

ISSUE 2 - TEMPORARY ADJUSTMENTS FOR ACCESS TO THE FISHERY FOR VESSELS
DENIED HARVEST OPPORTUNITY BY UNSAFE WEATHER OR OCEAN CONDITIONS

A 1986 MFCMA amendment requires, among other things, that any FMP or amendment completed after January 1, 1987

consider, and may provide for, temporary adjustments, after consultation with the U.S. Coast Guard and persons utilizing the fishery, regarding access to the fishery for vessels otherwise prevented from harvesting because of weather or other ocean conditions affecting the safety of vessels (Public Law 99-659, §303[a][6]).

This issue is proposed to conform with that MFCMA mandate.

Background

Weather is an important safety factor in west coast fishing operations. Numerous marine advisories are issued by the National Weather Service each year. Information on the number of days of gale warnings, rough bar advisories, and small craft advisories off Washington from May through August 1977-1981 and April through October 1985 is presented in Table 1.

In the salmon fishery, the exact number of at-sea accidents which are weather related is unknown. Data compiled by the U.S. Coast Guard do not specify which fishery a vessel was participating in when lost at sea, but such information is sometimes specifically noted on a casualty report. According to those casualty reports, at least 48 salmon vessels were lost at sea and 20 people killed while fishing for salmon in the five-year period from 1972-1976, prior to implementation of the MFCMA (Council, 1982). The cause of those accidents was not attributed to weather, as weather is not a condition included on the reports. The casualties were described as operational collisions, groundings, explosions, fire, flooding, floundering, capsizing, and mechanical failure.

More recent U.S. Coast Guard data on all types of fishing vessels show that adverse weather was the primary cause of 7 people being killed at sea and 18 fishing vessels being lost off Washington, Oregon, and California from 1981-1986. Weather was listed as the secondary cause of 20 additional people being killed at sea and 23 additional vessels being lost during the same time period.

The Vessel Safety Manual (Sabella, 1986) includes forms for reporting commercial fishing accidents to the Commercial Fishing Claims Register in New York, New York. The form includes both the type of fishing being conducted, as well as a description of weather conditions at the time of the accident. All reported data are held confidential and are used in a research effort to promote a safety and insurance program for the U.S. commercial fishing industry. The results of this program will provide insight into what part weather and oceanic conditions play in accidents on salmon vessels at sea.

In the meantime, the Vessel Safety Manual concludes that:

Table 1. Number of days per season in which small craft advisories, rough bar advisories, and gale warnings were posted on the Washington coast, 1977-1981 and 1985.

	April	May	June	July	August	September	October
1977							
Small Craft Advisories	14	12	4	0	7	12	6
Rough Bar Advisories	0	0	0	0	0	0	0
Gale Warnings	0	2	0	0	0	0	9
1978							
Small Craft Advisories	14	12	1	0	5	18	10
Rough Bar Advisories	0	0	0	3	3	0	0
Gale Warnings	1	1	0	0	0	2	4
1979							
Small Craft Advisories	8	7	3	6	2	8	15
Rough Bar Advisories	0	0	0	0	0	0	0
Gale Warnings	1	1	0	0	0	2	4
1980							
Small Craft Advisories	17	11	7	5	7	8	17
Rough Bar Advisories	0	0	3	5	1	0	0
Gale Warnings	4	0	0	0	0	2	0
1981							
Small Craft Advisories	15	6	13	3	4	15	9
Rough Bar Advisories	0	0	4	3	0	0	0
Gale Warnings	1	0	0	0	0	2	5
1985							
Small Craft Advisories	19	15	20	4	8	14	15
Rough Bar Advisories	5	0	0	3	11	0	0
Gale Warnings	2	0	0	0	0	2	9
Average							
Small Craft Advisories	14.5	10.5	8	3	5.5	12.5	12
Rough Bar Advisories	0.8	0	1.2	2.3	2.5	0	0
Gale Warnings	1.5	0.7	0	0	0	1.7	5.2

Source: For 1977-1981 data: "Proposed FMP for Managing the 1982 Salmon Fisheries Off the Coasts of California, Oregon, and Washington," Council. May 1982.

For 1985 data: Unpublished National Weather Service messages.

Note: Small craft advisories are issued when sustained winds are from 21 to 34 knots; gale warnings are issued when sustained winds are over 34 knots; and rough bar advisories are issued when waves are breaking or are over 10 feet high.

Most fishing vessel casualties are the result of human error. Moreover, even when casualties have been the result of equipment failure or bad weather, the human factor has often played a part. Maintenance and repair may have been inadequate, for example, or there may have been poor judgment exercised as to when and where to go fishing.

Faced with economic and competitive pressures, fishermen are prone to take calculated risks. In view of the liabilities that confront the vessel operator today, however, careful risk management is crucial for business success, not to mention survival.

In a study prepared at the request of the House Committee on Merchant Marine and Fisheries (Buck, 1985) individuals responded to a CRS survey on safety problems related to FMPs. Respondents from around the nation, including 10 from the west coast, identified the following conditions as those which contribute to unsafe fishing operations.

1. When seasons are severely restricted.
2. When fishing effort is concentrated in a limited area.
3. When fishing is closed in one area and open in adjacent areas.
4. When catch quotas are assigned to short seasons.

All of these conditions have occurred in the ocean salmon fishery and are aggravated by adverse weather or oceanic conditions. However, no easy solution exists to lessen the need for each of these management conditions. Simply knowing that certain fishing regulations increase the potential for weather-related accidents does little to solve the problem of how to restrict too many vessels which fish for too few salmon.

Seasons are severely restricted and quotas are assigned to protect depressed salmon stocks. When season quotas are not met, seasons may be extended if enough of the quota remains for at least one day's fishing and if the extension would not increase the impact on depressed stocks. In most cases, however, to increase quotas would create allocation imbalances among fisheries, e.g., U.S. and Canada, treaty and non-treaty, ocean recreational and troll, inside and outside. Some of these allocation arrangements are mandated by user agreements, district court orders, and international treaties. In addition, escapement goals would not be met resulting in fewer salmon to be harvested in future years.

Fishing effort is often concentrated in certain areas, such as around river mouths, to intercept salmon returning to spawn. To increase the size of open areas would allow interception of other salmon stocks which are needed for inside treaty and non-treaty fisheries and for spawning.

The most obvious solution to the problems raised by the CRS survey is a limited entry or individual quota system. Such systems are more likely to allow fishermen to fish when and where they wish within specific bounds to protect depressed stocks. Under such systems, a fisherman would be more apt

to stay ashore during inclement weather, as "his" fish would still be available for harvest. To date there has been little support in the industry for a limited entry or individual quota system.

In 1985, the NCFVSI was awarded a Saltonstall-Kennedy grant to identify and document the effect fishery management regulations and techniques have had on the safety of commercial fishing operations (NCFVSI, 1986). The NCFVSI awarded a subcontract to NRC in Seattle, Washington to research the issue on the west coast.

After 60 formal interviews and more than 100 informal discussions with Alaska, Washington, Oregon, and California fishermen, vessel owners and captains, and fishery managers, NRC reported that perceived safety-related problems which stem from ocean salmon regulations center around shortened seasons and a general high-intensity "derby" fishery environment. In addition, they concluded that because of restrictive regulations during the past few years, some fishermen no longer can afford to maintain their boats or purchase safety equipment.

NRC asked persons polled for recommendations to improve vessel and crew safety. Those recommendations are summarized in the NRC report as follows.

FMP salmon regulations are complex, and they must interface or be compatible with international treaties, regulations by four states, Indian treaties, federal court rulings and, in many cases, provide for specific stream spawning escapement requirements. These requirements do not allow for much innovative flexibility in addressing vessel safety concerns without adversely effecting management or conservation needs. A decrease in intensity, time/area closures and other factors which create noted safety problems require more fish, less effort or both. No specific recommendations are forthcoming and many state that changes in regulations to promote further vessel or crew safety in these fisheries are not possible without adversely impacting conservation. (page 31)

The Council agrees with the opinion expressed above, that restrictive fisheries do not allow much flexibility in addressing vessel safety concerns without adversely affecting management or conservation needs. To the extent that quotas are large enough and seasons are long enough, fishermen can choose to stay ashore in inclement weather and await better fishing conditions in which to harvest their catch.

Options

The Council reviewed two options to address the issue of fishery access denied by unsafe weather or ocean conditions. They are described below. Only Option 2 required changes in federal regulations. The Council also considered a third option which would have required the U.S. Coast Guard to evaluate safety aspects of alternative management measures during the preseason process as well as providing a postseason analysis of the actual regulations. This option was deleted as it would have increased management costs and resulted in

a more cumbersome preseason process with little likely benefit and was not supported by the U.S. Coast Guard.

Option 1 - Regulatory Status Quo (Implicit Consideration of Adjustments for Fishery Access Denied by Unsafe Weather)

While it does not specifically address this safety related issue or establish management guidelines, the current salmon framework FMP provides the required flexibility to consider adjustments for access to the fishery by vessels denied harvest opportunity by unsafe weather conditions.

Preseason Management

It is difficult, if not impossible, during the preseason process to anticipate most adverse weather or ocean conditions. However, the Council considers any comments on alternative management measures related to crew and vessel safety which are received from fishery participants, U.S. Coast Guard, and the public in general.

Inseason Management

Under the current framework procedures (Section 3.12 of the framework plan, as amended in 1987), the NMFS, Northwest regional director may adjust management measures during the season after consultation with the Council chairman and appropriate state fishery directors. Inseason adjustments to management measures must be consistent with fishery regimes established by the U.S.-Canada Pacific Salmon Commission, ocean escapement goals, conservation of the salmon resource, any adjudicated Indian fishing rights, and the ocean allocation scheme in the FMP. In addition, all inseason adjustments are based on consideration of the following factors.

- ° Predicted sizes of salmon runs
- ° Harvest quotas and hooking mortality limits for the area and total allowable impact limitations, if applicable
- ° Amount of recreational, commercial, and treaty Indian fishing effort and catch for each species in the area to date
- ° Estimated average daily catch per fisherman
- ° Predicted fishing effort for the area to the end of the scheduled season
- ° Other factors as appropriate

Weather and oceanic conditions greatly influence several of the factors listed above, e.g., estimated average daily catch per fisherman. In addition, weather or oceanic conditions and safety considerations have been taken into account in some instances under "other factors as appropriate" in the current

list of conditions to be considered. In 1987, some nearshore closures were modified to allow more equitable and safe access by small private boats to the recreational fishery.

No procedure has been formalized requiring the regional director to consult with the U.S. Coast Guard and affected fishermen. However, the regional director is required by regulation to consult with appropriate state directors and the Council chairman on any inseason action. This consultation usually is accomplished by a conference telephone meeting, and representatives of affected user groups have, by practice, been included in these telephone conversations. This type of involvement would continue under this option.

No procedure has been formalized requiring the regional director specifically to consider providing access to the fishery for vessels which could not go fishing because of weather or oceanic conditions. However, if vessels do not go fishing, quotas are not met, and the regional director has authority to consider extending seasons to allow fishery access which was prevented because of weather or oceanic conditions.

FMP Amendment

Under this option, the Council will amend framework amendment Section 3.13. (Schedule and Procedures for Amendment of the FMP) to reflect that:

Part of the process for evaluating all future FMP amendment proposals will be to consider whether they will result in the need for temporary adjustments for access.

The Council's present process for developing FMP amendments already includes extensive participation by the U.S. Coast Guard and persons utilizing the fishery. These participants are specified in the MFCMA amendment language pertinent to this issue.

Option 2 - Specific Consideration of Adjustments for Fishery Access Denied by Unsafe Weather

Option 2 would add the same clarification to FMP Section 3.13. with regard to the FMP amendment procedures as provided for in Option 1 above. In addition, Option 2 would clarify the Council's preseason and inseason consideration of safety related vessel access as described below.

Preseason Management

Under this option, the following paragraph would be added to Section 3.11. (Schedule and Procedures for Preseason Modification of the Regulations) of the framework amendment.

During its deliberations to develop ocean management recommendations, the Council will solicit comments and consider appropriate action with regard to safety impacts of alternative management measures under adverse weather or ocean conditions. In particular, the U.S. Coast Guard and affected fishery participants will be consulted with regard to this issue.

Inseason Management

Section 3.12. of the framework plan (as amended in 1987) would be modified to specify adverse weather and ocean conditions as an example of "other factors as appropriate" on the list of factors taken into account when making inseason adjustments to management measures. In addition, the list would specify consultation with U.S. Coast Guard and salmon advisors representing the affected fishery if a National Weather Service report indicated oceanic conditions which may be dangerous to salmon fishing vessels.

Consideration of weather and oceanic conditions would only be appropriate when the inseason management action would affect the timing or length of a season or the areas opened or closed to fishing. Weather and oceanic conditions would have no bearing on other inseason management adjustments, such as species substitutions, transfers of fish between quotas, and changes in bag limits or fishing days per week.

This option would formalize the current procedure of seeking National Weather Service advice on weather conditions before opening fisheries for short seasons to catch remnant quotas. In addition, the expertise of fishermen and the U.S. Coast Guard would be solicited to determine whether the weather and oceanic conditions forecasted posed serious danger to salmon vessels, especially small "day boats" which operate in the ocean salmon fishery.

If the fishermen consulted and the U.S. Coast Guard believed the predicted oceanic conditions would seriously endanger salmon vessels, the regional director could, for example, delay a scheduled opening if the delay would have no additional impact on stocks of concern.

Impacts

Biological Impacts

There would be no difference in the biological impacts of the two management options as the total harvest quotas which are set to meet escapement goals would not be different.

Socio-Economic Impacts

As has been discussed earlier, the actions which can be taken to address vessel safety concerns without jeopardizing management and conservation objectives are extremely limited. The benefits of each of the proposed options are extremely difficult to assess. However, some potential impacts are described below in general terms.

Administrative Costs

Option 2 essentially formalizes the current Council practices which are described under Option 1 (status quo). Since impacted fishery representatives are presently included in teleconference meetings, the only additional cost would be the inclusion of a U.S. Coast Guard representative.

Impacts on Fishermen

In quota fisheries, marginal weather conditions present the greatest potential for jeopardizing the safety of smaller vessels, since larger vessels may continue to fish safely. Under all options, delaying an opening due to inclement weather would be possible. This could have an impact on the distribution of landings between small and large fishing vessels. Such a management decision might provide increased access to the fishery for vessels which otherwise could not go fishing because of weather or oceanic conditions. However, it could also penalize other individuals who have made investments in larger vessels in order to fish safely in more inclement weather. The determination to delay an opening due to potential weather-created problems is therefore a complex question involving elements of uncertainty and harvest allocation as well as safety.

In extreme cases where delaying an opening might shorten the time on the water to the extent that attainment of the allocated quota is not possible, the ex-vessel revenue generated from the fishery would be decreased. Unscheduled delays in opening a season could increase the costs of all fishermen who are tied to the dock but unable to pursue other alternatives during the delay because of uncertainty of the opening time. This would be especially true for those fishermen who could have continued to harvest.

It is highly questionable whether the actions taken under any of the options would have an impact on salmon fishermen's insurance rates. There is no evidence the insurance industry reacts to losses in one particular fishing activity but rather sets rates based on risks in the fishing industry in general.

Interaction With Other Amendment Issues

There is no interaction between Issue 2 and the habitat issue in this amendment.

Recommendation

The Council recommends implementation of Option 1. Option 1 satisfies the requirements of the MFCMA (as amended), requires the least management costs, and is responsive to the safety issue.

References

Literature Cited

Buck, Eugene H. May 3, 1985. "Federal FMP - Safety Implications." Report prepared at the request of the House Committee on Merchant Marine and Fisheries:5.

NCFVSI (Compilers). 1986. Study on the Use of Fishery Management Regulations and Techniques to Improve the Safety of Commercial Fishing Operations:92.

Council. May 1982. "Proposed Plan for Managing the 1982 Salmon Fisheries Off the Coasts of California, Oregon, and Washington."

Sabella, John. ed. 1986. Vessel Safety Manual. North Pacific Fishing Vessel Owners Association:288.

Legislative Reference

Section 303(a)(6) of the MFCMA of 1976 (as amended).

FMP Reference

Section 3.11. Final Framework Amendment for Managing the Ocean Salmon Fisheries Off the Coasts of Washington, Oregon, and California Commencing in 1985:3-70 through 3-72.

Section 3.12. Final Framework Amendment for Managing the Ocean Salmon Fisheries Off the Coasts of Washington, Oregon, and California Commencing in 1985 as amended by the seventh amendment:1-19.

Regulations

50 CFR Part 661.21. and Appendix III.B.