

## VI. MANAGEMENT PROBLEMS AND CONCERNS

### Quota Management

The team is concerned that quota management problems, which were evidenced during the last season, could reduce the effectiveness of quotas as management measures to constrain harvest.

1. The establishment of several small quotas for very restrictive geographic areas increases the potential for cumulative overharvest. For example, the recreational fishery in the subarea north of the Queets River remained open after north of Cape Falcon coho quotas for the overall recreational fishery and the troll and recreational fisheries combined had been exceeded.
2. Information systems are not adequate to cope with increased demands for data resulting from the 1984 quota structure. Since quotas under the Framework Amendment are harvest ceilings, rather than guaranteed catches, management action must be conservative when very limited data are available. However, if fisheries are closed prior to the taking of the full quota, users become upset. Consequently, the tendency is to avoid closing fisheries until data become available which indicate that quotas have been exceeded. This can result in total harvests substantially higher than established quotas.
3. Closures under small quotas require timely action that some state laws may not permit. Consequently, quotas can be exceeded because, even though information is available to indicate that a closure notice should be issued, administrative action may not be possible.

These factors tend to lead to a situation where the intent of quotas to constrain harvests within maximum allowable impact levels is defeated.

The team expresses its concern that quota management structures involving small allowable harvest levels are conducive to excessive harvest.

### Shaker Mortality

The team has consistently opposed ocean fisheries which result in significant wastage of salmon through the mortality associated with the hook-and-release process. The tendency toward increased use of selective retention regulations in years of low harvestable abundance is inconsistent with the Council's objective to minimize fishery mortalities for those fish not landed.

Selective fisheries which occurred during the 1984 ocean salmon season were of two basic types. For an anticipated selective fishery, the impact on unlanded fish is estimated based on representative past performance, but actual impacts may be significantly different (e.g., Oregon troll fishery south of Cape Falcon). For an unanticipated selective fishery, insufficient information is available to estimate impacts. Proceeding with selective fisheries without adequate information increases the risk of exceeding allowable ocean harvest and may jeopardize subsequent fisheries that have common species or stock impacts. For example, unanticipated incidence of coho during the "trophy"

chinook recreational fishery at Neah Bay, reduced the already small coho quota for the all-species fishery.

Management problems created by the inability to estimate the impact of selective fisheries prior to the season are increased by the difficulty of estimating shaker incidence inseason.

We offer the suggestion that future selective fisheries be allowed on the basis of: (1) our ability to adequately monitor and estimate incidence of the unretained catch components, and (2) a specified acceptable level of fishery induced mortality.

### Columbia River Estuary (Buoy 10) Sport Fishery

The large catch in the Buoy 10 area at the mouth of the Columbia River and the significant contribution to that fishery of non-target stocks in 1984 demonstrates the problems created by inconsistency in ocean and inriver fisheries management. Conducting a "wide open" inside fishery in the Buoy 10 area had unanticipated impacts on the depressed stocks which restricted the ocean fisheries. The Buoy 10 sport fishery was adopted on the premise of a "clean fishery" with catches targetting on surplus Columbia River hatchery stocks. However, the catch composition of this fishery indicated that significant and unanticipated harvest impacts were occurring on the stocks that constrained the allowable ocean harvest. The experience in 1984 indicates the need to: (1) evaluate catch, effort, and tag data by time period in the Buoy 10 and adjacent ocean fishing area; (2) reevaluate the outer boundary line (line is approximately two miles upstream from the outer-most tip of the jetty); and (3) examine the timing of the fishery. Salmon managers must address future Buoy 10 sport fisheries as they pertain to weak stock protection, harvest opportunity for stocks with surpluses, and equitable sharing of the resource and conservation burden. The Buoy 10 fishery is an example of the difficulty the Council faces in meeting its goals when there is inconsistency between ocean and inriver fisheries management.

### Inseason Management

The team has repeatedly opposed inseason adjustments to abundance estimates until such time as scientifically valid procedures become available. As provided for in the Framework Amendment (pages 3-62 and 3-73), determination of the capability of such adjustments should be made prior to adoption of the regulations. In 1984, the emergency regulations implemented by the Secretary determined that total coho and chinook quotas were fixed and not subject to inseason adjustments (PFMC 1984 FMP, Supplement 4, page B-5).

Experience in 1984 reaffirms the unavailability of reliable inseason abundance estimation techniques for ocean fisheries at this time.

The Council considered two inseason requests to reconsider the 1984 coho quota for fisheries south of Cape Falcon. Fisherman reports of high coho abundance in coastal waters off California and Oregon prompted a June 20 Council teleconference to consider the reports and available data (Appendix E). The Council decided to make no change in the regulations.

Fisherman reports of large coho catches off California continued through early July. Then on July 25, California asked the Council for a second teleconference to reevaluate the OPI coho projection in the light of a new regression analysis (Appendix F). The California analysis related OPI stock size to total troll catch south of Point Arena. Based on a projected 25,000 fish troll landing south of Point Arena, the California analysis projected the total OPI at 1.762 million coho with a 95 percent confidence interval of 551,000 to 2.973 million fish. The salmon team advised the Council against using this analysis citing four concerns: (1) high level of variability in the data base, (2) low sensitivity at low stock abundance levels, (3) high risk factor for depressed components of the OPI, and (4) inconsistency with other coho and chinook stock abundance indicators. By majority vote, the Council disapproved three progressively scaled down motions to increase the allowable coho landing.

Ocean fisheries landings and inriver escapements in the OPI area indicate the actual OPI index totals 658,700 fish, 693,700 with private hatchery fish. The point estimate of the California analysis, therefore, overestimated total OPI abundance by 167 percent.

Pressures for inseason adjustment of regulations probably will continue in response to states' internal political developments, including users convincing commissioners and legislators that the Council and team have erred. Experience has demonstrated that such pressures almost invariably push for liberalizing fishing regulations. Making inseason increases in abundance estimates in the absence of a sound scientific basis increases the risk to the resource. The team reaffirms its support for the procedures described in the Framework Amendment and urges the Council to review the historical record when responding to future pressures to relax regulations.

#### Point Delgada Management Boundary

The team expressed concern last year that moving the southern management boundary for Klamath River chinook northward from Cape Vizcaino to Point Delgada would increase harvest impact on this severely depressed stock. Further, it would reduce the chances of maintaining the Klamath River rebuilding schedule without total closure of all ocean fisheries in the Klamath River management area in future years. Due to the projected low abundance for 1984, additional concern was expressed for southern Oregon chinook which contribute to the harvest in this management area. Postseason data indicated that there was a more southerly distribution of Klamath River chinook stocks in 1984 which would compound the impact of moving the boundary northward.

The team continues to be concerned with this change in the management boundary. It occurred without a comprehensive analysis of fishery impacts on the Klamath and Rogue river stocks in the Fort Bragg, Shelter Cove, and Eureka landing areas and without criteria approved by the Council for when management boundary changes are appropriate. The management area for depressed stocks should not be reduced. The team strongly contends that management areas with restrictive regulations to protect depressed stocks should at least be retained and preferably enlarged.