viavant and C. O. Swanton. 2007. A programmatic review of the Sport Fish Division Statewide Harvest Survey: Phase I recommendations of the statewide harvest survey review team. Alaska Department of Fish and Game, Special Publication No. 07-09, Anchorage.

Clark, R. A., J. J. Hasbrouck, D. A. Tracy, and L. J. Schwarz. 2006. Stock status and recommended escapement goals for coho salmon in selected waters within the Kodiak road zone, 1980-2003. Alaska Department of Fish and Game, Special Publication No. 06-13, Anchorage.

Clark, R. A, and P. Nelson. 2001. Assessment of harvests of Cook Inlet-origin chinook salmon in commercial fisheries in the Kodiak Management Area, 1997-1999. Alaska Department of Fish and Game, Regional Information Report No. 4K01-38, Kodiak.





Department of Fish and vyname Fish Division 3406 Cherry Avenue NE Salem, OR 97303 (503) 947-6200 Fax (503) 947-6202/6203 www.dfw.state.or.us



May 21, 2008

Mr. Chris Oliver, Executive Director North Pacific Fishery Management Council 605 West 4th Suite 306, Anchorage, AK 99501-2252

RE: Oregon Interim SSC Appointment

Dear Mr. Oliver:

By this letter, I would like to request your approval for the appointment of Troy Buell to the Scientific and Statistical Committee (SSC) of the North Pacific Fishery Management Council (NPFMC), subject to any approval required by the Council.

Mr. Buell was recently hired to replace Dr. Steve Parker, the former agency representative on the NPFMC's SSC. Mr. Buell has a good background in sampling design, gear research, and leading rockfish tagging projects.

Mr. Buell's vita is attached for your review. As you can see from Mr. Buell's background, he should prove well qualified to participate and provide effective input to the NPFMC through the SSC process.

We appreciate your consideration of this request.

Sincerely,

Gway Kirchner, Assistant Program Manager

Marine Resources Program

Oregon Department of Fish and Wildlife

2040 SE Marine Sciences Drive

Newport, Oregon 97365 Phone: 541.867.0300 x267

Fax: 541.867.0311

gway.r.kirchner@state.or.us

# Oregon Department of Fish and Wildlife Hatfield Marine Science Center 2040 SE Marine Science Drive Newport, Oregon 97365-5294 USA 541.867.0300 ext. 256 (Phone) 541.867.0311 (FAX) Troy. V. Buell@state.or.us

### **Education**

1999

B.S., Biology, Marine Biology Focus Program, Oregon State University, Corvallis, OR.

# **Professional Experience**

7/04-Present Marine Fisheries Research Biologist, Oregon Department of Fish and Wildlife, Marine Resources Program, Newport-Black rockfish PIT tag project coordinator. Project coordinator for at-sea research projects to study exploitation rates and abundance of black rockfish. Other projects included in this scope of work include: methods to reduce bycatch in recreational fisheries, collection of life history information used to improve the accuracy and precision of stock assessment models and investigation of the effects of rapid decompression on rockfish species.

3/04-6/04

Research Fisheries Biologist, Design, construct and maintain research equipment, operate and maintain 24 ft. research vessel. Retrieve acoustic receivers, download data. Design and maintain databases for telemetry data, assist with design and logistical planning of experiment. Assist with other research projects including barotrauma studies and PIT tagging of black rockfish.

5/03-10/03

Research Fisheries Biologist, Field leader for research study comparing bycatch in an experimental flatfish selective bottom trawl net to bycatch in an industry standard bottom trawl net on the continental slope. Design sampling protocol for investigation of photoperiod interaction with net type. Organize materials and personnel for several 3-5 day trips aboard a commercial fishing vessel, carry out at-sea sampling procedures, obtain counts and weights for all species, lengths for selected species, and maturity samples for selected species.

Train several research assistants in fish ID (over 30 species groundfish) and sampling procedures, communicate sampling procedures and needs to deckhands and captain of vessel, make decisions regarding at-sea sampling methodology.

Design and maintain electronic database of data collected, perform statistical analysis of data, create graphs and charts in Excel and Statview, interpret and report results to supervisor. Assist with data handling and analysis for several other projects, including barotrauma research, maturity studies, and other bycatch reduction measures.

## **Current Research Interests**

My current research interests are in improving information available for stock assessments of exploited species, especially nearshore rocky reef species. This includes alternative survey methodologies for species not adequately surveyed by trawl gear (including mark-recapture surveys), the design of shoreside and on-board sampling programs, the reproductive biology of rockfish, and the reconstruction of historical rockfish catches. Other interests include bycatch reduction via modification of fishing gear and practices, movements of nearshore rocky reef species, and the effects of rapid decompression on the survival of discarded rockfish, including methods to mitigate decompression related mortality.

#### **Professional Activities**

- 2008 Oral presentation at American Fisheries Society Westen Division Annual Meeting, PIT Tag Symposium entitled: Using mark-recovery data generated using PIT tags to inform stock assessments in Stock Synthesis II.
- 2007 Oral presentation at American Fisheries Society National Annual Meeting, Bycatch Reduction Symposium entitled: Reducing bycatch in U.S. West coast recreational groundfish fisheries: Evaluation of the effects of increased bait height above bottom on the catch of demersal rockfishes.
- 2005 Poster presentation at American Fisheries Society National Annual Meeting, Lowell Wakefield Fisheries Symposium entitled: Spatial and temporal differences in the size distribution of black rockfish: Implications for mark and recovery studies and fisheries management.

#### **Professional Affiliations**

American Fisheries Society Oregon Chapter AFS

#### **Refereed Publications**

- Buell, T.V., Hannah, R.W., and Parker, S.J. 2007. Estimation of black rockfish (Sebastes melanops) population parameters from recreational fisheries mark-recovery data off Newport, Oregon. Appendix A in Sampson, D.B. 2007, The status of blackrockfish off Oregon and California in 2007, Pacific Fishery Management Council, Portland, OR.
- Hannah, R.W., S.J. Parker and T.V. Buell. 2005. Evaluation of a selective flatfish trawl and diel variation in rockfish catchability as bycatch reduction tools in the deepwater complex fishery of the U.S. West coast. North American Journal of Fisheries Management 25:581-593.

# **Selected Non-Refereed Reports**

- Buell, T.V. Black rockfish PIT tag exploitation rate study: 2005. Oregon Department of Fish and Wildlife, Fish Research Project, 9 pp. Annual progress report, Salem, Oregon.
- Buell, T.V. and R.E. Easton Black rockfish exploitation rate study: 2007. Oregon Department of Fish and Wildlife, Fish Research Project, 7 pp. Annual progress report, Salem, Oregon.

# Manuscripts in Preparation

Hannah, R.W., T.V. Buell and M.T.O. Blume. The effect of increased bait height above bottom on catches in Oregon's marine recreational groundfish fishery.



# United States Department of the Interior

AGENDA B-1(c) JUNE 2008

FISH AND WILDLIFE SERVICE
Alaska Maritime National Wildlife Refuge
95 Sterling Highway, Suite 1
Homer, AK 99603-7473

May 2, 2008

Chris Oliver
Executive Director
North Pacific Fishery Management Council
605 West 4<sup>th</sup>, Suite 306
Anchorage, AK 99501-2252

NAY - G 2008

N.P.F.M.C.

Dear Mr. Oliver:

We wish to nominate Leslie Slater, of our staff, to replace Kathy Kuletz who recently resigned from the Plan Team. Ms. Slater is a wildlife biologist whose work over the past 15 years has mainly involved monitoring seabird population trends on the Alaska Maritime National Wildlife Refuge with emphasis on colonies in southeast and southcentral Alaska. Having lived and worked in the Aleutians for 5 years and an additional 2 summers in the Pribilofs on various projects, Ms. Slater has an extensive understanding of the issues surrounding the Bering Sea and North Pacific ecosystems. As an open communicator, we feel that her skills would meld readily within the Plan Team's functions.

Thank you for considering this nomination. We look forward to hearing from you.

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Sincerely,

William Meeks

Acting Refuge Manager

95 Sterling Hwy, Suite 1, Homer, Alaska 99603

907-226-4607

leslie\_slater@fws.gov

Objective Apply knowledge of seabird conservation to a broader scientific community where research follows an interdisciplinary approach to ecosystem management and problem-solving.

Professional Interests Seabird conservation, population monitoring, habitat restoration

Education Bachelor of Science, Wildlife Biology, Colorado State University, May 1983

# Professional Experience

- Wildlife biologist (Gulf of Alaska Unit) monitor seabird populations to study long-term trends and study impacts of changing environmental conditions, analyze data, produce internal reports and peer-reviewed publications; committee member and participant in refining data collection methods and responding to Sea Otter Unusual Mortality Event and shipwrecks (emphasis on preventing invasive species release and evaluating marine resource impacts from petrochemical discharge). Alaska Maritime National Wildlife Refuge, Homer. 1992 to present
- Research biologist in Prudhoe Bay oil fields where I studied the breeding ecology and behavior of buff-breasted sandpipers. Alaska Research Center, USFWS, Anchorage. 1990-1992
- Wildlife biologist evaluated lands for inclusion within the National Wildlife Refuge System. Division of Realty, USFWS, Anchorage. 1986-1990

#### Professional Awards

retary award (outstanding work performance), July 1994

. . .cial Act Service award (exemplary job performance), November 1996

On-the-Spot award (job innovation), February 1997

On-the-Spot award (outreach), September 1999

On-the-Spot award (sustained performance during stressful situation), August 2001

Individual Time-Off Award (promoting partnerships and dedication to the job), February 2004

Outstanding Federal Employee of the Year Team award (shipwreck response), May 2005

# Selected publications and professional presentations

Rudis, D., and L. Slater. 2003. Contaminants in seabird eggs. Second International Conservation of Albatross and other Petrels conference, Montevideo, Uruguay.

Abraham, C., D.F. Bertram, S.A. Hatch, M.J. Hipfner, L. Slater, W. Sydeman & Y. Watanuki. In press. Forage fish around the North Pacific as revealed by diet of a piscivorous seabird: synchrony and relationships with ocean climate. Canadian Journal of Fisheries and Aquatic Science.

Slater, L., and G.V. Byrd. In prep. Status, trends, and patterns of covariation of breeding seabirds at St. Lazaria Island, Southeast Alaska, 1994-2006. Proposed, Journal of Biogeography.

## References

Barbara A. Blackie, adjunct professor, Port Angeles Community College. 360-928-2170, blackieb@olympus.net

Freg Siekaniec, refuge manager, Alaska Maritime National Wildlife Refuge, 95 Sterling Hwy., Suite 1, Homer, Alaska 99603-7472. 907-226-4627, <u>gregory\_siekaniec@fws.gov</u>

Kris Thorsrud, librarian, Kachemak Bay Branch of Kenai Peninsula College, University of Alaska, 533 E. Pioneer Ave., Homer, Alaska 99603. 907-235-1657, inct@uaa.alaska.edu

# STATE OF ALASKA

AGENDA B-1(d) SARAH PALIN, GC JUNE 2008

P.O. BOX 115526 JUNEAU, AK 99811-5526 PHONE: (907) 465-4100 FAX: (907) 465-2332

# DEPARTMENT OF FISH AND GAME

OFFICE OF THE COMMISSIONER

April 25, 2008

Mr. Chris Oliver Executive Director North Pacific Fishery Management Council 605 W. 4<sup>th</sup> Suite 306 Anchorage, AK 99501-2252 M. P. W. C. C.

Dear Chris,

I would like to nominate David R. Barnard to serve as an ADF&G member of the Bering Sea/Aleutian Islands Groundfish Plan Team. David was upgraded recently to a Biometrician III in Kodiak to fill the position vacated by Ivan Vining. In his new position, David will provide statistical support to regional fisheries researchers and managers addressing a variety of issues associated with assessment and management of marine resources.

As reflected in his attached resume David has considerable breadth and depth of knowledge and experience in quantitative fishery science. As was Ivan Vining, David will be a valuable asset to the BS/AI Plan Team in their analyses and deliberations regarding assessment and management of BS/AI groundfish resources.

Thank you for considering David for membership on the BS/AI Plan Team.

Best regards,

Denby S. Lloyd Commissioner

**Enclosure** 

#### David R. Barnard

Alaska Department of Fish and Game 211 Mission Road Kodiak, AK 99615

907-486-1861 David.barnard@alaska.gov

#### **Education:**

BS Zoology, 1975, University of Wyoming, Laramie, WY

MS Biological Oceanography, 1981, University of Alaska, Fairbanks, AK

Secondary Education Certification (Science and Mathematics), 1989, University of Montana, Missoula, MT

MS Statistics, 2000, University of Wyoming, Laramie, WY

# **Professional Experience:**

4/08-present: Alaska Dept. of Fish and Game, Kodiak, AK

Position: Regional Biometrician

Responsibilities: Provide statistical support to fisheries management and

research biologists from Region IV.

1/01-3/08: Alaska Dept. of Fish and Game, Kodiak, AK

Position: BSAI Crab Observer Database Biometrician

Responsibilities: Review and update analytical methods and conduct analyses of spatial and temporal trends in fisheries performance and catch data; integrate observer data with stock assessment models for comparison to available survey data; prepare reports and presentations for the BOF, Council, inter-agency and advisory committee meetings.

8/97-12/00: Department of Statistics, University of Wyoming, Laramie, WY

Position: Graduate Teaching Assistant

Responsibilities: Teach introductory business statistics courses

8/89-6/97: Student Educational Opportunity Office, Univ. of Wyo., Laramie, WY,

Albany County School District No. 1, Laramie, WY,

Lincoln County School District No. 2, Afton, WY.

Position: Educator

Responsibilities: Teach secondary math and science courses in classroom and home

settings. Provide tutoring to college students.

6/74-6/87: Utah State Univ., Montana Dept. Fish Wildlife and Parks, Wyoming Game

and Fish Dept., North Slope Borough, LGL Alaska Research Associates.

Position: Fisheries/Aquatic Biologist

Responsibilities: Conduct a variety of field and laboratory studies involving the collection and analysis of data dealing with aquatic populations, water chemistry, and habitat quantification. Prepare proposals and reports.

#### **Present Position:**

Biometrician III Alaska Department of Fish and Game 211 Mission Road Kodiak, AK 99615

#### References:

Doug Pengilly
ADF&G Region IV
211 Mission Road
Kodiak, AK 99615
907-486-1865
doug.pengilly@alaska.gov

Wayne Donaldson ADF&G Region IV 211 Mission Road Kodiak, AK 99615 907-486-1842 Wayne.donaldson@alaska.gov Ric Shepard ADF&G Region IV 211 Mission Road Kodiak, AK 99615 907-486-1862 ric.shepard@alaska.gov



# UNITED STATES DEPARTMENT OF C JUNE 2008 National Oceanic and Atmospheric Administration

National Marine Fisheries Service P.O. Box 21668 Juneau, Alaska 99802-1668

May 29, 2008

Chris Oliver, Executive Director North Pacific Fishery Management Council 605 W. 4<sup>th</sup> Avenue Anchorage, AK 99501-2252 MAY 3 0 2008
M.P.P.M.C.

Dear Mr. Oliver:

Andy Smoker retired from NOAA Fisheries, effective May 30, 2008. Andy was the Alaska Region's representative on the Bering Sea and Aleutian Islands (BSAI) Groundfish Plan Team and contributed inseason fishery management expertise to the Plan Team's discussions and deliberations. Mary Furuness has been hired to fill the position vacated by Andy's retirement and currently is the Supervisor of the Inseason Management Branch of the Sustainable Fisheries Division. We would like to nominate Mary to replace Andy's position on the BSAI Groundfish Plan Team.

Mary has worked with the Inseason Management Branch since 1995 and during that time, has taken on a progressively increased responsibility for the monitoring and management of the Alaska groundfish fisheries in a manner that avoids exceeding specified groundfish and prohibited species catch quotas. She has expert knowledge of the catch data used to manage the Alaska groundfish fisheries and how that information is used to manage the fisheries and associated management programs developed by the North Pacific Fishery Management Council. Mary also coordinates the annual harvest specification process for the Alaska groundfish fisheries and has attended the groundfish Plan Team meetings for years in that capacity. We believe she would be an excellent addition to the BSAI Plan Team and hope that our nomination of Mary to replace Andy Smoker on the Plan will be endorsed by the Council.

Sincerely,

Robert D. Mecum Acting Administrator Alaska Region

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# THE WHITE HOUSE WASHINGTON

May 9, 2008

MEMORANDUM FOR

THE HEADS OF EXECUTIVE DEPARTMENTS AND

**AGENCIES** 

THE ADMINISTRATOR OF THE OFFICE OF INFORMATION AND REGULATORY AFFAIRS

FROM:

JOSHUA B. BOLTEN

CHIEF OF STAFF

SUBJECT:

Issuance of Agency Regulations at the End of the

Administration

Over the last seven years, our Administration has worked to achieve through regulation important public benefits while minimizing regulatory costs on the American people. The President has emphasized that the American people deserve a regulatory system that protects and improves their health, safety and environment, secures their rights, and ensures a fair and competitive economic system, while respecting their prerogative to make their own decisions and not imposing unnecessary costs. We need to continue this principled approach to regulation as we sprint to the finish, and resist the historical tendency of administrations to increase regulatory activity in their final months. We must recognize that the burden imposed by new regulations is cumulative and has a significant effect on all Americans.

Every regulatory agency and department has a responsibility for continuing to ensure regulations issued in this final year are in the best interests of the American public. To the extent permitted by law, the heads of executive departments and agencies should continue to minimize costs and maximize benefits for each of their upcoming regulations, and should avoid issuing regulations that are unnecessary. Except in extraordinary circumstances, regulations to be finalized in this Administration should be proposed no later than June 1, 2008, and final regulations should be issued no later than November 1, 2008.

To ensure we continue to serve the American people through carefully-designed regulations, the Administrator of the Office of Information and Regulatory Affairs (OIRA) of the Office of Management and Budget (OMB) will coordinate an effort to complete Administration priorities in this final year while providing for an appropriately open and transparent process and controlling regulatory costs. In this effort, OIRA will work closely with the heads of the President's policy councils, and rely on its centralized review authority under Executive Order 12866.

Pursuant to Executive Order 12866, agencies shall continue to assess the need for regulation, examine alternatives, design regulations in the most cost-effective manner to achieve regulatory objectives, and assess both the costs and benefits of intended regulations. Circular A-4 provides guidance to agencies for analyzing the effects of regulation. Agencies should view each regulation as part of a broader regulatory framework and, in cooperation with OIRA, make careful and coordinated policy choices that do not impose undue regulatory burdens on the American people.

Agencies should examine the regulations they intend to promulgate before the end of this Administration for compliance with this memorandum and provide all information and assistance requested by the Administrator of OIRA in this important endeavor. In identifying priorities and establishing schedules, agencies should provide adequate time for necessary analysis, interagency consultation, robust public comment, and a careful evaluation of and response to those comments. However, I also want to emphasize that nothing in this memorandum alters or impedes the ability of the executive departments and agencies to perform their responsibilities under existing law.

Finally, the OIRA Administrator will report on a regular basis regarding agency compliance with this memorandum.

CC

Chairman of the Council on Environmental Quality Chairman of the Council of Economic Advisors Director, Office of Science and Technology Policy Assistants to The President. Subject: MPA Q&As

From: Alan Risenhoover < Alan.Risenhoover@noaa.gov>

Date: Tue, 27 May 2008 16:26:02 -0400

To: Paul Howard <Paul.Howard@noaa.gov>, Dan Furlong <Dan.Furlong@noaa.gov>, Robert Mahood <Robert.Mahood@noaa.gov>, Wayne Swingle <wayne.swingle@gulfcouncil.org>, Donald McIsaac <Donald.McIsaac@noaa.gov>, Chris Oliver <chris.oliver@noaa.gov>, Kitty Simonds

<Kitty.Simonds@noaa.gov>, Miguel Rolon <miguel\_rolon\_cfmc@yahoo.com>

CC: NMFS Regional Admins < NMFS.Regional.Admins@noaa.gov>, Heather Sagar

<Heather.Sagar@Noaa.Gov>, William Chappell <William.Chappell@noaa.gov>, Emily Menashes

<Emily.Menashes@noaa.gov>

#### Executive Directors ---

Attached is a Q&A document prepared by the MPA Center regarding the Councils' concerns on the MPA Framework. Also, the MPA Center is willing to go to the Council meetings to help explain the framework.

Please take a look at the Q&As and we can discuss at the next conference call (times to be suggested soon) or coordinate times for Council briefings.

Thanks.

MPA Q&As for Councils 5.27.2008 final.doc Content-Type: application/msword Content-Encoding: base64

# Q & As for Council Coordinating Committee May 27, 2008

The Q&As below were developed based on questions about the national system of MPAs at the recent Council Coordinating Committee. Other questions that were submitted as public comments will be addressed in more detail through the response to public comments process.

Q: How will the national system benefit the Fishery Management Councils?

The national system provides a framework for national and regional coordination of MPAs across all levels of government and for a wide range of purposes. Executive Order 13158 makes clear that "the national system framework and the work of the MPA Center is intended to support, not interfere with, agencies' independent exercise of their own existing authorities." It is a tool that will allow us to understand and enhance our collective place-based marine conservation efforts by providing a focus on common goals and objectives defined through a public process. In addition, it provides for a transparent, science-based, public process to conduct future regional gap analyses to identify areas in the ocean and Great Lakes where additional place-based protection may be needed to achieve the priority conservation objectives of the system. This information will then be available to inform planning by fishery managers to address these gaps, providing a more comprehensive alternative to the current, often ad hoc approach to ocean management.

The national system also provides an opportunity to build better understanding and public support for the ways in which areas under Council and NOAA management contribute to regional ecosystem based management efforts. It will also help build institutional linkages among MPAs and management agencies across all levels of government and ranges of jurisdiction with common or complementary conservation objectives.

Q: Does the "avoid harm" provision of the national system apply to all resources within the MPA?

Section 5 of Executive Order 13158 states: "Each federal agency whose actions affect the natural or cultural resources that are protected by an MPA shall identify such actions. To the extent permitted by law and to the maximum extent practicable, each Federal agency, in taking such actions, shall avoid harm to the natural and cultural resources that are protected by an MPA." Section 5 specifically refers to "resources that are protected by an MPA," meaning those resources that are protected by legislation or regulation specific to that MPA. Resources present in an MPA that are not protected by law or regulation would not be affected by this requirement. As an historical note, this specific language was developed by NMFS in 2000 in order to clarify that fishery resources that are not protected by an MPA could not be regulated under the "avoid harm" provision. For example, if the Minerals Management Service planned to issue an energy lease within a permanent seasonal closure to protect fishery spawning areas, they would be required to avoid harm to those fishery resources "to the extent permitted by law and to the maximum extent practicable." However, if the planned lease had impacts on benthic

resources not protected by the closure, the avoid harm provision would not apply. In this example, MMS, not NOAA, would make this determination, as each federal agency is responsible for its own implementation of responsibilities to avoid harm.

Q: If an MPA becomes part of the national system, what happens if its current protections change (are either reduced or expanded)? Does it need to go through the nomination process again?

Participation in the national system does not constrain the management agency from changing its management of the MPA. It would still have the ability, within its own authorities and required processes, to add or reduce levels of protection or change the size of the MPA. If the MPA ceased to exist, no longer met the national system MPA eligibility criteria, or the management agency wished to withdraw, it would be removed from the national system.

To become part of the national system, an MPA must meet the following criteria:

- meet the definition of an MPA
- address at least one priority conservation objective (listed in the Revised Draft Framework)
- have a management plan (this is being interpreted fairly broadly as having specified conservation goals and a process or requirement for monitoring and evaluation of goals)

The MPA Center plans to prepare draft lists of eligible sites based on information from the MPA Inventory and other sources. These lists will be prepared on a regional basis, using input from regional expert workshops to identify habitat areas and co-located MPAs that contribute to priority conservation objectives.

The draft regional lists of eligible sites will then be reviewed by their management agencies, which will make the decision about whether to nominate their MPAs to the national system. If the size or scope of the MPA was changed, the managing agency would be asked to update the MPA Inventory to reflect these changes, but no additional nomination process would be required.

Q: What is the role of the Councils in nominating sites to the national system?

The Councils will be a key partner to NOAA in nominating sites to the national system. Through a transparent process, NOAA will consult with its Council partners and fully consider the views and interests of the Councils prior to nominating a site to the national system. These NOAA-Council consultations would take place at the Regional-level at key stages of the nominating process, and NOAA's National Marine Fisheries Service would make final decisions on nominations.

Q: How will the conservation gap analysis be used? Will the MPA Center use this to designate new sites?

The Revised Draft Framework envisions that a rigorous and comprehensive gap analysis will follow the initial identification of eligible, existing MPAs within each region. This gap analysis will be a transparent, collaborative, science-based process at the regional scale involving "MPA related and other agencies at various levels of government, FMCs, and other organizations and institutions in synthesizing and analyzing existing information and established conservation priorities." It will also include an opportunity for public comment. The resulting regional gap analyses will be publicly available, serving as a resource for agencies and stakeholders to guide the development of new MPAs or alternative management tools. The MPA Center has no authority to modify or establish MPAs; any actions taken to create new MPAs or alter existing MPAs, based on the gap analysis will occur under existing federal, state, tribal or local authorities and the review processes they require.

Q: Does the current Environmental Assessment provide sufficient detail in describing the impact of the Framework?

The Environmental Assessment finds that there will be no significant impact of the Framework, which describes the coordination function of the national system. The "avoid harm" provision within the Framework is limited to existing management or review authorities and procedures. Any future federal action that might have an impact on the human environment, such as the creation of a new MPA or the expansion of an existing one, would require its own NEPA compliance process.

# FISHERIES Leadership & Sustainability FORUM









May 7, 2008

Dear Regional Fishery Management Council Member,

We invite you to attend the inaugural workshop of the Fisheries Leadership & Sustainability Forum on September 22-23, 2008 at Stanford University in California.

This new program offers professional development opportunities for members of regional fishery management councils.

The Fisheries Leadership & Sustainability Forum is a joint effort among four of the nation's leading academic and policy institutions. The Forum is designed to help council members share experiences, build leadership skills, and increase their understanding of the science, economics, and policies that are integral to fisheries management.

The Forum includes semiannual in-person workshops as well as on-going educational opportunities to provide council members access to the latest academic research. The interactive workshops developed and led by faculty from Stanford and Duke Universities, as well as other experts, will focus on sharing expertise and applying knowledge to real-world scenarios.

Drawing from successful courses in the Universities' business schools, these workshops will also include leadership sessions tailored for the challenges council members face. The Forum will also serve as a networking opportunity where council members can share obstacles and success stories that will inform each other's work.

Enrollment in the Forum is limited. We encourage you to go to our website <u>www.FisheriesForum.org</u> and sign up for the September workshop. Financial scholarships are available to cover the cost of attendance.

# We look forward to hearing from you!

Sincerely,

Barton "Buzz" H. Thompson

Robert E. Paradise Professor of Natural Resources Law

Perry L. McCarth Co-Director of the Woods Institute for the Environment at Stanford

University

Meg Caldwell

Interim Director, Center for Ocean Solutions

Meg Caldwell

Director, Environmental and Natural Resources Law & Policy Program at Stanford Law School

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Deborah Rigling Gallagher

Assistant Professor of the Practice of Environmental Policy

Executive Director of Duke Environmental Leadership Program, Nicholas School of the

Environment and Earth Science at Duke University

**Timothy Profeta** 

Director, Nicholas Institute for Environmental Policy Solutions

Senior Associate Dean, Environmental Sciences & Policy at Duke University

Diane Regas

Managing Director, Oceans Program, Environmental Defense Fund

Subject: Fisheries Leadership and Sustainability Forum From: Margaret R Caldwell <megc@stanford.edu>

Date: Tue, 20 May 2008 14:27:37 -0700

To: chris.oliver@noaa.gov

Dear Chris.

Thank you for trying to reach me yesterday. Playing phone tag is frustrating, but I'm determined to make sure we do get the opportunity to speak at some point.

Having just phoned your office, I understand that you are on a business trip...and that your cell phone is not with you! So, rather than leave yet another message, I thought you would appreciate my jumpstarting our conversation and give you in email text some of the information I was hoping to talk with you about.

As I mentioned in my earlier phone message, I direct the Environmental and Natural Resources Law & Policy Program at Stanford and am interim director of the Center for Ocean Solutions, which is a collaboration between Stanford University, the Monterey Bay Aquarium, and the MBARI. The core mission of the Center for Ocean Solutions is to elevate the impact of science on ocean policy and help implement practical solutions to the major threats facing the oceans. We have entered into a partnership with the Nicholas Institute for Environmental Policy Solutions at Duke University and the Environmental Defense Fund to supplement the education and professional development of regional fisheries management council members, called the Fisheries Leadership & Sustainability Forum. In talking with council members, we realized that many of them want more information about fisheries management models, data, research, other fisheries' successes and challenges around the country, other management options available, and confidence in working through the regulatory process. We hope to supplement the existing NOAA training sessions and regional council staff training programs through a continuing education and professional development program. Chief among our goals of the Forum are to:

- facilitate cross-pollination between council members from different regions so that they can learn from each other;
- enhance leadership and problem-solving skills of council members, including negotiation and mediation skills for working with various stakeholder groups;
- use real-world fisheries decisions as a vehicle for exploring the science, economics, law, and policy of fisheries management; and
- provide ongoing access to experts at Duke and Stanford who conduct research on fish, marine ecosystems, and fisheries management issues.

We have spoken with Alan Risenhoover about the Forum, its goals and mission, and, while NMFS remains neutral, Alan is encouraging council members to look into the program and assess it for themselves. We will be holding semi-annual two-day workshops, with the first workshop being held at Stanford September 22-23, 2008. In the Spring of 2009, Duke will host the second workshop. Invitation letters have recently been mailed out to council members and we are hoping you will encourage your council members to consider attending.

We realize that the North Pacific Fishery Management Council has developed and implemented some of the most innovative and effective approaches to fisheries management. I believe it will be important for your council to be well represented at the workshop so that other council members can better understand potential tools, approaches and scientific information they may want to employ in their own region.

5/29/2008 4:21 PM

I will be in Tucson giving a presentation this Thursday and will be available by cell phone otherwise. My cell is 408/416-6542. The Fisheries Forum web site is <a href="www.FisheriesForum.org">www.FisheriesForum.org</a> best, Meg

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Senior Lecturer & Director
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http://casestudies.stanford.edu/
http://naturalresourceslaw.stanford.edu

**Subject:** meeting in Anchorage about FEP?

From: Kathryn Mengerink <mengerink@eli.org>

Date: Wed, 28 May 2008 00:16:41 -0400

To: chris.oliver@noaa.gov

Dear Chris,

I am Kathryn Mengerink, Director of the Ocean Program at the Environmental Law Institute. We are currently conducting a short feasibility study to determine the possibility of developing an integrated marine ecosystem management program in Alaska. We are considering two areas in particular--Bristol Bay and the Chukchi Sea. I have attached a one-page summary of our project.

As part of this project, we are learning about current ecosystem-based initiatives in Alaska. I met with Dave Fluharty last week, and he gave me a copy of your recent fisheries ecosystem plan for the Aleutian Islands. It looks great! Do you have plans to develop similar ecosystem plans for other regions in Alaska?

I will be in Anchorage on June 11-13. Do you have time for a short meeting to learn more about the work of the Council?

All the best, Kathryn

# Kathryn J. Mengerink, J.D., Ph.D.

Director, Ocean Program | Environmental Law Institute p: 202-939-3825 / 858-822-5821 | f: 202-939-3868 mengerink@eli.org | http://www.eli.org

Local Office: SIO, UCSD | 9500 Gilman Drive, Mail Code 0202 | La Jolla, CA 92093-0202

Headquarters: 2000 L Street NW, Suite 620 | Washington, DC 20036

Alaska Marine Spatial Management Study.pdf

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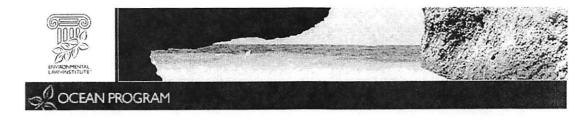
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# ENVIRONMENTAL LAW INSTITUTE MARINE SPATIAL MANAGEMENT IN ALASKA

# Background

Marine spatial management is an ecosystem-based management approach to ocean governance that seeks to reduce user conflict and achieve the long-term conservation and sustainability of natural resources. As typically envisioned, it is a participatory process that includes all stakeholders, often governed by a regional body tasked with developing and implementing a regional plan. It emphasizes science-based decision-making, consideration of ecological boundaries, and adoption of the precautionary approach. Momentum is building for ecosystem-based management in the U.S. and other countries. Grassroots programs exist in Morro Bay and Elkhorn Slough, California. Several states have enacted ecosystem-based management laws that create regional governance mechanisms and specific integrated ocean governance policies. Massachusetts is currently considering enacting a law to implement a statewide marine spatial management program. Federal agencies are working with regions, states, and localities to implement ecosystem-based objectives. They are also revising their own programs to incorporate ecosystem management concepts.

# **Project Goal**

This four-month project seeks to determine the feasibility of marine spatial management pilot program in Alaska that would inform future efforts in the Arctic and beyond. As envisioned, a marine spatial management program will seek to reduce user conflict and designate specific areas for conservation and cultural use. This initial study focuses on two main regions: (1) Bristol Bay, Alaska and (2) the U.S. portion of the Chukchi Sea. Specifically, we are:

- 1. Examining key biological, economic, and social variables that may hamper or enhance program development and implementation.
- Assessing the motivation and capacity of the constituency to undertake a marine spatial management program.
- 3. Assessing the feasibility of the regions as models for development of marine spatial management elsewhere in the Arctic.

#### **About Us**

Since 1969, the Environmental Law Institute (ELI) has played a pivotal role in shaping environmental law, management, and policy. ELI's mission is to convene the diverse constituency of leading environmental professionals in government, industry, public interest groups, and academia to work cooperatively in developing effective solutions to pressing environmental problems. ELI's Ocean Program seeks to reverse the trend of marine degradation from land-based activities; ensure effective management of industrialized oceans; and foster sustainable fisheries. Please visit our website for more information (<a href="http://www.eli.org">http://www.eli.org</a>).

BILLING CODE: 3510-22-S

# DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 600

[Docket No. 070717348-7766-02]

RIN 0648-AV60

Magnuson-Stevens Act Provisions; Annual Catch Limits; National Standard Guidelines AGENCY: National Marine Fisheries Service (NMFS); National Oceanic and Atmospheric Administration (NOAA); Commerce.

ACTION: Proposed rule; request for comments.

SUMMARY: NMFS proposes revisions to the guidelines for National Standard 1 (NS1) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA). This action is necessary to provide guidance on how to comply with new annual catch limit (ACL) and accountability measure (AM) requirements for ending overfishing of fisheries managed by federal fishery management plans (FMPs). It also clarifies the relationship between ACLs, maximum sustainable yield (MSY), optimum yield (OY), and other applicable reference points. The intent of this action is to facilitate compliance with requirements of the Magnuson-Stevens Act to end and prevent overfishing, rebuild overfished stocks and achieve OY.

DATES: Comments must be received by [insert date 90 days after date of publication in the FEDERAL REGISTER].

ADDRESSES: You may submit comments, identified by 0648-AV60, by any of the following methods:

 Electronic Submissions: Submit all electronic public comments via the Federal e-Rulemaking portal: <a href="http://www.regulations.gov">http://www.regulations.gov</a>;

- Fax: 301-713-1193, Attn: Mark Millikin;
- Mail: Mark R. Millikin, National Marine Fisheries Service, NOAA, Office of Sustainable
  Fisheries, 1315 East-West Highway, Room 13357, Silver Spring, MD 20910 (mark
  outside of envelope "Comments on Annual Catch Limits proposed rule");

Instructions: All comments received are a part of the public record and will generally be posted to <a href="http://www.regulations.gov">http://www.regulations.gov</a> without change. All Personal Identifying Information (for example, name, address, etc.) voluntarily submitted by the commenter may be publicly accessible. Do not submit confidential business information or otherwise sensitive or protected information.

NMFS will accept anonymous comments. Attachments to electronic comments will be accepted in Microsoft Word, Excel, Wordperfect, or Adobe PDF file formats only.

Copies of the Regulatory Impact Review (RIR)/Regulatory Flexibility Act Analysis (RFAA) for this proposed rule are available from Mark R. Millikin at the address listed above.

The RIR/RFAA document is also available via the internet at

http://www.nmfs.noaa.gov/msa2007/catchlimits.htm

FOR FURTHER INFORMATION CONTACT: Mark R. Millikin, Senior Fishery Management Specialist, 301-713-2341.

SUPPLEMENTARY INFORMATION:

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# I. Overview of Proposed Revisions

NMFS fulfills the requirements of section 301(b) of the Magnuson-Stevens Act—"The Secretary shall establish advisory guidelines (which shall not have the force and effect of law), based on national standards, to assist in the development of fishery management plans," with its national standard guidelines that appear at 50 CFR 600.310 through 50 CFR 600.355. NMFS is proposing revisions to the NS1 guidelines to address, among other things, new requirements for fisheries undergoing overfishing, to have ACLs and AMs to end overfishing by 2010, and all fisheries to have ACLs and AMs in place to prevent or end overfishing by 2011, and beyond. A stock or stock complex may not require an ACL and AMs if it qualifies for a statutory exception under the Magnuson-Stevens Act. Other proposed revisions to the NS1 guidelines include: (1) a description of the relationship between MSY, OY, overfishing limits (OFL), acceptable biological catch (ABC), ACLs, and annual catch targets (ACTs); (2) guidance on how to combine the use of ACLs and AMs for a stock to prevent overfishing when possible, and adjust ACTs or ACLs, or both, and AMs, if an ACL is exceeded; (3) allowing for inclusion of ecosystem component (EC) species in FMPs and, in such cases, guidance for how to classify which stocks are "in the fishery" and which species are ecosystem components; (4) replacing MSY control rules with ABC control rules and replacing OY control rules with ACT control rules; (5) new requirements for scientific and statistical committees (SSC); (6) changing the timeline to prepare new rebuilding plans; (7) revised guidance on how to establish rebuilding

time targets; and (8) advice on action to take at the end of a rebuilding period if a stock is not yet rebuilt.

# II. Acronyms

ABC – acceptable biological catch

ACL – annual catch limit

ACT – annual catch target

AM – accountability measures

ANPR - Advance Notice of Proposed Rulemaking

B<sub>msy</sub> - MSY stock size

EC – ecosystem component species

EEZ – Exclusive Economic Zone

F<sub>msy</sub> – MSY fishing mortality rate

FMP - fishery management plan

MFMT - maximum fishing mortality threshold

MSA – Magnuson-Stevens Act

MSRA – Magnuson-Stevens Fishery Conservation and Management Reauthorization Act

MSST - minimum stock size threshold

MSY – maximum sustainable yield

NOI - Notice of Intent

NS1 – National Standard 1

OFL – overfishing limit

OY – optimum yield

SDC – status determination criteria

SFA - Sustainable Fisheries Act

SSC – scientific and statistical committee

T<sub>max</sub> - maximum time allowable for rebuilding a stock

T<sub>min</sub> – minimum time for rebuilding a stock

T<sub>target</sub> – target time for rebuilding a stock

# III. Background

The MSA serves as the chief authority for fisheries management in the U.S. Exclusive Economic Zone (EEZ). Section 301(b) of the MSA requires that "The Secretary shall establish advisory guidelines (which shall not have the force and effect of law), based on the national standards, to assist in the development of fishery management plans." Guidelines for the national standards are codified in subpart D of 50 CFR part 600. The guidelines for national standards were last revised through a final rule published in the <u>Federal Register</u> on May 1, 1998 (63 FR 24212), by adding revisions to the guidelines for National Standards 1 (optimum yield), 2 (scientific information), 4 (allocations), 5 (efficiency), and 7 (costs and benefits); and adding new guidelines for National Standards 8 (communities), 9 (bycatch), and 10 (safety of life at sea).

The guidelines for NS1 were revised extensively in the final rule published on May 1, 1998, to bring them into conformance to revisions to the MSA, as amended in 1996 by the Sustainable Fisheries Act (SFA). In particular, the 1998 revisions to the NS1 guidelines addressed new requirements for FMPs brought about by SFA amendments to MSA section 304(e) (rebuilding overfished fisheries).

The Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 (MSRA), which President Bush signed into law on January 12, 2007, included new

requirements regarding preventing and ending overfishing and rebuilding fisheries. Therefore, NMFS is proposing revisions to the NS1 guidelines at 50 CFR 600.310, to integrate these new requirements with existing provisions related to overfishing, rebuilding overfished stocks, and achieving optimum yield.

# IV. NMFS's Proposed Rule for Further Revisions to NS1 Guidelines in 2005

NMFS published an advance notice of proposed rulemaking (ANPR) in 2003 (68 FR 7492, February 14, 2003), and a proposed rule in 2005 (70 FR 36240, June 22, 2005), in the Federal Register to propose further revisions to the NS1 guidelines. NMFS sought to improve the utility of the 1998 guidelines in assisting the regional fishery management councils, and the Secretary of Commerce (Secretary) in the case of a Secretarial Amendment or a Secretarial FMP (denoted collectively hereafter as "Councils," as 50 CFR 600.305(c)(11) provides that "Council" includes both the regional fishery management councils and the Secretary when preparing FMPs or amendments), when establishing or revising status determination criteria (SDC) for overfishing and overfished definitions for stocks, and constructing or revising rebuilding plans for overfished stocks.

Although NMFS received many public comments on the ANPR and the 2005 proposed rule, NMFS decided not to pursue publication of a final rule when it learned that Congress was preparing an amendment to the MSA that seemed likely to revise how to manage stocks undergoing overfishing and stocks that need a rebuilding plan. Congress's efforts culminated in passage of the 2006 MSRA.

## V. NMFS's Initial Action on MSRA Requirements for ACLs

NMFS published a notice of intent (NOI) to prepare an environmental impact statement (EIS) and commencement of a scoping period for ACLs and AMs in the <u>Federal Register</u> on

February 14, 2007 (72 FR 7016), with a comment period ending date of April 17, 2007. NMFS held nine scoping sessions, one associated with each of the eight Regional Fishery Management Councils' meetings and one at NMFS Headquarters in Silver Spring, MD. Comments that NMFS received are contained in "Summary of Comments Received on NMFS Proposal to Develop Guidance on ACLs and AMs, July 2007," that is available at the NMFS website: <a href="http://www.nmfs.noaa.gov/msa2007/catchlimits.htm">http://www.nmfs.noaa.gov/msa2007/catchlimits.htm</a>.

The NOI indicated that an environmental assessment or EIS would be prepared for this action. However, NMFS has decided that, for purposes of compliance with the National Environmental Policy Act, a categorical exclusion is appropriate for this action. The proposed action would provide general guidance on ACL and AM and other requirements, but there is considerable diversity in federally-managed fisheries and FMPs. Thus, any analysis of the environmental, economic, and social impacts of the NS1 guidelines would be highly speculative. Potential environmental, economic, and social impacts cannot be meaningfully analyzed until the Councils apply the guidelines to specific fisheries and FMPs. At that time, the Councils would prepare an EIS or EA, as appropriate.

# VI. MSRA Ending Overfishing Requirements

Section 104(a)(10) of the MSRA established new requirements to end and prevent overfishing, including ACLs and AMs. Section 303(a)(15) was added to the MSA to read as follows: "establish a mechanism for specifying annual catch limits in the plan (including a multiyear plan), implementing regulations, or annual specifications, at a level such that overfishing does not occur in the fishery, including measures to ensure accountability." ACLs and AMs are required by fishing year 2010 if overfishing is occurring in a fishery, and they are required for all other fisheries by fishing year 2011.

In practical terms, given the time it takes to prepare and implement an FMP amendment, if the status of one or more stocks in a fishery at the end of 2008 is "subject to overfishing," Councils should submit ACL and AM mechanisms and actual ACLs for that fishery to be effective in fishing year 2010. If overfishing is determined to be occurring in a fishery in 2009, Councils should submit ACL and AM mechanisms and actual ACLs for that fishery to be effective in fishing year 2010, if possible, or in fishing year 2011, at the latest. All fisheries must have ACL and AM mechanisms and actual ACLs by the fishing year 2011, and beyond. The Secretary should amend Secretarial FMPs, to comply with ACL and AM requirements on the same timetable. Section 305(c) of the MSA, which was unchanged by MSRA, also provides authority to the Secretary to promulgate emergency regulations or interim measures necessary to address an emergency or overfishing for any fishery without regard to whether an FMP exists for such fishery.

NMFS recognizes that the phrase, "at a level such that overfishing does not occur" in section 303(a)(15) of the MSA is subject to different interpretations, as reflected in the varying comments received during scoping. On the one hand, the phrase could be interpreted to mean that overfishing is strictly prohibited at any cost. On the other hand, section 303(a)(15) refers to a "mechanism" for setting ACLs, including AMs, which seems to imply a more dynamic process that allows for adjustment of management measures as a fishery is carried out. The only way to ensure absolutely no overfishing occurs is to stop fishing. As long as fishing occurs, there is a chance for occasional instances of overfishing due to scientific uncertainty of data, influence of non-fishing factors, and management uncertainty. Continued overfishing for a period of years (chronic overfishing), presents the greatest danger to the health of fish stocks, and often leads to stocks becoming overfished. NMFS has noted that overfished stocks with chronic overfishing

seem to seldom rebuild, whereas overfished stocks that are rarely subject to overfishing have a better chance of rebuilding.

Taking the above considerations into account, NMFS believes that the ACL requirement should be interpreted to provide for some flexibility given scientific and management uncertainty and other factors, but at the same time, must address overfishing and facilitate rebuilding. Chronic overfishing can be prevented by ensuring that the combination of ACLs and AMs decrease the risk of future overfishing each successive time an ACL is exceeded. NMFS thus proposes a performance standard such that if catch of a stock exceeds its ACL more often than once in the last four years (i.e., more often than 25 percent of the time), then the system of ACLs, ACTs and AMs should be re-evaluated to improve its performance and effectiveness (see § 600.310(g)(3) in this proposed action). NMFS believes that allowing a higher frequency of the ACL being exceeded would not safeguard enough against overfishing. A Council could choose a higher performance standard (e.g., a stock's catch should not exceed its ACL more often than once every five or six years) for a stock that is particularly vulnerable to the effects of overfishing.

# VII. Reasons for Overfishing and Expectations for ACLs to Prevent/End Overfishing

The "NMFS Fourth Quarterly Report for 2007 Status of U.S. Fisheries" indicates that 41 stocks managed by federal FMPs were undergoing overfishing as of December 31, 2007. Stocks become listed as "overfishing" or remain in an overfishing status for a variety of reasons, including:

1. The goal of the FMP may be to end overfishing over several years by gradually reducing fishing mortality rates instead of ending overfishing immediately.

- 2. Management measures have proven ineffective at ending overfishing (e.g., lack of inseason closure authority for the fishery or management measures are aimed at achieving a target catch that is set too close to the catch amount that results in overfishing, or both).
- 3. Management measures to address overfishing have not been implemented yet.
- 4. Recent change in scientific advice (i.e., the Council has not had sufficient time to amend the FMP and no automatic measures exist in the FMP to make necessary adjustments to end overfishing in the subsequent fishing year).
- 5. Bycatch mortality in other fisheries has not been addressed adequately or is poorly known.
- 6. Data sufficient to verify whether or not overfishing is occurring are not available, so the existing overfishing determination is retained.
- 7. International fishing pressure is responsible for the large majority of overfishing.
- 8. Fishing pressure in state or territorial waters is responsible for the large majority of overfishing, federal action alone is not sufficient to end overfishing, and managers in the various jurisdictions are unable thus far to agree on a concerted approach for preventing overfishing.

NMFS believes that the ACL and AM requirements will address overfishing that results from reasons 1, 2, 3, and 4 above. Better scientific data, along with adequate ACLs and AMs, should enable Councils to prevent overfishing for reasons 5 and 6. Stocks that are undergoing overfishing for reason 7 would be exempt from the ACL requirement (see §§ 600.310(h)(2)(ii) and 600.310(k) of this proposed action for discussion of international fisheries). There may be circumstances where managers in various jurisdictions are unable to agree on an ACL and AMs

that would end or prevent overfishing for a fishery described under reason 8. In such cases, these proposed guidelines would require an ACL for the overall fishery, but AMs would be implemented only for the portion of the fishery under federal management authority.

VIII. Definition, Interpretation, and Application of the term "Fishery" and its Relevance to ACLs

The MSA, as amended by MSRA, requires that a Council shall develop ACLs "for each of its managed fisheries" (see MSA section 302(h)(6)) and as noted earlier, that each FMP have a mechanism for specifying ACLs "at a level such that overfishing does not occur in the fishery" (see MSA section 303(a)(15)). Consistent with these sections of the MSA, the proposed NS1 guidelines provide that ACLs and AMs are needed for each "fishery" under federal FMP management, unless covered by a statutory exception.

The MSA defines "fishery" broadly, and this definition did not change with the passage of the MSRA. A "fishery" is "one or more stocks of fish which can be treated as a unit for purposes of conservation and management and which are identified on the basis of geographical, scientific, technical, recreational and economic characteristics," and "any fishing of such stocks" (see MSA section 3(13) and 50 CFR 600.10). The term "fishery" can mean different things in different contexts. For example, when dealing with biological concepts such as determining a status of overfishing or overfished, the NS1 guidelines generally apply at the "stock or stock complex" level (See, e.g., 50 CFR 600.310(c)(1), (d) (defining MSY and "overfish" with regard to "stock or stock complex") and § 600.305(c)(12) (explaining that "stock or stock complex" is used as a synonym for "fishery" in NS guidelines). In other instances, such as managing a fishery for OY, the term "fishery" is viewed more broadly (see 50 CFR 600.310(f) (referring to OY at the "fishery" and not the "stock or stock complex" level)).

Given the broad definition of "fishery," the Councils have had, and continue to have, considerable discretion in defining the "fishery" under FMPs. Some FMPs include only one or a few stocks whereas others include several or hundreds of species. Looking at existing FMPs, the primary reasons why stocks are included in FMPs are because people seek to harvest them for sale or personal use (i.e., the fish are the target of fishing activity), or they are caught incidentally in the pursuit of harvesting one or more other stocks and could experience overfishing or become overfished without conservation and management measures. These reasons are consistent with the stated purposes of the MSA, which includes the preparation and implementation of FMPs "which will achieve and maintain, on a continuing basis, the optimum yield from each fishery" (see MSA section 2(b)(4)). OY is defined with regard to "the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities, and taking into account the protection of marine ecosystems" (see MSA section 3(33)).

While the focus of FMPs has been stocks managed for OY, in recent years, some FMPs have included other stocks in an effort to incorporate ecosystem approaches to management. Congress acknowledged this increased attention to ecosystem approaches in the "Findings" section of the Act (see MSA section 2(a)(11) (acknowledging that a number of Councils have demonstrated significant progress in integrating ecosystem considerations under existing authorities of the MSA)). In addition, MSRA added a new section 303(b)(12) that provides that an FMP may "include management measures in the plan to conserve target and non-target species and habitats, considering the variety of ecological factors affecting fishery populations."

NMFS wants to encourage ecosystem approaches to fishery management and believes that clarification of what constitutes the "fishery" would be helpful. As such, NMFS is proposing guidance pertaining to "stocks in the fishery" and "ecosystem component (EC)

species," which are described in detail below. The intent of this guidance is to articulate approaches taken under existing FMPs and to provide a framework for thinking about future FMPs and FMP amendments. The Councils would have the discretion to determine, on a case-by-case basis, whether changes in their stock classifications under current FMPs are needed.

A. Stocks in the Fishery

As a default, all stocks currently identified in an FMP are considered "stocks in the fishery." "Stocks in the fishery" would include target stocks (i.e., stocks that fishers seek to catch for sale or personal use, including "economic discards" as defined under MSA section 3(9)), non-target stocks that are retained for sale or personal use, and non-target stocks that are not retained for sale or personal use and that are either determined to be subject to overfishing, approaching overfished, or overfished, or could become so, according to the best scientific information available, without conservation and management measures (See Figure 1 and § 600.310(d)(2) of this proposed action). Stocks and stock complexes in the fishery should have quantitative SDC, MSY, ABC, ACL, and ACT (collectively called "reference points" throughout this section) and AMs (See Table 1 for reference points needed for different types of stocks, and see § 600.310(b)(2)(iv) of this proposed action), although some stocks in the fishery may not require ACLs and AMs if they are covered by a statutory exception (see § 600.310(b)(2) of this proposed action). Hereafter, in these guidelines, "stock" or "stock(s) and stock complex(es)" refer to "stocks in the fishery."

#### B. Ecosystem Component Species

Beyond the "stocks in the fishery," a Council may, but is not required to, include EC species in an FMP. Such species would include non-target fish species that are not considered part of the "fishery" but rather species with which the fishery may occasionally interact (i.e.

catch) (see § 600.310(d)(5) of this proposed action). A Council may choose to include EC species for purposes of incorporating ecosystem approaches to fishery management, data collection, etc. Identification of EC species must be done through an FMP amendment process (see § 600.310(d) of this proposed action). Such species are appropriate to consider when addressing specification of OY and conservation and management measures for the fishery (see MSA sections 3(33) (referring to taking into account the marine ecosystems in OY definition), and 3(5) (referring to avoiding irreversible or long-term effects on fishery resources and the marine environment and ensuring multiplicity of options). Because EC species are not considered to be "in the fishery," specification of reference points, ACLs, and AMs are not required (see Table 1). However, a Council should consider measures for the fishery to minimize bycatch and bycatch mortality of EC species consistent with National Standard 9, and to protect their associated role in the ecosystem. NMFS is especially interested in the public's comments on the appropriate criteria for classification of EC species.

#### C. Stocks Identified in More than One FMP

If a stock is identified as part of more than one "fishery," Councils should choose which FMP will be the "primary FMP" in which management objectives, SDC, and other reference points for the stock are established. In most cases, the primary FMP for a stock will be the one in which the stock is identified as a target stock. Other FMPs in which the stock is identified as part of a fishery should contain management measures consistent with the primary FMP for the stock.

Figure 1. Proposed Classification of stocks in an FMP

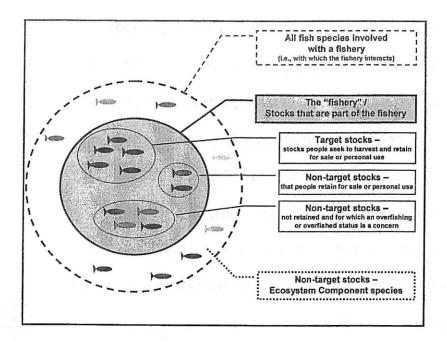


Table 1. Reference points, accountability measures, and control rules that would be required or recommended.

Reference points, accountability measures, and control rules	Stocks and Stock Complexes in a Fishery (excluding those with an approximate 1 year life cycle and those managed under international fishery agreements)	Stocks and Stock Complexes in a Fishery That Have a Life Cycle of Approximately 1 Year	Stocks and Stock Complexes in a Fishery Managed Under an International Fishery Agreement <sup>3</sup>	Ecosystem Component Species <sup>4</sup>
MSY <sup>1</sup>	✓	<b>✓</b>	✓	N/A
SDC <sup>1</sup> (e.g. MFMT <sup>2</sup> , MSST <sup>2</sup> )	✓	✓	✓	N/A
OY <sup>1</sup>	At the stock, stock complex, or fishery level	At the stock, stock complex, or fishery level	R	N/A
OFL <sup>2</sup>	R	R	R	N/A
ABC <sup>1</sup>	✓	✓	R	N/A
ACL <sup>1</sup>	✓	Only if "subject to overfishing"	R	N/A
AMs <sup>1</sup>	. 🗸	Only if "subject to overfishing"	R	N/A
ACT <sup>2</sup>	✓	Only if "subject to overfishing"	R	N/A
ABC control rule <sup>2</sup>	✓	✓	R	N/A
ACT control rule <sup>2</sup>	✓	R	R	N/A

<sup>&</sup>lt;sup>1</sup>MSA requirement

<u>Legend:</u>
✓ = Yes, this is applicable

ABC = Acceptable Biological Catch

ACL = Annual Catch Limit

AM = Accountability Measures

MFMT = Maximum Fishing Mortality Threshold

MSST = Minimum Stock Size Threshold

MSY = Maximum Sustainable Yield

N/A = Not Applicable

OFL = Overfishing Limit

OY = Optimum Yield

R = Recommended

SDC = Status Determination Criteria

<sup>&</sup>lt;sup>2</sup>For consistency with the NS1 Guidelines

<sup>&</sup>lt;sup>3</sup>If the stock is in a U.S. FMP and managed under an international fishery agreement to which the U.S. is party

<sup>&</sup>lt;sup>4</sup>Not required by MSA, but an option provided in the NS1 Guidelines

#### D. Stock Complexes

"Stock complex" means a group of stocks in an FMP that are sufficiently similar in geographic distribution, life history, and vulnerability to the fishery that the impacts of management actions on the stocks in the complex is similar (see § 600.310(d)(8) of this proposed action). Stock complexes may be comprised of: (1) one or more indicator stocks, each of which has SDC and ACLs, and several other stocks; (2) several stocks without an indicator stock, with SDC and an ACL for the complex as a whole; or (3) one or more indicator stocks, each of which has SDC and management objectives, with an ACL for the complex as a whole (this situation might be applicable to some salmon species).

For stock complexes, the SDC measured on a stock complex-wide basis or for an indicator stock should satisfy the MSA's requirements to prevent overfishing and achieve OY for a fishery. Vulnerability of stocks to the fishery should be evaluated when determining if: (1) A particular stock complex should be established or reorganized; (2) a particular stock should be a member of a stock complex; or (3) a stock complex should be reorganized. Indicator stocks are stocks selected as a representative for a stock complex because they have known determinations regarding SDC, and known values for MSY and OY, and can form the basis for an MSY and OY for the combinations of stocks in a complex. Although it is common for the indicator stock for a stock complex to be the most abundant stock, if an indicator stock is less vulnerable than other stocks in the complex, the management measures should be more conservative to protect the more vulnerable stocks from overfishing.

IX. Statutory Exceptions to Requirements for ACLs and AMs and Flexibility in Application of NS1 Guidelines

The MSRA provides two statutory exceptions to the ACL and AM requirements under MSA section 303(a)(15) (see MSRA section 104(b) (adding two exceptions under a MSA section 303 note); see also § 600.310(h)(2) of this proposed action). First, MSA section 303(a)(15) "shall not apply to a fishery for species that have a life cycle of approximately 1 year unless the Secretary has determined the fishery is subject to overfishing of that species" (see MSRA section 104(b)(2)). NMFS interprets "fishery for species" to be a stock. In addition, NMFS interprets "a life cycle of approximately 1 year" to mean that the average length of time it takes for an individual to produce a reproductively active offspring is approximately 1 year, and that the individual has only one breeding season in its lifetime. While stocks that qualify for the 1-year life cycle exception would not need to have ACLs and AMs, such stocks should still have SDC, MSY, OY, ABC, and an ABC control rule.

Second, MSA section 303(a)(15) shall take effect in 2010 and 2011, as discussed earlier, "unless otherwise provided for under an international agreement in which the United States participates" (see MSRA section 104(b)(1)). It is not clear to what the text "unless otherwise provided for" is referring. NMFS has considered several possible interpretations of this text in light of other provisions in MSRA, including the new international overfishing provisions in MSA section 304(i). Prior to MSRA, fisheries managed under international agreements in which the United States participates (referred to in this action as "international fisheries") were subject to MSA section 304(e) requirements regarding overfishing and rebuilding. However, in many of these fisheries, the United States could not unilaterally end overfishing or rebuild the stocks.

New MSA section 304(i) and other MSRA provisions acknowledge the increasing problem of international overfishing and the challenges of establishing conservation and management measures at the international level. Given Congress' recognition of the increasing problem of

international overfishing and the complexities of international negotiation, NMFS believes that the ACL exception should apply to fisheries that are subject to management under international agreements in which the United States participates. Applying ACLs or AMs only to the U.S. portion of the catch would not effect rebuilding or end overfishing, would potentially disadvantage U.S. fishermen with respect to foreign fishermen, and could weaken U.S. negotiating positions at international fora in which it participates.

Apart from the statutory exceptions, NMFS recognizes that there are limited circumstances that do not fit the standard approaches to specification of reference points and management measures set forth in the proposed revisions to the NS1 guidelines. These include, among other things, conservation and management of ESA-listed species, harvests from aquaculture operations, and stocks with unusual life history characteristics (e.g., Pacific salmon, where the spawning potential for a stock is spread over a multi-year period). For fisheries where ESA-listed species are incidentally caught, the ESA recovery plan would be a significant driver for setting management objectives, including ACLs, for the fishery. For aquaculture, once managers address status of broodstock taken from the wild (i.e., whether overfishing is occurring and/or whether the stock is in need of rebuilding), then the levels of harvests from an aquaculture facility would not necessarily need to focus on ending or preventing overfishing or rebuilding stocks. In these circumstances, Councils may propose alternative approaches for satisfying the NS1 requirements of the Magnuson-Stevens Act other than those set forth in these guidelines. Councils should document their rationale for any alternative approaches for these limited circumstances in an FMP or FMP amendment, which will be reviewed for consistency with the Magnuson-Stevens Act.

For a fishery in a federal FMP that has a large majority of harvest in state or territorial waters, the fishery should have ACL that takes into account the overall status of the stock, whether in state or federal waters or beyond. However, NMFS recognizes that AMs could only be applied to the portion of the fishery under federal jurisdiction. Given the jurisdictional issue, one approach proposed is that the overall ACL could be divided into a federal portion (federal-ACL) and a state portion (state-ACL). AMs would then be triggered when the federal-ACL was reached or projected to be reached (see further explanation in "Accountability Measures" section below).

# X. MSRA Requirements for SSCs Related to ACLs

The MSRA added new requirements for SSCs in the MSA. New section 302(g)(1)(B) of the MSA states that an SSC for each Regional Fishery Management Council "shall provide its Council ongoing scientific advice for fishery management decisions, including recommendations for acceptable biological catch, preventing overfishing, maximum sustainable yield, and achieving rebuilding targets, and reports on stock status and health, bycatch, habitat status, social and economic impacts of management measures, and sustainability of fishing practices." New section 302(g)(1)(E) provides that "The Secretary and each Council may establish a peer review process for that Council for scientific information used to advise the Council about the conservation and management of the fishery." In addition, new section 302(h)(6) provides that each Regional Fishery Management Council is required to "develop annual catch limits for each of its managed fisheries that may not exceed the fishing level recommendations of its scientific and statistical committee or the peer review process established under subsection (g)."

NMFS recognizes that there is variability in the peer review processes and involvement of SSCs amongst the various Councils. In addition, the above statutory sections could be subject

to different interpretations. While MSA section 302(h)(6) refers generally to "fishing level recommendations," section 302(g)(1)(B) refers to recommendations for ABC and MSY, among other things, and section 302(g)(1)(E) refers generally to "scientific information." Further, the text provides for advice from the SSC but also refers to peer review processes, leaving open a question about the role and relationship between the two. NMFS believes that clear processes for implementing these provisions are important in order to ensure that Councils get the information needed to establish ACL mechanisms, prevent confusion in the decision making process, and ensure general consistency in approaches taken.

For purposes of setting ACLs, a critical piece of scientific advice that Councils will need will be the ABC. Taking this into account, and considering the new requirements in light of existing SSC, Council, and peer review processes, NMFS proposes that the Councils establish a process that could be included in their Statement of Organization, Practices and Procedures (see § 600.115) which will: establish an ABC control rule, identify the body that will apply the ABC control rule (i.e., calculates the ABC), identify the review process that will verify the resulting ABC, and confirm that the SSC recommends the ABC to the Council. For Secretarial FMPs or FMP amendments, agency scientists or a peer review process would provide the scientific advice to establish ABC. For fisheries managed under international agreements in which the United States participates (referred to in this action as "international fisheries"), stock assessments are conducted through international scientific bodies that may include U.S. and non-U.S. scientists. While the United States promotes fishery conservation and management principles as embodied in the MSA (see, e.g., MSA section 102(c)), it cannot guarantee that international actions will be consistent with the Act or NS1 guidelines. Thus, an ABC as defined in these guidelines would not be required for international fisheries.

For stock and stock complexes required to have an ABC, NMFS recommends that each Council should establish an ABC control rule (see § 600.310(f)(4) of this proposed action) based on scientific advice from its SSC. The process of establishing an ABC control rule could also involve science advisors or the peer review process established under MSA section 302(g)(1)(E). Stock assessment scientists, a plan development team, or other designated body would then apply the ABC control rule. If a peer review process is established it should investigate the technical merits of stock assessments and other scientific information used by the SSC. For example, a peer review process (e.g., Stock Assessment Review Panel) could validate the ABC calculation and then pass their results to the SSC. Ultimately, the SSC should make the formal ABC recommendation to the Council. For Council-managed fisheries, the peer review process is not a substitute for the SSC, and should work in conjunction with the SSC.

# XI. MSY, OY, and SDC: A Review

MSY, OY, and SDC are concepts described in the current NS1 guidelines, and MSRA did not effect changes to the MSA that would require changes to these concepts. The following sections provide a review of MSY, OY, and SDC and an explanation of the relationship between them and the proposed guidance on ACLs and other requirements.

MSY is the largest long-term average catch or yield that can be taken from a stock or stock complex under prevailing ecological and environmental conditions and fishery technological characteristics. Any estimate of MSY depends on the population dynamics of the stock and the characteristics of the fisheries (e.g. gear selectivity). MSY stock size ( $B_{msy}$ ) is the long-term average size of the stock or stock complex, measured in terms of spawning biomass, or other appropriate measure of the stock's reproductive potential, that would be achieved by fishing at  $F_{msy}$ . OY is the amount of fish that will provide the greatest overall benefit to the

Nation, while preventing overfishing, particularly with respect to food production and recreational opportunities, and taking into account the protection of marine ecosystems. OY is prescribed on the basis of the MSY from the fishery, as reduced by relevant economic, social or ecological factors. In the case of an overfished fishery, OY provides for rebuilding to a level consistent with producing MSY in such a fishery. In NS1, use of the phrase, "achieving, on a continuing basis, the optimum yield from each fishery" means producing, from each stock, stock complex or fishery a long-term series of catches such that the average catch is equal to OY, overfishing is prevented, the long term average biomass is near or above B<sub>msy</sub>, and overfished stocks are rebuilt in as short a time as possible as specified in MSA section 304(e)(4). OY might be established at the stock or stock complex level, or for a fishery comprised of stocks, many of which have their own ACL and ACT (e.g., groundfish of the Gulf of Alaska and groundfish of the Bering Sea and Aleutian Islands).

Section 3(34) of the MSA states that "overfishing" and "overfished" mean a rate or level of fishing mortality that jeopardizes the capacity of a fishery to produce the maximum sustainable yield on a continuing basis. To reduce confusion and conform to usage of those terms in other fisheries worldwide, in the current NS1 guidelines, NMFS interpreted these terms so that "overfished" pertains to the biomass of the stock or stock complex, and "overfishing" pertains to a rate or level of removal of fish from the stock or stock complex. The current NS1 guidelines also provide for SDC, which are quantifiable factors for determining whether a stock or stock complex is overfished or if overfishing is occurring. An overfished definition consists of a measure of stock abundance called the minimum stock size threshold (MSST), below which a stock's or stock complex's capacity to produce MSY on a continuing basis is jeopardized.

Overfishing of a stock or stock complex occurs whenever a stock or stock complex is subjected

to a rate or level of fishing mortality, called the maximum fishing mortality threshold (MFMT), above which the stock's or stock complex's capacity to produce MSY on a continuing basis is jeopardized or annual catch exceeds a stock's or stock complex's OFL. MSRA made no changes to the MSA that would necessitate different interpretations of these terms or different approaches to these concepts.

#### XII. Description of the Relationship of OFL to MSY and ACT to OY

National Standard 1 establishes the relationship between conservation and management measures, preventing overfishing, and achieving OY from each stock, stock complex or fishery. The following sections describe in detail NMFS' proposed guidance on ACLs and other new requirements. Among other things, the proposed guidance introduces new terms – overfishing limit (OFL) and annual catch target (ACT) – which are not set forth in the MSA but which NMFS believes would be helpful to implement the statutory requirements. As an overview, OFL is an annual amount of catch that corresponds to the estimate of MFMT applied to a stock or complex's abundance; MSY is the long-term average of such catches. The current NS1 guidelines define overfishing with regard to MFMT, which is a rate of fishing. The use of OFL would provide another method for measuring overfishing by allowing the comparison of a stock or stock complexes' annual catch to its OFL; if catch exceeds OFL, overfishing is occurring. It is recommended that ABC would be set below OFL to take into account the scientific uncertainty in the estimate of OFL.

ACL would be the limit that triggers AMs, and ACT would be the management target for the fishery. Management measures for a fishery should, on an annual basis, achieve the ACT and prevent the ACL from being exceeded. The long-term objective is to achieve OY through annual achievement of ACT.

# XIII. Definition Framework for OFL, ABC, ACL, and ACT

The MSRA does not define ACLs, AMs, and ABC, and there are many different ways in which these terms can be defined. The voluminous comments that NMFS received during scoping reflects the wide range of possible interpretations and approaches. For example, some commenters felt that ACL should be considered a target catch level and others felt it should be a limit that should not be approached or reached. Many commenters suggested, in general, that a buffer be implemented between management targets and limits in order to prevent overfishing and account for uncertainty. Over the past year, NMFS spent considerable time reviewing different interpretations of the ACL requirement in light of MSA sections 303(a)(15), 302(h)(6), and 302(g) and other sections of the MSA, and taking into consideration the current NS1 guidelines, previously proposed changes to those guidelines, existing FMPs and FMP amendments, scientific and management roles in the decision making process, and public comment. Based on this review, NMFS proposes the following definitions for ACL, AM, and ABC, and also for ACT and OFL:

- Overfishing limit (OFL) means "the annual amount of catch that corresponds to the
  estimate of MFMT applied to a stock or stock complex's abundance and is
  expressed in terms of numbers or weight of fish." See § 600.310(e)(2)(i)(D) of this
  proposed action.
- 2. Acceptable biological catch (ABC) means "a level of a stock or stock complex's annual catch that accounts for the scientific uncertainty in the estimate of OFL and should be specified based on the ABC control rule." See § 600.310 (f)(2)(ii) of this proposed action.

- 3. Annual catch limit (ACL) means "the level of annual catch of a stock or stock complex that serves as the basis for invoking accountability measures." See § 600.310(f)(2)(iv) of this proposed action.
- 4. Annual catch target (ACT) means "an amount of annual catch of a stock or stock complex that is the management target of the fishery. A stock or stock complex's ACT should usually be less than its ACL and results from the application of the ACT control rule. If sector-ACLs have been established, each one should have a corresponding sector-ACT." See §§ 600.310(f)(2)(v) and (f)(6) of this proposed action.
- 5. Accountability measures (AMs) means "management controls that prevent ACLs or sector-ACLs from being exceeded (inseason AMs), where possible, and correct or mitigate overages if they occur." See § 600.310(g) of this proposed action.

As proposed in this action, the relationship between the above terms would be OFL>ABC>ACL>ACT (see Figure 2). Because a primary goal of the MSA, and management responsibility of NMFS and the Councils, is to end and prevent overfishing, rather than account for it after it occurs, NMFS believes that a good approach to management is to have OFL>ABC and ACL>ACT. The ABC is lower than the OFL to address scientific uncertainty in the estimate of OFL, and ACT is lower than the ACL to address uncertainty in the accounting for catch and in the degree to which management measures can control catch to the target level.

OFL is an annual amount of catch that corresponds to the estimate of MFMT applied to a stock or complex's abundance, and MSY is the long-term average of such catches. NMFS proposes that OFL be the upper bound of ABC, but that ABC should usually be reduced from the OFL to account for scientific uncertainty in the estimate of OFL. For overfished stocks, ABC

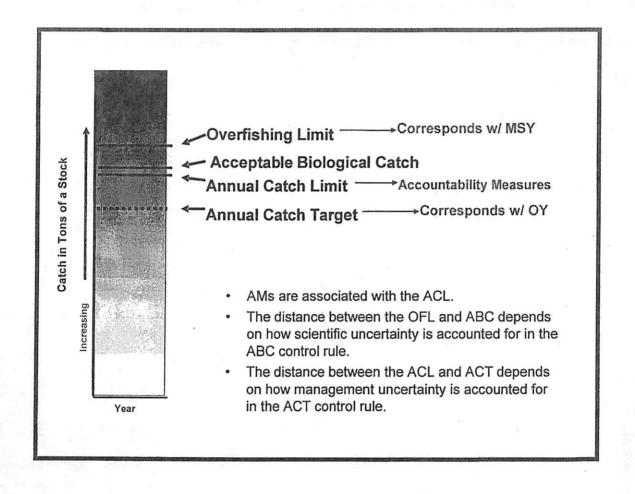
must also be set to reflect the annual catch that is consistent with the rebuilding plan for that stock. Therefore, if a stock is being managed under a rebuilding program, its ABC should be lower during some or all stages of rebuilding than when the stock is rebuilt. The ABC will be set on the basis of the ABC control rule.

The proposed guidelines would have the Councils set the ACL as a level of catch specified for a stock or stock complex each year that cannot exceed its ABC. If a stock or stock complex's catch exceeds its ACL, AMs will be invoked as specified in the FMP. The ACL may typically be equal to the ABC and setting the ACL provides an opportunity to divide the total ACL into sector-specific ACLs. As noted above, the purpose of the ACT is to address management uncertainty. The ACT would be the target catch of a stock or stock complex that a fishery is managed to attain and should generally be less than the stock or stock complex's ACL. "Catch" includes fish that are retained for any purpose, as well as mortality of fish that are discarded (see § 600.310(f)(2)(i) of this proposed action). Therefore, for fisheries where bycatch estimates are not available in a timely enough manner to manage annual catch, targets may be specified for landings, so long as an estimate of bycatch is accounted for such that total of landings and bycatch will not exceed the stock's or stock complex's ACL. For a stock with sufficient inseason data monitoring, the fishery for that stock would be closed in time to prevent the ACL from being exceeded.

NMFS notes that when it published an initial notice about ACLs, ACT was not a parameter used when exploring the concept of how to make ACLs and AMs operational. At that time, NMFS suggested an initial approach of OFL>ABC>ACL with ACL as the target catch that management measures should try to attain. Under that approach, if catch of a stock reached the OFL, its fishery would be closed. During the scoping period, NMFS received some public

comments expressing concern about the use of an ACL as a management target as opposed to a "limit." Also, the framework contained in this proposed rule provides for better separation between scientific uncertainty in estimating OFL (i.e., a recommendation that ABC be lower than OFL), and management uncertainty and OY factors indicating that an ACT be lower than the ACL.

Figure 2: Relationship between OFL, ABC, ACL and ACT (see discussion of the ABC and ACT control rules below).



#### XIV. Control Rules

Control rules are harvest strategies that specify how a stock's or stock complex's catch will be modified in response to one or more factors, particularly estimated stock size. The current NS1 guidelines include MSY control rules which are "limit" control rules and OY control rules which are "target" control rules. For any stock, the limit control rule results in a higher amount than the target control rule for a given stock abundance. Because of the new MSA requirement for annual catch limits to end and prevent overfishing for stocks in a fishery, NMFS proposes that MSY control rules be replaced by ABC control rules and become the new limit control rule, and OY control rules be replaced by ACT control rules and become the new target control rule. This would align the control rules more directly with the new requirement to specify an ABC and an ACL for stocks in the fishery (see earlier discussion in the preamble for the relationship between OFL and MSY, and between ACT and OY).

ABC and ACT control rules should be developed for each stock when possible. For stock complexes, ABC and ACT control rules should be developed for each indicator stock or for the stock complex as a whole. ACTs should be set with the intention that they typically will be achieved. A stock's or stock complex's ACT control rule should result in lower target catches than the ABC control rule would, for all levels of a stock's or stock complex's abundance.

In the proposed revisions to NS1 guidelines, an ABC control rule is a specified approach to setting the ABC for a stock or stock complex as a function of the scientific uncertainty in the estimate of OFL. An ACT control rule is an approach to setting the ACT for each stock and stock complex such that the risk of exceeding ACL due to management uncertainty (ability to control catch and variability in catch data) is an acceptably low level. Both control rules are designed to reduce the risk that overfishing will occur.

For rebuilding stocks, the ABC, ACL, and ACT should be set at lower levels than for rebuilt stocks because two objectives are combined. First, overfishing should not occur; and second, rebuilding at a rate commensurate with the stock's rebuilding plan should occur. This means that, for a rebuilding stock, a lower target fishing mortality rate may be needed to accomplish rebuilding, in addition to avoiding overfishing (i.e., ACL and ACT are lower than they would be if the stock was rebuilt).

#### XV. Sector ACLs, ACTs, and AMs

A Council may decide, but is not required, to divide the ACL into sector-ACLs. "Sector" for purposes of the NS1 guidelines means a distinct user group to which separate management strategies and catch quotas apply. Examples of sectors could include the commercial sector, recreational sector, or various gear groups within a fishery. It is up to each Council to decide how to designate sectors, if any. If sector-ACLs are established, sector-AMs and sector-ACTs must be developed for each sector-ACL. In cases where states cooperatively manage a stock, it is possible that a sector ACL could be further subdivided in order to establish "subsector" ACLs and ACTs for various states to align with current management of catch limits or quotas in the state fisheries. The system of ACLs and AMs must be effective and equitable and protect the stock as a whole from overfishing. The sum of a stock's sector-ACLs must not exceed the stock's ACL. If sector-ACLs and sector-AMs are established, additional AMs at the stock level would also be appropriate. A sector must be closed inseason if timely catch data indicates its ACL has been reached. If a sector does not have timely inseason fisheries data, or has a history of annual overages, then a Council should establish a large enough difference between a sector's ACT and ACL to improve the probability that the sector-ACL and the stock's ACL are not exceeded.

### XVI. Accountability Measures

AMs are management controls implemented for stocks such that exceeding the ACL or sector-ACL is prevented, where possible, and corrected or mitigated if it occurs (see § 600.310(g) of this proposed action). AMs include: (1) Those that are applied inseason and designed to prevent the ACL from being reached; (2) measures applied after the fishing year that are designed to address the operational issue that caused the ACL overage, ensuring it does not happen in subsequent fishing years, and, as necessary, address any biological harm to the stock; and (3) those based on multi-year average data which are still reviewed and applied annually (see discussion below). AMs should address and minimize both the frequency of overages and the magnitude of an overage. AMs should be designed so that if an ACL is exceeded, specific adjustments are effective in the next fishing year, or as soon as possible, with explanation of why more timely adjustment is not possible.

If timely inseason fishery catch data are available for a stock, Councils should ensure their FMPs contain inseason closure authority as an AM to prevent a stock's ACL from being exceeded. Where fishery catch data are not timely enough to implement inseason AMs, the ACT should be adjusted downward from the ACL to account for the increased management uncertainty and the delayed ability to implement AMs.

A "multiyear plan" as referenced in section 303(a)(15) of the MSA is a plan that establishes harvest specifications or harvest guidelines for each year of a time period greater than one year. Because "multiyear plans" establish ACLs and ACTs for more than one year at a time, they should include AMs that provide if an ACL is exceeded in one year, then a subsequent year's harvest specification (including ACLs and ACTs) could be revised (see § 600.310(f)(5)(i) of this proposed action).

Some fisheries have highly variable annual catches and lack reliable inseason or annual data on which to base AMs. If there are insufficient data upon which to compare catch to ACL, either inseason or on an annual basis, a Council could base AMs on comparison of average catch to average ACL over a three-year moving average period or, if supported by analysis, some other appropriate multi-year period (see § 600.310(g)(4) of this proposed action). As a performance standard, if the average catch exceeds the average ACL more than once in the last four years, then the ACL, ACT and AM system should be re-evaluated to improve its performance. The initial ACL and management measures should incorporate information from previous years so that AMs based on average ACLs can be applied from the first year.

If a stock is in a rebuilding plan and its ACL is exceeded, the AMs should include overage adjustments that reduce the ACL in the next fishing year by the full amount of the overage, unless the best scientific information available shows that a reduced overage adjustment is sufficent, or no adjustment is needed to mitigate the effects of the overage. This AM is important to increase the likelihood that the stock will continue to rebuild.

As discussed earlier, stocks and stock complexes in federal FMPs that have a large majority of harvest in state or territorial waters should have an ACL that takes into consideration the overall status of the stock. However, federal management would be limited to that portion of the fishery under federal jurisdiction. Options for AMs that a Council could consider for stocks or stock complexes caught mostly in state or territorial waters would include, but are not limited to: (1) close the EEZ when the federal portion of the ACL is reached, or (2) close the EEZ when the overall stock or stock complex's ACL is reached. The AMs should ensure that federal managers are doing as much as possible to end and prevent overfishing. When stocks are comanaged by federal, state, tribal, and/or territorial fishery managers, the goal should be to

develop collaborative conservation and management strategies, and scientific capacity to support such strategies, to prevent overfishing of shared stocks and ensure their sustainability.

# XVII. Summary of Items to Include in FMPs

This section provides a summary of items that Councils should include in their FMPs and FMP amendments in order to address ACL, AM, and other aspects of the proposed NS1 guidelines. Some items are specific to new MSRA provisions. Others were required prior to MSRA, but are included here so as to be comprehensive. Councils may review their FMPs to decide if all stocks are "in the fishery" or whether some fit the category of "ecosystem component species" and amend their FMP as appropriate. If they do not establish EC species through an FMP amendment, then all stocks in an FMP are presumed to be "in the fishery." For all stocks and stock complexes that are in the fishery, the Councils should evaluate and describe the following items in their FMPs and amend the FMPs, if necessary, to align their management objectives to end or prevent overfishing (see § 600.310(c) of this proposed action): (1) MSY and SDC, (2) OY at the stock, stock complex or fishery level, (3) ABC control rule, (4) ACLs and mechanisms for setting ACLs and possible sector-specific ACLs in relationship to the ABC, (5) ACT control rule, (6) AMs and AM mechanisms, and (7) stocks and stock complexes that have statutory exceptions from ACLs or fall under limited circumstances which require different approaches to meet the ACL requirements (e.g., ESA-listed stocks and harvests from aquaculture facilities).

The Councils should evaluate the extent to which their FMPs comply with requirements to define MSY and OY for stocks in the fishery, and the reasons that OY is reduced from MSY (see § 600.310(e)(3)(iv) of this proposed action). An overall objective of management of federal fisheries under the MSA is to conserve fishery resources so as to prevent overfishing and achieve

OY (see sections 2(a)(6) and 2(b)(4) of the MSA). OY is based on MSY for a fishery, as reduced for economic, social, or ecological reasons (see section 3(33)(B) of the MSA). Therefore, it is important that all FMPs have MSY and OY prescribed correctly.

FMPs should contain a description of fisheries data for the stocks, stock complexes, and ecosystem component species. The sources of fishing mortality, such as commercial catch (both landed and discarded), recreational catch, and bycatch in other fisheries should be listed in the FMP for each fishery, along with a description of the data collection and estimation methods used to quantify total catch mortality in each fishery. The description of the data collection methods used to monitor the fishery should include information on the frequency that those data are collected and updated and the scope of sampling coverage for the fishery. In addition, the FMP should describe how those data are used to determine the relationship between total catch at a given point in time and the ACL for a stock or stock complex.

FMPs should explain issues related to shared jurisdiction of stocks (if any), and the degree to which ACLs and AMs established by the Councils will ensure that overfishing does not occur on the stock as a whole.

NMFS is aware that existing FMPs may use terms that are similar to, associated with, or may be equivalent to ABC, ACL, ACT, and AM in many fisheries for which annual specifications are set for different stocks or stock complexes. NMFS' preference is that, as Councils revise their FMPs, they use the same terms as set forth in the NS1 guidelines as finalized. However, given the longstanding use of terms under certain FMPs, if changing terminology could cause confusion, Councils could opt to retain existing terminology and explain in a proposed rule how the terminology and approaches in the FMPs are consistent with those set forth in the NS1 guidelines.

Councils should amend their FMPs to provide explicit narrative of how the FMP objectives and annual management measures will work with ACLs and AMs. All stocks and stock complexes should have an annual or multiyear specification process for stocks managed in a fishery. An annual or multiyear specification process for setting or adjusting ACLs provides a timely, consistent method that the public and stakeholders can understand, and that provides an opportunity for public comment. Such a process could also provide a method for assigning an ACL, ACT, and AM to a "stock having a life cycle of approximately one year" that is undergoing overfishing.

#### XVIII. Change in Timetable when Establishing a Rebuilding Plan

The MSA provides that the Secretary shall annually identify stocks and stock complexes that are overfished or approaching a condition of being overfished; notify the appropriate Council at any time when a stock or stock complex is determined to be overfished; and notify the appropriate Council when adequate progress is not being made under existing FMPs, FMP amendments, or regulations (see MSA sections 304(e)(1), (2), and (7)). MSRA did not change these identification and notification provisions but revised the timing of Council actions. Currently, the Councils have 1 year to prepare an FMP, FMP amendment, or proposed regulations (see MSA sections 304(e)(3) and 304 note (Effective Date for Subsection (c)). Beginning July 12, 2009, the Councils have 2 years from the date of an identification or notification to prepare and implement an FMP, FMP amendment, or proposed regulations "to end overfishing immediately in the fishery and to rebuild affected stocks...or to prevent overfishing from occurring in the fishery whenever such fishery is identified as approaching an overfished condition" (see MSA section 304(e)(3) (as revised by MSRA section 104(c)). To facilitate timely implementation of actions under revised section 304(e)(3), the Councils should

submit an FMP, FMP amendment, or proposed regulations within 15 months of an identification or notification under this section. This will provide the Secretary with 9 months to implement the measures, if approved (see § 600.310(j)(2)(ii) of this proposed action).

While MSA section 304(e)(3) provides for two years for a Council to prepare and implement an FMP, FMP amendment, or proposed regulations, as discussed earlier, MSA section 303(a)(15) has a separate requirement for FMPs and ACLs that is effective in fishing year 2010 for fisheries determined to be subject to overfishing and in fishing year 2011 for all other fisheries. Thus, as of 2010 and beyond, for a stock and stock complex determined to be overfished and experiencing overfishing, a Council needs to take measures consistent with MSA section 303(a)(15) that address overfishing while the rebuilding plan is under development.

#### XIX. Establishing the Length of Time for a Rebuilding Plan

NMFS proposes clarifying guidance for calculating the target time to rebuild ( $T_{target}$ ) in rebuilding plans for stocks (see § 600.310(j)(3)(i)(E) of this proposed action), based on experiences with FMPs since the last NS1 guideline revisions. The purpose of this clarification is to emphasize that the rebuilding time must be "as short as possible," taking several factors into account (see MSA section 304(e)(4)(A)(i)). Establishing the  $T_{target}$  should be based on the minimum time for rebuilding a stock ( $T_{min}$ ), and factors described in § 600.310(j)(3) of this proposed action with priority given to rebuilding in as short a time as possible.  $T_{target}$  shall not exceed the maximum time allowable for rebuilding ( $T_{max}$ ) and should generally be less than  $T_{max}$ .

# XX. Action when a Stock's Rebuilding Plan Ends and the Stock is not Rebuilt

Many rebuilding plans for overfished stocks under section 304(e) of the MSA were initiated in 1998, or later, and some of those plans are reaching the end of their rebuilding

periods such that a stock is no longer overfished, but not rebuilt. NMFS does not have explicit guidance in the NS1 guidelines to describe what a Council should do under such circumstances. Therefore, NMFS proposes that if a stock reaches the end of its rebuilding plan period and it is not yet determined to be rebuilt, then the rebuilding F should not be increased until the stock has been demonstrated to be rebuilt (see § 600.310(j)(3)(ii) of this proposed action). If the rebuilding plan was based on a  $T_{target}$  that was less than  $T_{max}$ , and the stock is not rebuilt by  $T_{target}$ , rebuilding measures should be revised if necessary, such that the stock will be rebuilt by  $T_{max}$ . If the stock has not rebuilt by  $T_{max}$ , and the rebuilding F is greater than 75 percent of MFMT, then the rebuilding F should be reduced to no more than 75 percent of MFMT until the stock has been demonstrated to be rebuilt.

## XXI. Changes to the definitions of some components of MSY

NMFS is proposing changes to the definitions of some components of MSY. The purposes of these changes are to improve some portions of the MSY related definitions and to further clarify how MSY is estimated. The definition of MSY in the NS1 guidelines would remain the same for the most part but the phrase "and fishery technological characteristics (e.g., gear selectivity) and the distribution of catch among fleets" would be added to the end of the definition (see § 600.310(e)(1)(i)(A) of this proposed action). The purpose of this change is to acknowledge that MSY also depends upon gear selectivity (age at entry) and the catch performance of the fishery, which can depend on the relative proportion of catch between different fleets with differing fishing characteristics. The definition of MSY stock size would be changed in two places. Currently, the guidelines state that "MSY stock size means the long-term average size of the stock or stock complex, measured in terms of spawning biomass or other appropriate units that would be achieved under a MSY control rule in which the fishing mortality

rate is constant." In the proposed guidelines (see § 600.310(e)(1)(i)(C) of the proposed action), NMFS clarifies that "other appropriate units" means an "appropriate measure of the stock's reproductive potential." NMFS also replaces the statement that "the fishing mortality rate is constant" with "Fmsy." NMFS also added a definition for MSY fishing mortality rate (Fmsy) (see § 600.310(e)(1)(i)(B) of the proposed action), which was lacking in the current guidelines. MSY fishing mortality "is the fishing mortality rate that, if applied over the long term, would result in MSY."

#### XXII. Social, Economic and Ecological Factors as They Relate to OY

NMFS proposes additional guidance to better describe social and ecological factors, and minor revisions to the economic factors as they relate to setting OY for a stock (see § 600.310(e)(3)(iv) of this proposed action). The revisions to the social factors describe fishery-related indicators and non-fishery related indicators that should be considered when OY needs to be reduced for a stock or stock complex.

#### XXIII. Scope of this Proposed Action

NMFS received voluminous comments during its scoping comment period for ACLs and AMs, including proposals to strengthen guidance on ecosystem considerations when setting ACLs and AMs. While NMFS has carefully considered all comments received, it will not be able to include all proposed NS1 revisions in this action. These proposed revisions to the NS1 guidelines will address primarily the need to have ACL and AM mechanisms and ACLs and AMs in place such that ACLs end overfishing in 2010, for stocks undergoing overfishing, and prevent overfishing for all other stocks beginning in 2011.

NMFS intends to withdraw most of the proposed revisions to the NS1 guidelines that were published in 2005 in a separate withdrawal of a proposed rule action. A few of the topics

from the 2005 rule are considered in this action, such as: 1) establishing the length of time for a rebuilding plan; 2) action to take when a stock is not determined to be rebuilt at the end of its rebuilding plan; and 3) the definition of several components of MSY. Other proposed revisions considered in the 2005 proposed NS1 guidelines and suggested during the comment period for this action will be considered by NMFS for possible inclusion in subsequent revisions to the NS1 guidelines.

## XXIV. Republishing Codified Text in its Entirety

For clarity and convenience of the reader, this proposed rule would revise § 600.310 in its entirety. The following describes the changes to § 600.310 that are being proposed.

In the proposed revisions to § 600.310, paragraph (b)—General, would be revised to contain a general outline of information provided by the NS1 guidelines. Current paragraph (b) only contains a brief summary of the relationship between MSY and OY.

Current paragraph (c)—<u>MSY</u> is revised and redesignated paragraph (e)(1).

Current paragraph (d)(1)—Definitions, is revised and redesignated paragraph (e)(2)(i).

Current paragraph (d)(2)—<u>Specification of status determination criteria</u>, is revised and redesignated paragraph (e)(2)(ii).

Current paragraph (d)(3)-Relationship of status determination criteria to other national standards is revised, redesignated paragraph (l) and renamed, "Relationship of National Standard 1 to other national standards."

Current paragraph (d)(6)—<u>Exceptions</u>, is revised, redesignated paragraph (m), and renamed, "<u>Exceptions</u> to requirements to prevent overfishing."

Current paragraph (e)—Ending overfishing and rebuilding overfished stocks, is revised and redesignated paragraph (j)—Council actions to address overfishing and rebuilding for stocks and stock complexes in the fishery.

Current paragraph (f)—OY is redesignated paragraph (e)(3).

Revised paragraphs with much different content include: paragraph (c)—Summary of

Items to Include in FMPs Related to NS1, paragraph (d)—Classifying stocks in an FMP, and

paragraph (f)—Acceptable Biological Catch, Annual Catch Limits, and Annual Catch Targets.

New paragraphs that contain new content not covered in the current NS1 guidelines include: (g) <u>Accountability measures</u>, (h) <u>Establishing ACL and AM mechanisms in FMPs</u>, (i) <u>Fisheries data</u>, and (k) <u>International overfishing</u>.

#### XXV. Classification

Pursuant to the Magnuson-Stevens Act, the NMFS Assistant Administrator has determined that this proposed rule is consistent with the Magnuson-Stevens Act, and other applicable law, subject to further consideration after public comment.

This proposed rule has been determined to be significant for purposes of Executive Order 12866. NOAA has prepared a regulatory impact review of this rulemaking, which is available at: <a href="http://www.nmfs.noaa.gov/msa2007/catchlimits.htm">http://www.nmfs.noaa.gov/msa2007/catchlimits.htm</a>. This analysis discusses various policy options that NOAA considered in preparation of this proposed rule, given NOAA's interpretation of the statutory terms in the MSRA, such as the appropriate meaning of the word "limit" in "Annual Catch Limit," and NOAA's belief that it has become necessary for Councils to consider separately the uncertainties in fishery management and the scientific uncertainties in stock evaluation in order to effectively set fishery management policies and ensure fulfillment of the goals to end overfishing and rebuild overfished stocks.

NOAA invites the public to comment on this proposal, the supporting analysis, and its underlying interpretation of the analytical requirements of the MSRA. In particular, NOAA seeks comment on: the appropriate interplay of the OFL, ABC, ACL and ACT; whether the Council's experience with MSY and OY would readily translate into these new concepts; whether the ACT and ACT control rules, as proposed, would be effective tools in managing fisheries at risk; the degree to which Councils should have the flexibility to specify stringent AMs to prevent the ACL from being exceeded in lieu of setting an ACT and ACT control rules; and the expected burden of these analytical requirements, both in terms of time and resources.

The Chief Counsel for Regulation of the Department of Commerce certified to the Chief Counsel for Advocacy of the Small Business Administration that these proposed revisions to the NS1 guidelines, if adopted, would not have any significant economic impact on a substantial number of small entities, as follows:

I certify that the attached proposed action issued under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) will not have any significant economic impacts on a substantial number of small entities, as defined under the Regulatory Flexibility Act. The proposed action would revise the National Standard 1 (NS1) guidelines at 50 CFR § 600.310.

The proposed revisions to the NS1 guidelines provide guidance on how to address new overfishing and rebuilding and related requirements under MSA sections 303(a)(15), 304(e), and other sections. Pursuant to section 301(b) of the Act, the NS guidelines do not have the force and effect of law. Regional Fishery Management Councils (Councils) and the Secretary of Commerce would use the NS1 guidelines when developing or amending FMPs to implement annual catch limits (ACLs) and accountability measures (AMs) and to take necessary actions to rebuild overfished fisheries. ACL and AM requirements under section 303(a)(15) of the Magnuson-Stevens Act are effective in fishing year 2010, for stocks undergoing overfishing and in fishing year 2011, for all other fisheries. NMFS believes that revisions to the NS1 guidelines will assist the Councils and the Secretary in addressing new MSA requirements, ensure greater consistency in approaches to ending overfishing and rebuilding stocks, increase efficiency in reviewing actions and tracking annual management performance, and improve communication between NMFS and the Councils.

Because the NS1 guidelines are general guidance and there is considerable diversity in the different federally-managed fisheries, potential economic impacts of the guidelines are highly speculative. As the Councils and/or the Secretary apply these guidelines to

specific fisheries, they will develop FMPs, FMP amendments, or other regulatory actions that will be accompanied by environmental, economic, and social analyses prepared pursuant to the Regulatory Flexibility Act, National Environmental Policy Act, and other statutes.

NMFS has identified a total of 59,823 commercial vessel permit holders and 18,486 headboat and charter boat vessel permits. A total of 26,074 recreational permits exist for Atlantic highly migratory species (HMS). Operator permits are estimated at 6,636 and dealer permits were estimated at 7,550. However, it is important to note that in most cases each vessel possesses permits for several fisheries (multiple vessel permits). As such, the total number of vessel permits (commercial, headboat and charter boat, and HMS recreational) grossly overestimate the actual number of vessels that are operating in these fisheries. All vessels included in the total vessel permits for each fishery are considered to be small entities for the purposes of the Regulatory Flexibility Act analysis. As a result, NMFS does not believe that these proposed revisions to the NS1 guidelines would place a substantial number of small entities at a disadvantage as compared to large entities or that it would reduce profit significantly. The NS1 guidelines would provide general guidance on ending and preventing overfishing and rebuilding fisheries, leaving considerable discretion to the Councils and the Secretary to consider alternative ways to accomplish these goals consistent with the NS, other provisions of the Magnuson-Stevens Act, and other applicable law. Therefore, an IRFA has not been prepared for this action.

These proposed revisions to the NS1 guidelines do not contain any new recordkeeping or reporting requirements subject to the Paperwork Reduction Act. When the Councils and the Secretary develop FMPs, FMP amendments, or other regulatory actions per the Magnuson-Stevens Act and NS1 guidelines, such actions may include new proposed collection-of-information requirements. In the event that new collection-of-information requirements are proposed, a specific analysis regarding the public's reporting burden would accompany such action. NMFS is not aware of any other relevant federal rules that may duplicate, overlap or conflict with the proposed rule.

## List of Subjects in 50 CFR Part 600

Fisheries, Fishing, Reporting and recordkeeping requirements.

Dated:

JUN 0 3 2008

Samuel D. Rauch III
Deputy Assistant Administrator
For Regulatory Programs
National Marine Fisheries Service

For the reasons stated in the preamble, 50 CFR part 600 is proposed to be amended as follows:

PART 600—Magnuson-Stevens Act Provisions

1. The authority citation for part 600 continues to read as follows:

Authority: 16 U.S.C. 1801 et seq.

- 2. Section 600.310 is revised to read as follows:
- § 600.310 National Standard 1—Optimum Yield.
- (a) <u>Standard 1</u>. Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield (OY) from each fishery for the U.S. fishing industry.
- (b) General. (1) The guidelines set forth in this section describe fishery management approaches to meet the objectives of National Standard 1 (NS1), and include guidance on:
  - (i) Specifying maximum sustainable yield (MSY) and OY;
  - (ii) Specifying status determination criteria (SDC) so that overfishing and overfished

determinations can be made for stocks and stock complexes that are part of a fishery;

- (iii) Preventing overfishing and achieving OY using a system of limits and targets, incorporation of scientific and management uncertainty in control rules, and adaptive management using annual catch limits (ACL) and measures to ensure accountability (AM); and
  - (iv) Rebuilding stocks and stock complexes.
- (2) Overview of Magnuson-Stevens Act concepts and provisions related to NS1--(i)

  MSY. The Magnuson-Stevens Act establishes MSY as the basis for fishery management and requires that: The fishing mortality rate does not jeopardize the capacity of a stock or stock complex to produce MSY; the abundance of an overfished stock or stock complex be rebuilt to a level that is capable of producing MSY; and OY not exceed MSY.
- (ii) OY. The determination of OY is a decisional mechanism for resolving the Magnuson-Stevens Act's conservation and management objectives, achieving a fishery management plan's (FMP) objectives, and balancing the various interests that comprise the greatest overall benefits to the Nation. OY is based on MSY as reduced under paragraphs (e)(3)(iii) and (iv) of this section. The most important limitation on the specification of OY is that the choice of OY and the conservation and management measures proposed to achieve it must prevent overfishing.
- (iii) ACLs and AMs. Any FMP which is prepared by any Council shall establish a mechanism for specifying ACLs in the FMP (including a multiyear plan), implementing regulations, or annual specifications, at a level such that overfishing does not occur in the fishery, including measures to ensure accountability (Magnuson-Stevens Act section 303(a)(15)). Subject to certain exceptions and circumstances described in paragraph (h) of this section, this requirement takes effect in fishing year 2010, for fisheries determined subject to overfishing, and in fishing year 2011 for all other fisheries (Magnuson-Stevens Act section 303 note). "Council"

includes the Regional Fishery Management Councils and the Secretary of Commerce, as appropriate (see § 600.305(c)(11)).

- (iv) Reference points. SDC, MSY, acceptable biological catch (ABC), ACL, and annual catch target (ACT), which are described further in paragraphs (e) and (f) of this section, are collectively referred to as "reference points."
- (v) <u>Scientific advice</u>. The Magnuson-Stevens Act has requirements regarding scientific and statistical committees (SSC) of the Regional Fishery Management Councils, including but not limited to, the following provisions:
- (A) Each Regional Fishery Management Council shall establish an SSC as described in section 302(g)(1)(A) of the Magnuson-Stevens Act.
- (B) Each SSC shall provide its Regional Fishery Management Council recommendations for ABC as well as other scientific advice, as described in Magnuson-Stevens Act section 302(g)(1)(B). The SSC may specify the type of information that should be included in the Stock Assessment and Fishery Evaluation (SAFE) report (see § 600.315).
- (C) The Secretary and each Regional Fishery Management Council may establish a peer review process for that Regional Fishery Management Council for scientific information used to advise the Regional Fishery Management Council about the conservation and management of the fishery (see Magnuson-Stevens Act section 302(g)(1)(E)). If a peer review process is established, it should investigate the technical merits of stock assessments and other scientific information used by the SSC. The peer review process is not a substitute for the SSC and should work in conjunction with the SSC.

- (D) Each Regional Fishery Management Council shall develop ACLs for each of its managed fisheries that may not exceed the fishing level recommendations of its SSC or peer review process (Magnuson-Stevens Act section 302(h)(6)).
- (3) Approach for setting limits and targets for consistency with NS1. In general, when specifying limits and targets intended to avoid overfishing and achieve sustainable fisheries, Councils should take an approach that considers uncertainty in scientific information and management control of the fishery. These guidelines identify limit and target reference points which should be set lower as uncertainty increases such that there is a low risk that limits are exceeded as described in paragraphs (f)(4) and (f)(6) of this section.
- (c) Summary of items to include in FMPs related to NS1. This section provides a summary of items that Councils should include in their FMPs and FMP amendments in order to address ACL, AM, and other aspects of the NS1 guidelines. As described in further detail in paragraphs (c)(1) through (7) of this section, Councils may review their FMPs to decide if all stocks are "in the fishery" or whether some fit the category of "ecosystem component species" and amend their FMPs as appropriate. If they do not establish ecosystem component species through an FMP amendment, then all stocks in an FMP are presumed to be "in the fishery." Councils should also describe fisheries data for the stocks, stock complexes, and ecosystem component species in their FMPs. For all stocks and stock complexes that are "in the fishery," the Councils should evaluate and describe the following items in their FMPs and amend the FMPs, if necessary, to align their management objectives to end or prevent overfishing:
  - (1) MSY and SDC (see paragraphs (e)(1) and (2) of this section).
- (2) OY at the stock, stock complex, or fishery level and provide the OY specification analysis (see paragraph (e)(3) of this section).

- (3) ABC control rule (see paragraph (f)(4) of this section).
- (4) ACLs and mechanisms for setting ACLs and possible sector-specific ACLs in relationship to the ABC (see paragraphs (f)(5) and (h) of this section).
  - (5) ACT control rule (see paragraph (f)(6) of this section).
  - (6) AMs and AM mechanisms (see paragraphs (g) and (h)(1) of this section).
- (7) Stocks and stock complexes that have statutory exceptions from ACLs (see paragraph (h)(2) of this section) or which fall under limited circumstances which require different approaches to meet the ACL requirements (see paragraph (h)(3) of this section).
- (d) Classifying stocks in an FMP--(1) Introduction. Magnuson-Stevens Act section 303(a)(2) requires that an FMP contain, among other things, a description of the species of fish involved in the fishery. FMPs include target stocks and may also include non-target species or stocks. All stocks listed in an FMP or FMP amendment are considered to be "in the fishery" unless they are identified as ecosystem component (EC) species through an FMP amendment process.
- (2) Stocks in a fishery. Stocks in a fishery include: (1) target stocks; (2) non-target stocks that are retained for sale or personal use; and (3) non-target stocks that are not retained for sale or personal use and that are either determined to be subject to overfishing, approaching overfished, or overfished, or could become so, according to the best available information, without conservation and management measures. Stocks in a fishery may be grouped into stock complexes, as appropriate. Requirements for reference points and management measures for these stocks are described throughout these guidelines.
- (3) "Target stocks" are stocks that fishers seek to catch for sale or personal use, including "economic discards" as defined under Magnuson-Stevens Act section 3(9).

- (4) "Non-target species" and "non-target stocks" are fish caught incidentally during the pursuit of target stocks in a fishery, including "regulatory discards" as defined under Magnuson-Stevens Act section 3(38). They may or may not be retained for sale or personal use. Non-target species may be included in a fishery and, if so, they should be identified at the stock level. Some non-target species may be identified in an FMP as ecosystem component (EC) species or stocks.
- (5) "Ecosystem component (EC) species" are generally not retained for any purpose, although de minimis amounts might occasionally be retained. EC species may be identified at the species or stock level, and may be grouped into complexes. EC species may be included in an FMP or FMP amendment for any of the following reasons: for data collection purposes; for ecosystem considerations related to specification of OY for the associated fishery; as considerations in the development of conservation and management measures for the associated fishery; and/or to address other ecosystem issues. While EC species are not considered to be "in the fishery," a Council should consider measures for the fishery to minimize bycatch and bycatch mortality of EC species consistent with National Standard 9, and to protect their associated role in the ecosystem. EC species do not require specification of reference points but should be monitored on a regular basis, to the extent practicable, to determine changes in their status or their vulnerability to the fishery. If necessary, they should be reclassified as "in the fishery."
- (6) Reclassification. A Council should monitor the catch resulting from a fishery on a regular basis to determine if the stocks and species are appropriately classified in the FMP. If the criteria previously used to classify a stock or species is no longer valid, the Council should reclassify it through an FMP amendment, which documents rationale for the decision.
- (7) Stocks or species identified in more than one FMP. If a stock is identified in more than one fishery, Councils should choose which FMP will be the primary FMP in which

management objectives, SDC, and other reference points for the stock are established. In most cases, the primary FMP for a stock will be the one in which the stock is identified as a target stock. Other FMPs in which the stock is identified as part of a fishery should be consistent with the primary FMP.

- (8) Stock complex. "Stock complex" means a group of stocks that are sufficiently similar in geographic distribution, life history, and vulnerabilities to the fishery such that the impact of management actions on the stocks is similar. Stocks may be grouped into complexes for various reasons, including where stocks in a multispecies fishery cannot be targeted independent of one another; where there is insufficient data to measure their status relative to SDC; or when it is not feasible for fishermen to distinguish individual stocks among their catch. The vulnerability of stocks to the fishery should be evaluated when determining if a particular stock complex should be established or reorganized, or if a particular stock should be included in a complex. Stock complexes may be comprised of: one or more indicator stocks, each of which has SDC and ACLs, and several other stocks; several stocks without an indicator stock, with SDC and an ACL for the complex as a whole; or one of more indicator stocks, each of which has SDC and management objectives, with an ACL for the complex as a whole (this situation might be applicable to some salmon species).
- (9) <u>Indicator stocks</u>. An indicator stock is a stock that is used to help manage and evaluate stocks that are in a stock complex and do not have their own SDC. If an indicator stock is used to evaluate the status of a complex, it should be representative of the typical status of each stock within the complex, due to similarity in vulnerability. If the stocks within a stock complex have a wide range of vulnerability, they should be reorganized into different stock complexes that have similar vulnerabilities; otherwise the indicator stock should be chosen to

represent the more vulnerable stocks within the complex. In instances where an indicator stock is less vulnerable than other members of the complex, management measures need to be more conservative so that the more vulnerable members of the complex are not at risk from the fishery. More than one indicator stock can be selected to provide more information about the status of the complex. Although the indicator stock(s) are used to evaluate the status of the complex, individual stocks within complexes should be examined periodically using available quantitative or qualitative information to evaluate whether a stock has become overfished or may be subject to overfishing.

- (e) <u>Features of MSY, SDC</u>, and OY that should be identified in FMPs for all stocks and stock complexes in the fishery--(1) <u>MSY</u>. Each FMP should include an estimate of MSY for the stocks and stock complexes in the fishery, as described in paragraph (d)(2) of this section).
- (i) <u>Definitions.</u> (A) <u>MSY</u> is the largest long-term average catch or yield that can be taken from a stock or stock complex under prevailing ecological, environmental conditions and fishery technological characteristics (e.g., gear selectivity), and the distribution of catch among fleets.
- (B)  $\underline{MSY}$  fishing mortality rate ( $\underline{F}_{msy}$ ) is the fishing mortality rate that, if applied over the long term, would result in  $\underline{MSY}$ .
- (C)  $\underline{MSY}$  stock size  $(B_{msy})$  means the long-term average size of the stock or stock complex, measured in terms of spawning biomass or other appropriate measure of the stock's reproductive potential that would be achieved by fishing at  $F_{msy}$ .
- (ii) MSY for stocks. MSY should be estimated for each stock based on the best scientific information available (see § 600.315).
- (iii) MSY for stock complexes. MSY should be estimated on a stock-by-stock basis whenever possible. However, where MSY cannot be estimated for each stock in a stock

complex, then MSY may be estimated for one or more indicator stocks for the complex or for the complex as a whole. When indicator stocks are used, the stock complex's MSY could be listed as "unknown," while noting that the complex is managed on the basis of one or more indicator stocks that do have known, stock-specific MSYs or suitable proxies as described in paragraph (e)(1)(iv) of this section. When indicator stocks are not used, MSY or a suitable proxy should be calculated for the stock complex as a whole.

- (iv) Specifying MSY. Because MSY is a long-term average, it need not be estimated annually, but it must be based on the best scientific information available (see § 600.315), and should be re-estimated as required by changes in long-term environmental or ecological conditions, fishery technological characteristics, or new scientific information. When data are insufficient to estimate MSY directly, Councils should adopt other measures of reproductive potential, based on the best scientific information available, that can serve as reasonable proxies for MSY, F<sub>msy</sub>, and B<sub>msy</sub>, to the extent possible. As MSY values are estimates and will have some level of uncertainty associated with them, the degree of uncertainty in the estimates should be identified, when possible, through the stock assessment process and peer review (see § 600.335).
- (2) Status determination criteria—(i) Definitions—(A) Status determination criteria (SDC) mean the quantifiable factors, MFMT, OFL, and MSST, or their proxies, that are used to determine if overfishing has occurred, or if the stock or stock complex is overfished. Magnuson—Stevens Act (section 3(34)) defines both "overfishing" and "overfished" to mean a rate or level of fishing mortality that jeopardizes the capacity of a fishery to produce the MSY on a continuing basis. To avoid confusion, this section clarifies that "overfished" relates to biomass of a stock or stock complex, and "overfishing" pertains to a rate or level of removal of fish from

a stock or stock complex.

- (B) Overfishing (to overfish) occurs whenever a stock or stock complex is subjected to a level of fishing mortality or annual total catch that jeopardizes the capacity of a stock or stock complex to produce MSY on a continuing basis.
- (C) <u>Maximum fishing mortality threshold (MFMT)</u> means the level of fishing mortality (F), on an annual basis, above which overfishing is occurring.
- (D) Overfishing limit (OFL) means the annual amount of catch that corresponds to the estimate of MFMT applied to a stock or stock complex's abundance and is expressed in terms of numbers or weight of fish. MSY is the long-term average of such catches.
- (E) <u>Overfished</u>. A stock or stock complex is considered "overfished" when its biomass has declined below a level that jeopardizes the capacity of the stock or stock complex to produce MSY on a continuing basis.
- (F) Minimum stock size threshold (MSST) means the level of biomass below which the stock or stock complex is considered to be overfished.
- (G) <u>Approaching an overfished condition</u>. A stock or stock complex is approaching an overfished condition when it is projected that there is more than a 50 percent chance that the biomass of the stock or stock complex will decline below the MSST within two years.
- (ii) Specification of SDC and overfishing and overfished determinations. SDC must be expressed in a way that enables the Council to monitor each stock or stock complex in the FMP and determine annually, if possible, whether overfishing is occurring and whether the stock or stock complex is overfished. In specifying SDC, a Council should provide an analysis of how the SDC were chosen and how they relate to reproductive potential. Each FMP must specify, to the extent possible, objective and measurable SDC as follows (see paragraphs (e)(2)(ii)(A) and

- (B) of this section):
- (A) SDC to determine overfishing status. Each FMP should describe which of the following two methods will be used for each stock or stock complex to determine an overfishing status.
- (1) <u>Fishing mortality rate exceeds MFMT</u>. Exceeding the MFMT for a period of 1 year or more constitutes overfishing. The MFMT or reasonable proxy may be expressed either as a single number (a fishing mortality rate or F value), or as a function of spawning biomass or other measure of reproductive potential. The MFMT must not exceed Fmsy.
- (2) <u>Catch exceeds the OFL</u>. Should the annual catch exceed the annual OFL for 1 year or more, the stock or stock complex is considered subject to overfishing.
- (B) <u>SDC</u> to determine overfished status. The MSST or reasonable proxy should be expressed in terms of spawning biomass or other measure of reproductive potential. To the extent possible, the MSST should equal whichever of the following is greater: One-half the MSY stock size, or the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock or stock complex were exploited at the MFMT specified under paragraph (e)(2)(ii)(A)(1) of this section. Should the estimated size of the stock or stock complex in a given year fall below this threshold, the stock or stock complex is considered overfished.
- (iii) Relationship of SDC to environmental change. Some short-term environmental changes can alter the size of a stock or stock complex without affecting its long-term reproductive potential. Long-term environmental changes affect both the short-term size of the stock or stock complex and the long-term reproductive potential of the stock or stock complex.
  - (A) If environmental changes cause a stock or stock complex to fall below its MSST

without affecting its long-term reproductive potential, fishing mortality must be constrained sufficiently to allow rebuilding within an acceptable time frame (also see paragraph (j)(3)(ii) of this section). SDC should not be respecified.

- (B) If environmental changes affect the long-term reproductive potential of the stock or stock complex, one or more components of the SDC must be respecified. Once SDC have been respecified, fishing mortality may or may not have to be reduced, depending on the status of the stock or stock complex with respect to the new criteria.
- (C) If manmade environmental changes are partially responsible for a stock or stock complex being in an overfished condition, in addition to controlling fishing mortality, Councils should recommend restoration of habitat and other ameliorative programs, to the extent possible (see also the guidelines issued pursuant to section 305(b) of the Magnuson-Stevens Act for Council actions concerning essential fish habitat).
- (iv) <u>Secretarial approval of SDC</u>. Secretarial approval or disapproval of proposed SDC will be based on consideration of whether the proposal:
  - (A) Has sufficient scientific merit;
  - (B) Contains the elements described in paragraph (e)(2)(ii) of this section;
- (C) Provides a basis for objective measurement of the status of the stock or stock complex against the criteria; and
  - (D) Is operationally feasible.
- (3) Optimum yield--(i) Definitions--(A) Optimum yield (OY). Magnuson-Stevens Act section (3)(33) defines "optimum," with respect to the yield from a fishery, as the amount of fish that will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities and taking into account the protection of marine

ecosystems; that is prescribed on the basis of the MSY from the fishery, as reduced by any relevant economic, social, or ecological factor; and, in the case of an overfished fishery, that provides for rebuilding to a level consistent with producing the MSY in such fishery. OY may be established at the stock or stock complex level, or at the fishery level.

- (B) In NS1, use of the phrase "achieving, on a continuing basis, the optimum yield from each fishery" means producing, from each stock, stock complex, or fishery: a long-term series of catches such that the average catch is equal to the OY, overfishing is prevented, the long term average biomass is near or above Bmsy, and overfished stocks and stock complexes are rebuilt consistent with timing and other requirements of section 304(e)(4) of the Magnuson-Stevens Act and paragraph (j) of this section.
- (ii) General. OY is a long-term average amount of desired yield from a stock, stock complex, or fishery. The long-term objective is to achieve OY through annual achievement of ACT, which is described in paragraph (f) of this section. An FMP must contain conservation and management measures to achieve OY, and provisions for information collection that are designed to determine the degree to which OY is achieved on a continuing basis—that is, to result in a long-term average catch equal to the long-term average OY, through an effective system of ACLs, ACTs, and AMs. These measures should allow for practical and effective implementation and enforcement of the management regime. The Secretary has an obligation to implement and enforce the FMP. If management measures prove unenforceable—or too restrictive, or not rigorous enough to prevent overfishing while achieving OY—they should be modified; an alternative is to reexamine the adequacy of the OY specification. Exceeding OY does not necessarily constitute overfishing. However, even if no overfishing resulted from exceeding OY, continual harvest at a level above OY would violate NS1, because OY was not

achieved on a continuing basis. An FMP must contain an assessment and specification of OY, including a summary of information utilized in making such specification, consistent with requirements of section 303(a)(3) of the Magnuson-Stevens Act. A Council must identify those economic, social, and ecological factors relevant to management of a particular stock, stock complex, or fishery, then evaluate them to determine the OY. The choice of a particular OY must be carefully documented to show that the OY selected will produce the greatest benefit to the Nation and prevent overfishing.

- (iii) <u>Determining the greatest benefit to the Nation</u>. In determining the greatest benefit to the Nation, the values that should be weighed and receive serious attention when considering the economic, social, or ecological factors used in reducing MSY to obtain OY are:
- (A) The benefits of food production are derived from providing seafood to consumers; maintaining an economically viable fishery together with its attendant contributions to the national, regional, and local economies; and utilizing the capacity of the Nation's fishery resources to meet nutritional needs.
- (B) The benefits of recreational opportunities reflect the quality of both the recreational fishing experience and non-consumptive fishery uses such as ecotourism, fish watching, and recreational diving. Benefits also include the contribution of recreational fishing to the national, regional, and local economies and food supplies.
- (C) The benefits of protection afforded to marine ecosystems are those resulting from maintaining viable populations (including those of unexploited species), maintaining adequate forage for all components of the ecosystem, maintaining evolutionary and ecological processes (e.g., disturbance regimes, hydrological processes, nutrient cycles), maintaining the evolutionary potential of species and ecosystems, and accommodating human use.

- (iv) Factors to consider in OY specification. Because fisheries have limited capacities, any attempt to maximize the measures of benefits described in paragraph (e)(3)(iii) of this section will inevitably encounter practical constraints. OY cannot exceed MSY in any circumstance and must take into account the need to prevent overfishing and rebuild overfished stocks and stock complexes. OY can be reduced to a value less than MSY based on social, economic, and ecological factors. To the extent possible, the relevant social, economic, and ecological factors used to establish OY for a stock, stock complex, or fishery should be quantified and reviewed in historical, short-term, and long-term contexts. Even where quantification of these factors is not possible, the FMP still must address these factors in its OY specification.
- (A) Social factors. Examples are enjoyment gained from recreational fishing, avoidance of gear conflicts and resulting disputes, preservation of a way of life for fishermen and their families, and dependence of local communities on a fishery (e.g., involvement in fisheries and ability to adapt to change). Consideration may be given to fishery-related indicators (e.g., number of fishery permits, number of commercial fishing vessels, number of party and charter trips, landings, ex-vessel revenues etc.) and non-fishery related indicators (e.g., unemployment rates, percent of population below the poverty level, population density, etc.). Other factors that may be considered include the effects that past harvest levels have had on fishing communities, the cultural place of subsistence fishing, obligations under Indian treaties, proportions of affected minority and low-income groups, and worldwide nutritional needs.
- (B) Economic factors. Examples are prudent consideration of the risk of overharvesting when a stock's size or reproductive potential is uncertain (see § 600.335(c)(2)(i)), satisfaction of consumer and recreational needs, and encouragement of domestic and export markets for U.S.

harvested fish. Other factors that may be considered include the value of fisheries, the level of capitalization, the decrease in cost per unit of catch afforded by an increase in stock size, the attendant increase in catch per unit of effort, alternate employment opportunities, and economic contribution to fishing communities, coastal areas, affected states, and the nation.

- (C) Ecological factors. Examples include impacts on ecosystem component species, forage fish stocks, other fisheries, predator-prey or competitive interactions, marine mammals, threatened or endangered species, and birds. Species interactions that have not been explicitly taken into account when calculating MSY should be considered as relevant factors for setting OY below MSY. In addition, consideration should be given to managing forage stocks for higher biomass than B<sub>msy</sub> to enhance and protect the marine ecosystem. Also important are ecological or environmental conditions that stress marine organisms, such as natural and manmade changes in wetlands or nursery grounds, and effects of pollutants on habitat and stocks.
- (v) Specification of OY. The specification of OY must be consistent with preventing overfishing and should be reduced from MSY to account for scientific uncertainty in calculating MSY, and economic, social, and ecological factors such as those described in paragraph (e)(3)(iv) of this section. If the estimates of MFMT and current biomass are known with a high level of certainty and management controls can accurately limit catch to the ACT then OY could be set very close to MSY. To the degree that such MSY estimates and management controls are lacking or unavailable, OY should be set farther from MSY. In order to achieve OY in the long term, catch targets (i.e., ACT) should be set below catch limits (i.e., ACLs) based on the degree of management control so that average catch (or average ACT) approximates OY (see paragraph (f)(6) of this section). If management measures cannot adequately control fishing mortality so

that the specified OY can be achieved without overfishing, the Council should reevaluate the management measures and specification of OY so that the dual requirements of NS1 (preventing overfishing while achieving, on a continuing basis, OY) are met.

- (A) The amount of fish that constitutes the OY should be expressed in terms of numbers or weight of fish. As a long-term average, OY cannot exceed MSY.
- (B) Either a range or a single value may be specified for OY. Specification of a numerical, fixed-value OY does not preclude use of ACTs that vary with stock size or management precision. For example, an ACT control rule (described in paragraph (f)(6) of this section) might prescribe a smaller ACT if there is less management precision.
- (C) All catch must be counted against OY, including that resulting from bycatch, scientific research, and all fishing activities.
- (D) The OY specification should be translatable into an annual numerical estimate for the purposes of establishing any total allowable level of foreign fishing (TALFF) and analyzing impacts of the management regime.
- (E) The determination of OY is based on MSY, directly or through proxy. However, even where sufficient scientific data as to the biological characteristics of the stock do not exist, or where the period of exploitation or investigation has not been long enough for adequate understanding of stock dynamics, or where frequent large-scale fluctuations in stock size diminish the meaningfulness of the MSY concept, OY must still be established based on the best scientific information available.
- (F) An OY established at a fishery level may not exceed the sum of the MSY values for each of the stocks or stock complexes within the fishery. If OY is specified at a fishery level, the sum of the ACTs for the stocks and stock complexes in the fishery should approximate OY.

- (G) There should be a mechanism in the FMP for periodic reassessment of the OY specification, so that it is responsive to changing circumstances in the fishery.
- (H) Part of the OY may be held as a reserve to allow for factors such as uncertainties in estimates of stock size and domestic annual harvest (DAH). If an OY reserve is established, an adequate mechanism should be included in the FMP to permit timely release of the reserve to domestic or foreign fishermen, if necessary.
- (vi) OY and foreign fishing. Section 201(d) of the Magnuson-Stevens Act provides that fishing by foreign nations is limited to that portion of the OY that will not be harvested by vessels of the United States. The FMP must include an assessment to address the following, as required by section 303(a)(4) of the Magnuson-Stevens Act:
- (A) <u>DAH</u>. Councils and/or the Secretary must consider the capacity of, and the extent to which, U.S. vessels will harvest the OY on an annual basis. Estimating the amount that U.S. fishing vessels will actually harvest is required to determine the surplus.
- (B) <u>Domestic annual processing (DAP)</u>. Each FMP must assess the capacity of U.S. processors. It must also assess the amount of DAP, which is the sum of two estimates: The estimated amount of U.S. harvest that domestic processors will process, which may be based on historical performance or on surveys of the expressed intention of manufacturers to process, supported by evidence of contracts, plant expansion, or other relevant information; and the estimated amount of fish that will be harvested by domestic vessels, but not processed (e.g., marketed as fresh whole fish, used for private consumption, or used for bait).
- (C) <u>Joint venture processing (JVP)</u>. When DAH exceeds DAP, the surplus is available for JVP.

- (f) Acceptable biological catch, annual catch limits, and annual catch targets. The following features (see paragraphs (f)(1) through (f)(7) of this section) of acceptable biological catch, annual catch limits, and annual catch targets apply to stocks and stock complexes in the fishery (see paragraph (d)(2) of this section).
- (1) Introduction. A control rule is a policy for establishing a limit or target fishing level that is based on the best available scientific information and is established by fishery managers in consultation with fisheries scientists. Control rules should be designed so that management actions become more conservative as biomass estimates, or other proxies, for a stock or stock complex decline and as science and management uncertainty increases. Paragraph (f) of this section describes a three-step approach for setting limits and targets so as to ensure a low risk of overfishing while achieving, on a continuing basis, OY: First, ABC is set below the OFL to account for scientific uncertainty in calculating the OFL; second, ACL is set at an amount not to exceed the ABC; and third, ACT is set at an amount not to exceed the ACL to account for management uncertainty in controlling a fishery's actual catch.
- (2) <u>Definitions</u>. (i) <u>Catch</u> is the total quantity of fish, measured in weight or numbers of fish, taken in commercial, recreational, subsistence, tribal, and other fisheries. Catch includes fish that are retained for any purpose, as well as mortality of fish that are discarded.
- (ii) Acceptable biological catch (ABC) is a level of a stock or stock complex's annual catch that accounts for the scientific uncertainty in the estimate of OFL and should be specified based on the ABC control rule.
- (iii) ABC control rule means a specified approach to setting the ABC for a stock or stock complex as a function of the scientific uncertainty in the estimate of OFL.
  - (iv) Annual catch limit (ACL) is the level of annual catch of a stock or stock complex

that serves as the basis for invoking AMs. ACL cannot exceed the ABC, but may be divided into sector-ACLs (see paragraph (f)(5) of this section).

- (v) Annual catch target (ACT) is an amount of annual catch of a stock or stock complex that is the management target of the fishery. A stock or stock complex's ACT should usually be less than its ACL and results from the application of the ACT control rule. If sector-ACLs have been established, each one should have a sector-ACT.
- (vi) ACT control rule means a specified approach to setting the ACT for each stock or stock complex such that the risk of exceeding the ACL due to management uncertainty is at an acceptably low level.
- (3) Specification of ABC. ABC may not exceed OFL (see paragraph (e)(2)(i)(D) of this section) and is recommended to be reduced from OFL to account for scientific uncertainty in the estimate of OFL. Councils should develop a process for receiving scientific information and advice used to establish ABC. This process should: establish an ABC control rule, identify the body that will apply the ABC control rule (i.e., calculates the ABC), identify the review process that will verify the resulting ABC, and confirm that the SSC recommends the ABC to the Council. For Secretarial FMPs or FMP amendments, agency scientists or a peer review process would provide the scientific advice to establish ABC. For internationally-assessed stocks, an ABC as defined in these guidelines is not required.
- (i) Expression of ABC. ABC should be expressed in terms of catch, but may be expressed in terms of landings as long as estimates of bycatch and any other fishing mortality not accounted for in the landings are incorporated into the determination of ABC.

- (ii) ABC for overfished stocks. For overfished stocks and stock complexes, a rebuilding ABC must be set to reflect the annual catch that is consistent with the target fishing mortality rates in the rebuilding plan.
- (4) ABC control rule. For stocks and stock complexes required to have an ABC, each Council should establish an ABC control rule based on scientific advice from its SSC. The process of establishing an ABC control rule could also involve science advisors or the peer review process established under Magnuson-Stevens Act section 302(g)(1)(E). The ABC control rule should clearly articulate how far below the OFL, or OFL proxy, the ABC will be set based on the level of scientific knowledge about the stock or stock complex and the scientific uncertainty in the estimate of OFL. The ABC control rule should take into account uncertainty in factors such as stock assessment results, time lags in updating assessments, the degree of retrospective revision of assessment results, and projections. The control rule may be used in a tiered approach to address different levels of scientific uncertainty.
- (5) Setting the annual catch limit—(i) General. ACL cannot exceed the ABC and may be set annually or on a multiyear plan basis. A "multiyear plan" as referenced in section 303(a)(15) of the Magnuson-Stevens Act is a plan that establishes harvest specifications or harvest guidelines for each year of a time period greater than 1 year. A multiyear plan should include ACLs and ACTs for each year with appropriate AMs to prevent overfishing and maintain an appropriate rate of rebuilding if the stock or stock complex is in a rebuilding plan. The AMs specified for a multiyear plan should provide that, if an ACL is exceeded for a year, then a subsequent year's harvest specification (including ACLs and ACTs) could be revised.
- (ii) <u>Sector ACLs</u>. A Council may, but is not required to, divide an ACL into sector-ACLs. "Sector," for purposes of this section, means a distinct user group to which separate management

strategies and separate catch quotas apply. Examples of sectors include the commercial sector, recreational sector, or various gear groups within a fishery. Sector-AMs must be developed for each sector-ACL, and the sum of sector ACLs must not exceed the stock or stock complex level ACL. The system of ACLs and AMs designed must be effective and equitable and protect the stock or stock complex as a whole. If sector-ACLs and AMs are established, additional AMs at the stock or stock complex level would also be appropriate.

- (iii) ACLs for State-Federal Fisheries. For stocks or stock complexes that have a large majority of harvest in state or territorial waters, FMPs and FMP amendments should include an ACL for the overall stock that may be further divided. For example, the overall ACL could be divided into a federal-ACL and state-ACL. However, NMFS recognizes that federal management would be limited to the portion of the fishery under federal authority (see paragraph (g)(5) of this section). When stocks are co-managed by federal, state, tribal, and/or territorial fishery managers, the goal should be to develop collaborative conservation and management strategies, and scientific capacity to support such strategies, to prevent overfishing of shared stocks and ensure their sustainability.
- (6) ACT control rule. For stocks and stock complexes required to have an ACL, each Council should establish ACT control rules for setting the ACTs. The ACT control rule should clearly articulate how far below the ACL the target will be established based on the amount of management uncertainty associated with harvest of a stock or stock complex. For example, the ACT may need to be set further below the ACL in fisheries where inseason monitoring of catch data is unavailable or infeasible, or where AMs are established using a multi-year averaging approach (see paragraph (g)(4) of this section).

- (i) <u>Determining management uncertainty</u>. Two sources of management uncertainty should be accounted for in establishing the ACT control rule: uncertainty in the ability of managers to constrain catch to the ACT and uncertainty in quantifying the true catch amounts (i.e., estimation errors). To determine the level of management uncertainty in controlling catch, analyses should consider past management performance in the fishery and factors such as time lags in reported catch. Such analyses should be based on the best available scientific information from an SSC, agency scientists, or peer review process as appropriate.
- (ii) <u>Establishing tiers and corresponding ACT control rules</u>. Tiers can be established based on levels of management uncertainty associated with the fishery, frequency and accuracy of catch monitoring data available, and risks of exceeding the limit. An ACT control rule could be established for each tier and have, as appropriate, different formulas and standards used to establish the ACT.
- (7) <u>Relationships of OFL to MSY and ACT to OY</u>. The following (see paragraphs (f)(7)(i) and (ii) of this section) describes the relationships between terms used in ending and preventing overfishing and rebuilding overfished stocks and stock complexes.
- (i) <u>Relationship of OFL to MSY</u>. OFL is the amount of catch for a particular year that corresponds to the estimate of MFMT applied to a stock or stock complex's abundance, and MSY is the long-term average of such catches. ABC is recommended to be set below OFL to take into account the scientific uncertainty in the estimate of OFL.
- (ii) Relationship of ACT to OY. Paragraphs (a) and (e)(3) of this section define and describe OY and the goal of preventing overfishing, while achieving on a continuing basis the OY from each stock, stock complex, or fishery. Management measures for a fishery should, on

an annual basis, achieve the ACTs and prevent the ACLs from being exceeded. The long-term objective is to achieve OY through annual achievement of ACT.

- (g) Accountability measures. The following features (see paragraphs (g)(1) through (5) of this section) of accountability measures apply to those stocks and stock complexes in the fishery.
- (1) <u>Introduction</u>. AMs are management controls that prevent ACLs or sector-ACLs from being exceeded (inseason AMs), where possible, and correct or mitigate overages if they occur. AMs should address and minimize both the frequency and magnitude of overages and correct the problems that caused the overage in as short a time as possible.
- (2) <u>Inseason AMs</u>. Whenever possible, FMPs should include inseason monitoring and management measures to prevent catch from exceeding ACLs. Inseason AMs could include, but are not limited to, closure of a fishery; closure of specific areas; changes in gear; changes in trip size or bag limits; reductions in effort; or other appropriate management controls for the fishery. If final data or data components of catch are delayed, Councils should make appropriate use of preliminary data, such as landed catch, in implementing inseason AMs. Where timely catch data are available for a stock, FMPs should include inseason closure authority to close the fishery on or before the date when the ACL for a stock or stock complex is projected to be reached.
- (3) AMs for when the ACL is exceeded. On an annual basis, the Council should determine as soon as possible after the fishing year if an ACL was exceeded. If an ACL was exceeded, AMs should be triggered and implemented as soon as possible to correct the operational issue that caused the ACL overage, as well as any biological consequences to the stock or stock complex resulting from the overage when it is known. These AMs could include, among other things, modifications of inseason AMs or overage adjustments. For stocks and stock complexes in rebuilding plans, the AMs should include overage adjustments that reduce

the ACLs in the next fishing year by the full amount of the overages, unless the best scientific information available shows that a reduced overage adjustment, or no adjustment is needed to mitigate the effects of the overages. If catch exceeds the ACL more than once in the last four years, the system of ACLs, ACTs and AMs should be re-evaluated to improve its performance and effectiveness.

- (4) AMs based on multi-year average data. Some fisheries have highly variable annual catches and lack reliable inseason or annual data on which to base AMs. If there are insufficient data upon which to compare catch to ACL, either inseason or on an annual basis, AMs could be based on comparisons of average catch to average ACL over a three-year moving average period or, if supported by analysis, some other appropriate multi-year period. Evaluation of the moving average catch to the average ACL must be conducted annually. If the average catch exceeds the average ACL more than once in the last four years, then the ACL, ACT and AM system should be re-evaluated. The initial ACL and management measures should incorporate information from previous years so that AMs based on average ACLs can be applied from the first year.
- (5) AMs for State-Federal Fisheries. For stocks or stock complexes that have a large majority of harvest in state or territorial waters, AMs should be developed for the portion of the fishery under federal authority and could include closing the EEZ when the federal portion of the ACL is reached, or the overall stock's ACL is reached, or other measures.
- (h) Establishing ACL and AM mechanisms in FMPs. FMPs or FMP amendments should establish ACL and AM mechanisms for all stocks and stock complexes in the fishery, unless paragraph (h)(2) of this section is applicable. If a complex has multiple indicator stocks, each indicator stock must have its own ACL; an additional ACL for the stock complex as a whole is optional. In cases where fisheries harvest multiple indicator stocks of a single species that

cannot be distinguished at the time of capture, separate ACLs for the indicator stocks are not required and the ACL can be established for the complex as a whole.

- (1) In establishing ACL and AM mechanisms, FMPs should describe:
- (i) Timeframes for setting ACLs (e.g., annually or multi-year periods);
- (ii) Sector-ACLs, if any (including set-asides for research or bycatch);
- (iii) AMs and their relationship to ABC and ACT control rules, including how AMs are triggered and what sources of data will be used (e.g., inseason data, annual catch compared to the ACL, or multi-year averaging approach);
  - (iv) Sector-AMs, if there are sector-ACLs; and
  - (v) Fisheries data described in paragraph (i) of this section.
- (2) Exceptions from ACL and AM requirements—(i) Life cycle. Section 303(a)(15) of the Magnuson-Stevens Act "shall not apply to a fishery for species that has a life cycle of approximately 1 year unless the Secretary has determined the fishery is subject to overfishing of that species" (as described in Magnuson-Stevens Act section 303 note). This exception applies to a stock for which the average length of time it takes for an individual to produce a reproductively active offspring is approximately 1 year and that the individual has only one breeding season in its life time. While exempt from the ACL and AM requirements, FMPs or FMP amendments for these stocks should have SDC, MSY, OY, ABC, and an ABC control rule.
- (ii) <u>International fishery agreements</u>. Section 303(a)(15) of the Magnuson-Stevens Act applies "unless otherwise provided for under an international agreement in which the United States participates" (Magnuson-Stevens Act section 303 note). This exception applies to stocks or stock complexes subject to management under an international agreement, which is defined as "any bilateral or multilateral treaty, convention, or agreement which relates to fishing and to

which the United States is a party" (see Magnuson-Stevens Act section 3(24)). These stocks would still need to have SDC and MSY.

- (3) Flexibility in application of NS1 guidelines. There are limited circumstances that may not fit the standard approaches to specification of reference points and management measures set forth in these guidelines. These include, among other things, conservation and management of ESA-listed species, harvests from aquaculture operations, and stocks with unusual life history characteristics (e.g. Pacific salmon, where the spawning potential for a stock is spread over a multi-year period). In these circumstances, Councils may propose alternative approaches for satisfying the NS1 requirements of the Magnuson-Stevens Act than those set forth in these guidelines. Councils should document their rationale for any alternative approaches for these limited circumstances in an FMP or FMP amendment, which will be reviewed for consistency with the Magnuson-Stevens Act.
- (i) <u>Fisheries data</u>. In their FMPs, Councils should describe general data collection methods, as well as any specific data collection methods used for all stocks, stock complexes, and ecosystem component species. FMPs should:
- (1) List sources of fishing mortality (both landed and discarded), including commercial and recreational catch and bycatch in other fisheries;
- (2) Describe the data collection and estimation methods used to quantify total catch mortality in each fishery, including information on the management tools used (i.e., logbooks, vessel monitoring systems, observer programs, landings reports, fish tickets, processor reports, dealer reports, recreational angler surveys, or other methods); the frequency with which data are collected and updated; and the scope of sampling coverage for each fishery; and

- (3) Describe the methods used to compile catch data from various catch data collection methods and how those data are used to determine the relationship between total catch at a given point in time and the ACL for stocks and stock complexes that are part of a fishery.
- (j) Council actions to address overfishing and rebuilding for stocks and stock complexes in the fishery--(1) Notification. The Secretary will immediately notify a Council whenever it is determined that:
  - (i) Overfishing is occurring;
  - (ii) A stock or stock complex is overfished;
  - (iii) A stock or stock complex is approaching an overfished condition; or
- (iv) Existing remedial action taken for the purpose of ending previously identified overfishing or rebuilding a previously identified overfished stock or stock complex has not resulted in adequate progress.
- (2) <u>Timing of actions</u>—(i) <u>If a stock or stock complex is undergoing overfishing</u>. FMPs or FMP amendments should establish ACL and AM mechanisms in 2010, for stocks and stock complexes determined to be subject to overfishing, and in 2011, for all other stocks and stock complexes (see paragraph (b)(2)(iii) of this section). To address practical implementation aspects of the FMP and FMP amendment process, paragraphs (j)(2)(i)(A) through (C) of this section clarifies the expected timing of actions.
- (A) In addition to establishing ACL and AM mechanisms, the ACLs and AMs themselves should be specified in FMPs, FMP amendments, implementing regulations, or annual specifications beginning in 2010 or 2011, as appropriate.
- (B) For stocks and stock complexes still determined to be subject to overfishing at the end of 2008, ACL and AM mechanisms and the ACLs and AMs themselves should be effective

in fishing year 2010.

- (C) For stocks and stock complexes determined to be subject to overfishing during 2009, ACL and AM mechanisms and ACLs and AMs themselves should be effective in fishing year 2010, if possible, or in fishing year 2011, at the latest.
- (ii) If a stock or stock complex is overfished or approaching an overfished condition. (A) For notifications that a stock or stock complex is overfished or approaching an overfished condition made before July 12, 2009, a Council must prepare an FMP, FMP amendment, or proposed regulations within one year of notification. If the stock or stock complex is overfished, the purpose of the action is to specify a time period for ending overfishing and rebuilding the stock or stock complex that will be as short as possible as described under section 304(e) of the Magnuson-Stevens Act. If the stock or stock complex is approaching an overfished condition, the purpose of the action is to prevent the biomass from declining below the MSST.
- (B) For notifications that a stock or stock complex is overfished made after July 12, 2009, a Council must prepare an FMP, FMP amendment, or proposed regulations within two years of notification. Council actions should be submitted for Secretarial review within 15 months of notification to ensure sufficient time for the Secretary to implement the measures, if approved. If the stock or stock complex is overfished and overfishing is occurring, the rebuilding plan must end overfishing immediately and be consistent with ACL and AM requirements of the Magnsuon-Stevens Act.
- (C) For notifications that a stock or stock complex is approaching an overfished condition made after July 12, 2009, a Council should take immediate action to reduce the likelihood that the stock or stock complex will become overfished. Otherwise, the stock or stock complex would likely be overfished by the time the two-year timeline to implement management

measures expired.

- (3) Overfished fishery. (i) Where a stock or stock complex is overfished, a Council must specify a time period for rebuilding the stock or stock complex based on factors specified in Magnuson-Stevens Act section 304(e)(4). This target time for rebuilding (T<sub>target</sub>) shall be as short as possible, taking into account: the status and biology of any overfished stock, the needs of fishing communities, recommendations by international organizations in which the U.S. participates, and interaction of the stock within the marine ecosystem. In addition, the time period shall not exceed 10 years, except where biology of the stock, other environmental conditions, or management measures under an international agreement to which the U.S. participates dictate otherwise. SSCs (or agency scientists or peer review processes in the case of Secretarial actions) shall provide recommendations for achieving rebuilding targets (see Magnuson-Stevens Act section 302(g)(1)(B)). The above factors enter into the specification of T<sub>target</sub> as follows:
- (A) The "minimum time for rebuilding a stock" ( $T_{min}$ ) means the amount of time the stock or stock complex is expected to take to rebuild to its MSY biomass level in the absence of any fishing mortality. In this context, the term "expected" means to have at least a 50-percent probability of attaining the  $B_{msy}$ .
- (B) For scenarios under paragraph (j)(2)(ii)(A) of this section, the starting year for the T<sub>min</sub> calculation is the first year that a rebuilding plan is implemented. For scenarios under paragraph (j)(2)(ii)(B) of this section, the starting year for the T<sub>min</sub> calculation is 2 years after notification that a stock or stock complex is overfished or the first year that a rebuilding plan is implemented, whichever is sooner.
  - (C) If T<sub>min</sub> for the stock or stock complex is 10 years or less, then the maximum time

allowable for rebuilding (T<sub>max</sub>) that stock to its B<sub>msy</sub> is 10 years.

- (D) If  $T_{min}$  for the stock or stock complex exceeds 10 years, then the maximum time allowable for rebuilding a stock or stock complex to its  $B_{msy}$  is  $T_{min}$  plus the length of time associated with one generation time for that stock or stock complex. "Generation time" is the average length of time between when an individual is born and the birth of its offspring.
- (E)  $T_{target}$  shall not exceed  $T_{max}$ , should generally be less than  $T_{max}$ , and should be calculated based on the factors described in this paragraph (j)(3) with a priority given to rebuilding in as short a time as possible.
- (ii) If a stock or stock complex reached the end of its rebuilding plan period and has not yet been determined to be rebuilt, then the rebuilding F should not be increased until the stock or stock complex has been demonstrated to be rebuilt. If the rebuilding plan was based on a T<sub>target</sub> that was less than T<sub>max</sub>, and the stock or stock complex is not rebuilt by T<sub>target</sub>, rebuilding measures should be revised, if necessary, such that the stock or stock complex will be rebuilt by T<sub>max</sub>. If the stock or stock complex has not rebuilt by T<sub>max</sub>, and the rebuilding F is greater than 75 percent of MFMT, then the rebuilding F should be reduced to no more than 75 percent of MFMT until the stock or stock complex has been demonstrated to be rebuilt.
- (iii) Council action addressing an overfished fishery must allocate both overfishing restrictions and recovery benefits fairly and equitably among sectors of the fishery.
- (iv) For fisheries managed under an international agreement, Council action addressing an overfished fishery must reflect traditional participation in the fishery, relative to other nations, by fishermen of the United States.
- (4) <u>Emergency actions and interim measures</u>. The Secretary, on his/her own initiative or in response to a Council request, may implement interim measures to reduce overfishing or

promulgate regulations to address an emergency (Magnuson-Stevens Act section 304(e)(6) or 305(c)). In considering a Council request for action, the Secretary would consider, among other things, the need for and urgency of the action and public interest considerations, such as benefits to the stock or stock complex and impacts on participants in the fishery.

- (i) These measures may remain in effect for not more than 180 days, but may be extended for an additional 186 days if the public has had an opportunity to comment on the measures and, in the case of Council-recommended measures, the Council is actively preparing an FMP, FMP amendment, or proposed regulations to address the emergency or overfishing on a permanent basis.
- (ii) Often, these measures need to be implemented without prior notice and an opportunity for public comment, as it would be impracticable to provide for such processes given the need to act quickly and also contrary to the public interest to delay action. However, emergency regulations and interim measures that do not qualify for waivers or exceptions under the Administrative Procedure Act would need to follow proposed notice and comment rulemaking procedures.
- (k) International overfishing. If the Secretary determines that a fishery is overfished or approaching a condition of being overfished due to excessive international fishing pressure, and for which there are no management measures (or no effective measures) to end overfishing under an international agreement to which the United States is a party, then the Secretary and/or the appropriate Council shall take certain actions as provided under Magnuson-Stevens Act section 304(i). The Secretary, in cooperation with the Secretary of State, should immediately take appropriate action at the international level to end the overfishing. In addition, within one year after the determination, the Secretary and/or appropriate Council shall:

- (1) Develop recommendations for domestic regulations to address the relative impact of the U.S. fishing vessels on the stock. Council recommendations should be submitted to the Secretary.
- (2) Develop and submit recommendations to the Secretary of State, and to the Congress, for international actions that will end overfishing in the fishery and rebuild the affected stocks, taking into account the relative impact of vessels of other nations and vessels of the United States on the relevant stock. Councils should, in consultation with the Secretary, develop recommendations that take into consideration relevant provisions of the Magnuson-Stevens Act and NS1 guidelines, including section 304(e) of the Magnuson-Stevens Act and paragraph (j)(3)(iv) of this section, and other applicable laws. For highly migratory species in the Pacific, recommendations from the Western Pacific, North Pacific, or Pacific Councils must be developed and submitted consistent with Magnuson-Stevens Reauthorization Act section 503(f), as appropriate.
- (3) Considerations for assessing "relative impact." "Relative impact" under paragraphs (k)(1) and (2) of this section may include consideration of factors that include, but are not limited to: domestic and international management measures already in place, management history of a given nation, estimates of a nation's landings or catch (including bycatch) in a given fishery, and estimates of a nation's mortality contributions in a given fishery. Information used to determine relative impact should be based upon the best available scientific information.
- (l) Relationship of National Standard 1 to other national standards—(1) National Standard 2 (see § 600.315). Management measures and reference points to implement NS1 must be based on the best scientific information available. When data are insufficient to estimate reference points directly, Councils should develop reasonable proxies to the extent possible (also see

paragraph (e)(1)(iv) of this section). In cases where scientific data are severely limited, effort should also be directed to identifying and gathering the needed data. SSCs should advise their Councils regarding the best scientific information available for fishery management decisions.

- (2) National Standard 3 (see § 600.320). Reference points should generally be specified in terms of the level of stock aggregation for which the best scientific information is available (also see paragraph (e)(1)(iii) of this section). Also, scientific assessments should be based on the best information about the total range of the stock and potential biological structuring of the stock into biological sub-units, which may differ from the geographic units on which management is feasible.
- (3) National Standard 6 (see § 600.335). Councils must build into the reference points and control rules appropriate consideration of risk, taking into account uncertainties in estimating harvest, stock conditions, life history parameters, or the effects of environmental factors.
- (4) National Standard 8 (see § 600.345). Councils must take into account the importance of fishery resources to fishing communities when specifying OY and an ACT control rule. Also, see paragraph (e)(3)(iv)(A) of this section for more information on how factors that relate to fishing communities should be considered when reducing OY from MSY.
- (5) National Standard 9 (see § 600.350). Evaluation of stock status with respect to reference points must take into account mortality caused by bycatch. In addition, the estimation of catch should include the mortality of fish that are discarded.
- (m) Exceptions to requirements to prevent overfishing. Exceptions to the requirement to prevent overfishing could apply under certain limited circumstances. Harvesting one stock at its optimum level may result in overfishing of another stock when the two stocks tend to be caught together (This can occur when the two stocks are part of the same fishery or if one is bycatch in

the other's fishery). Before a Council may decide to allow this type of overfishing, an analysis must be performed and the analysis must contain a justification in terms of overall benefits, including a comparison of benefits under alternative management measures, and an analysis of the risk of any stock or stock complex falling below its MSST. The Council may decide to allow this type of overfishing if the analysis demonstrates that all of the following conditions are satisfied:

- (1) Such action will result in long-term net benefits to the Nation;
- (2) Mitigating measures have been considered and it has been demonstrated that a similar level of long-term net benefits cannot be achieved by modifying fleet behavior, gear selection/configuration, or other technical characteristic in a manner such that no overfishing would occur; and
- (3) The resulting rate of fishing mortality will not cause any stock or stock complex to fall below its MSST more than 50 percent of the time in the long term, although it is recognized that persistent overfishing is expected to cause the affected stock to fall below its  $B_{msy}$  more than 50 percent of the time in the long term.