

NATIONAL MARINE FISHERIES SERVICE REPORT ON
COASTAL PELAGIC SPECIES (CPS) MANAGEMENT

Situation: National Marine Fisheries Service (NMFS) will briefly report on recent developments in the coastal pelagic species fishery and other issues of relevance to the Council.

Council Task:

1. Discussion.

Reference Materials:

1. None.

Agenda Order:

- a. Agendum Overview
- b. Reports and Comments of Advisory Bodies
- c. Public Comment
- d. Council Discussion

Svein Fougner

PFMC
08/21/02

LB Boydston

UPDATE ON CALIFORNIA'S PACIFIC SARDINE FISHERY IN 2002

California's purse seine fishery landed a total 35,589 metric tons of sardine as of the 6th of September. The fishery south of Pt. Piedras Blancas has landed 30,476 mt, with 48,485 mt remaining on the initial southern allocation. The northern California fishery based in Monterey Bay has landed 5,113 mt to date, only 13% of the initial northern allocation. Northern California's fishery will close this weekend, along with Oregon and Washington, when the northern harvest guideline is attained. Lower Monterey landings can be attributed to sporadic sardine availability in combination with an active squid fishery between March and August.

Two exogenous factors have affected California's sardine fishery this season. Early in the year, the California Department of Health Services issued health warnings due to high domoic acid levels in sardine and anchovy. Domoic acid closures affected the Monterey fishery in March and the southern California fishery from April through June. Concurrent to this, problems arose with a major export market in Australia. In April 2002, the Australian government implemented a moratorium on importation of California sardine and mackerel for use in tuna rearing pens. The moratorium was due to the confirmed presence of the viral hemorrhagic septicemia virus (VHSV) in Pacific sardine and mackerel from southern California and a concern that VHSV could infect Australia's endemic sardine population via the pen feeding practice. Interim measures allowing some importation are now in place, and exports are expected to resume at a steady pace as the California's fall-winter fishery commences.

~~Can expect the~~

Jean McCrae

G.2.b
Supplemental ODFW Report
September, 2002

Preliminary Report of the 2002 Oregon Sardine Fishery

LANDINGS

Landings of sardines into Oregon continue to increase. Landings through approximately September 6, total 20,220 mt. Total landing for 2001 entire season was just under 13,000 mt. Oregon harvested more than 50% of the entire northern sub-area harvest guideline.

FISHERY DESCRIPTION

Total number of landings in 2001 is over 600 (over 450 in 2001). Average catch per landing is greater than in 2001: 76,000 in 2002, 60,000 in 2001.

Sardines are managed in Oregon under the Developmental Fisheries Program which limits the number of permits issued to 20. All 20 permits were issued in 2002 and 2001. Thirteen vessels have made landings into Oregon by September 6, 2002.

In 2002, six processors have bought sardines, there were five in 2001.

According to log processed to date, 94% of the harvest has come off Oregon and 6% off Washington. In 2001, the catch was 73% off Oregon and 27% off Washington

MONITORING AND REPORTING

Due to budget cuts, we did not have a full time observer for 2002. Existing staff has made 5-6 ride-along trips on sardine vessels to observe bycatch.

Logbook are filled out by vessel skipper; the logs contain bycatch information. Bycatch continues to be low. Salmon bycatch averages less than 0.5 fish per trip. Other bycatch and incidental catch species include mackerel, anchovies, herring, shad, and a handful of shark (mostly blue shark).

BIOLOGICAL SAMPLES

We continue to collect samples of sardine at the dock for biological data (includes weight, length, sex, maturity, and age structures). Samples analyzed to-date show a larger average size in 2002 than in 2001. Age structures taken from 2001 samples show an age composition of mostly ages 2-3.



Preliminary Report of the 2002 Trial Purse Seine Fishery for Pacific Sardine (*Sardinops sagax*)

Washington Department of Fish and Wildlife
Intergovernmental Resource Management
48 Devonshire Road
Montesano, Washington 98563

**WASHINGTON DEPARTMENT OF FISH AND WILDLIFE
PRELIMINARY REPORT OF THE 2002 TRIAL PURSE SEINE FISHERY
FOR PACIFIC SARDINE (*Sardinops sagax*)**

Background

In Washington, sardines are managed under the Emerging Commercial Fishery provisions as a trial commercial fishery. A trial commercial fishery allows the harvest of a newly classified species, or harvest of a previously classified species in a new area or by new means (WAC 220-88-010). The Washington Fish and Wildlife Commission first approved a trial ocean purse seine sardine fishery in 2000, and the fishery has occurred for the last years. The target of the trial fishery was sardines; however, incidental catches of anchovy, mackerel, and squid can also be landed.

Goals and Objectives

The goals for this trial fishery were to provide fishing opportunity consistent with the Pacific Fishery Management Council's Coastal Pelagic Species fishery management plan and Washington Department of Fish and Wildlife (WDFW) policy, collect information on sardines off Washington to improve the coastwide stock assessment, and document the extent of bycatch occurring in the fishery.

Objectives include:

- Collect length, weight, age, sex, and maturity data from the catch landed into Washington.
- Document bycatch, in terms of species, amount, and condition. Recommend management measures to reduce bycatch, as necessary.
- Document harvest methods, distribution of harvest, and catch per unit of effort.

Fishery Regulations

The trial fishery began on May 15 and is scheduled to continue through October 31, 2002. The fishery is managed under the Pacific Council's northern allocation of the coastwide sardine harvest guideline and to a WDFW harvest guideline of 15,000 mt. Washington purse seine fishers are regulated by a set of permit conditions.

Fishery Description

The fishery opened on May 15, 2002; however, the first landing into Washington occurred on June 10. Through September 3, landings into Washington total 13,079 mt. The Department has issued approximately 30 permits and 13 permit holders have participated in the fishery to date. A total of 353 landings and the majority of the landings (79%) were made into Ilwaco. A comparison of the Washington seasons and landings are contained in Table 1 and Figure 1.

Table 1. Washington fishery comparisons for 2000, 2001, and preliminary for 2002.

	2000	2001	2002
--	------	------	------

			(thru 9/3)
Sardine Harvest	4,791.4 mt	10,837 mt	13,079 mt
# of Landings	153	299	353
# Vessels Participating	3 (88%)	13	13

Figure 1. Monthly sardine landings in 2000, 2001, and preliminary landings for 2002.

Observer Coverage/Logbooks

The purpose of requiring observer coverage is to document total catch and bycatch in the purse seine fishery. Bycatch has been recorded in terms of species, amount, and condition; observers noted whether the fish were released or landed, and whether the fish were alive, dead, or in poor condition. The Department was aiming for 30% coverage and has averaged about 26% overall.

All of the vessels participating in the fishery chose to utilize Department observers, rather than contract with private observer companies. A “sardine hotline” was established for fishers to notify the Department of their planned fishing activities so observer coverage could be scheduled accordingly. Observers were in daily contact with the vessels to schedule onboard trips directly.

Fishers were cooperative in allowing observers on board and in scheduling departure times and locations. In general, logbooks were completed and submitted as requested.

Bycatch

Based on observer data, the bycatch of non-targeted species has been fairly low. Bycatch has included chinook and coho salmon, spiny dogfish, blue shark, and other species. A summary of

the bycatch species and total amounts will be available in WDFW's final report in November 2002.

Biological Samples

Department staff have collected 85 biological samples of 25 sardines each, and have processed a portion of these to date. Otoliths will be extracted and sent to the California Department of Fish and Game (CDFG) laboratory in LaJolla for age-reading. Accompanying data will include catch date, vessel name, standard lengths of the sardines, individual weights, sex, and maturity (determined using the CDFG Standard Maturity Guide for Wetfish which was based on Hjort, J. (1914) State of Sexual Organs).

Summary of WDFW Activities

WDFW staff developed the processes to implement the trial fishery and administered the observer program, notification process, port sampling, data recording, and biological analyses. Two additional full-time observers were hired and existing staff were utilized to augment our observer program and conduct dockside sampling. The observers worked onboard commercial fishing trips to document bycatch, determine catch composition, and collect market samples.

Samplers monitored unloading at processing plants for incidental catch data, weighed sub-samples of the sardine catch, and collected logbooks to determine harvest distribution, CPUE, and unobserved bycatch information. Additional staff time was spent extracting otoliths, measuring, weighing, and determining sex and maturity of samples, and summarizing observer and logbook information.

COASTAL PELAGIC SPECIES ADVISORY SUBPANEL REPORT ON
PACIFIC SARDINE FISHERY UPDATE

The Coastal Pelagic Species Advisory Subpanel (CPSAS) requests that the Council recommend NMFS trigger the reallocation of unused sardine allocation 50/50 between the two management sub-areas as provided in the fishery management plan (FMP).

Furthermore, the CPSAS discussed allocation issues for the 2003 season and beyond. A majority of the CPSAS recognizes there are problems associated with the allocation system in place. A majority of the CPSAS urges the Council to begin the process to implement a regulatory or plan amendment at the November 2002 Council meeting. This effort would require Council direction during this meeting to the Coastal Pelagic Species Management Team (CPSMT) in order to begin the process. The CPSAS agrees that the purpose of the alternative actions proposed seek to achieve full utilization of the harvest guideline which has not occurred under the federal FMP.

The CPSAS proposes the following allocation options should be forwarded to the CPSMT for analysis:

1. Status quo.
2. Change only current re-allocation date.
 - a. August 1
 - b. September 1
3. Change current sub-area definitions.
 - a. Change only line from Piedras Blancas North to Pt. Arena
4. Change current allocation percentages.
 - a. 50/50
5. Implement three sub-quotas vs. two.
6. Give discretion to NMFS Regional Administrator to reallocate annually from a set-aside based on certain criteria (i.e., social and/or economic hardship).
7. Modify FMP language to establish an inseason adjustment mechanism to modify subarea quotas taking into account the harvest in the respective subareas.
8. Eliminate allocation entirely (coast-wide quota).

The CPSAS reiterates its past recommendations that additional research on Pacific Northwest stocks is necessary, and fishery dependent data from the Oregon and Washington fisheries should be incorporated into the sardine stock assessment. The CPSAS once again recommends the Council support the continued efforts of the Tri-National Sardine Forum. The CPSAS supports and recognizes the need to research the sardine stock composition by a swept trawl survey and an egg pump survey to assess spawning rates in the Pacific Northwest. We believe this research is critical given recent increases in northwest harvest levels and will aid in better understanding of the coastwide sardine biomass. The CPSAS requests the Council urge NMFS to fund this research in 2003.

RECEIVED

AUG 20 2002

PFMC

Heather M. Munro
Munro Consulting
PO Box 1515
Newport, OR 97365
(541) 574-7767
Hmunro@actionnet.net

Mr. Rod McInnis, Regional Administrator
National Marine Fisheries Service
Southwest Region
501 W Ocean Blvd, Suite 4200
Long Beach, CA 90802-4213

August 16, 2002

Dear Mr. McInnis:

This letter serves as a formal request to the National Marine Fisheries Service to implement an emergency rule which would reallocate the current coast wide sardine harvest guideline prior to October 1st. The request is being made on behalf of the West Coast Seafood Processors Association and the following companies: Pacific Seafood Group; Astoria Pacific Sardine; Del Mar Seafoods; Monterey Fish Company; California Shellfish Company; Qualy Pak Specialty Foods; Merino Seafood Inc.; Jessie's Illwaco Fish Company; the Port of Ilwacco; and the various fishermen and crew who currently fish for these companies.

As you know, the Coastal Pelagic Species Fishery Management Plan (CPS FMP) allows for a reallocation of all unutilized quota from the two sardine management areas on October 1st of each year. This unused harvest is combined and then split 50/50 between the two allocation zones.

NMFS data indicate that as of July 31, 2002, 14,793 mt of sardines have been landed in the northern management area. More recent data from Oregon and Washington indicate that through August 11th, a combined total of 20,314 mt of sardines have been landed into both states. Data on August landings of sardines in northern California is not yet available, although processors note that prior to August 12th, landings were minimal. On August 12th, sardine landings began to increase rapidly.

The coast wide harvest guideline of 118,442 mt currently allocates 39,481 mt to the northern area (Monterey, Oregon & Washington) and 78,961 mt to southern California. Based on the most recent information available, 19,167 mt remains of the northern allocation, with fishermen having already utilized 51% of the allocation. Southern California fishermen have utilized 35% of the southern allocation, leaving 51,340 mt currently unharvested.

Washington and Oregon processors have been packing an average of 600 mt of sardine a day (300 mt in each state). In Washington and Oregon combined, processors have the capacity to pack at least 850 mt a day. The Monterey fishery has picked up significantly and expects to top off at an average daily production of 800 mt. The Monterey processors have the infrastructure to pack up to 1,000 mt a day of product. Therefore, weather permitting, processors operating under the northern allocation will be packing an average of 1,400 mt of sardines per day. At this rate, the entire northern allocation will be reached by September 1st. Once this happens, all

fishing operations in the northern management area will be forced to shut down until NMFS activates the automatic reallocation of unused quota in October. This equates to an entire month without fishing for Oregon, Washington and Monterey. This type of closure will cause significant economic hardship in northern California, Oregon and Washington ports. This closure can be avoided if NMFS chooses to implement an emergency rule that reallocates unused portions of the coast-wide quota as early as possible, or at least by September 1st. As noted above, the southern management area has 51,340 mt remaining on the allocation which is more than the area has landed in a full season during either 2000 or 2001. Historically, the catch in southern California has slowed down beginning in September.

The first national standard for fishery conservation and management in the Magnuson-Stevens Fishery Conservation and Management Act states:

(1) Conservation and management measures shall prevent overfishing while achieving on a continuing basis, the optimum yield from each fishery for the United States fishing industry

If the reallocation date is not moved forward, the optimum yield for sardines will not be achieved. Since the implementation of the CPS FMP in 1999, two and a half sardine seasons have passed. In 2000, 59,019 mt of sardines were left unharvested. In 2001, 57,436 mt remained at the end of the season. However, as sardine fisheries continue to expand in Oregon and Washington, the amount of harvest associated with the northern allocation has grown steadily. While the Council's Coastal Pelagic Species Advisory Subpanel has begun to discuss long-term solutions to this allocation problem, there will not be a solution available for the current problem in time to help the ports for this season. When various bodies brought this potential problem before the Council in the past, the Council chose to wait and see if a problem actually developed. A problem has now developed and NMFS intervention is necessary to avoid a possible shut-down in the fishery.

We ask that you review the available data and move the reallocation to the soonest date practicable. It is understood that this emergency declaration would only be for this fishing season and that the continued dialogue for identifying long-term solutions will be continued. In fact, the Council's CPS Advisory Subpanel will be taking up this issue at the September Council meeting. The west coast sardine fishery is an extremely healthy one. Fish are available to be caught in the northern management area and there is currently a high demand for this fish. This demand is expected to continue through the end of the year. It would be unfortunate if whole sectors of the industry were forced to shut down simply because an automatic reallocation could not be implemented.

I am available at the above number to answer any questions. I and all the companies listed look forward to your response.

Sincerely,



Heather M. Munro, President
Munro Consulting

cc Mr. Rod Moore, West Coast Seafood Processors Association
Mr. Jay Bornstein, Astoria Pacific Sardine
Mr. Daryl Kapp Astoria Pacific Sardine

Mr. Frank Dulcich, Pacific Seafood Group
Mr. Joe Cappuccio, Del Mar Seafoods
Mr. Sal Tringali, Monterey Fish Company
Mr. Anthony Tringali, Monterey Fish Company
Mr. Tom Libby, Point Adams Packing Company
Mr. Robert Cigliano, Qualy-Pak Specialty Foods
Mr. Dennis Rideman, Moreno's Seafood Inc
Mr. Pierre Marchand, Jessie's Ilwacco Fish Company
Mr. Jerry Thon, Astoria Holdings Company
Mr. Joe Childers, Childers and Associates
Mr. Mack Funk, Port of Ilwacco
Mr. Rob Zuanich, Purse Seine Vessel Owners Association
Mr. Rob Ross, California Fisheries and Seafood Institute
Ms. Diane Pleschner, California Wetfish Producers Association
Dr. Jeffrey Koenings, Washington Department of Fish & Wildlife
Mr. Phil Anderson, Washington Department of Fish & Wildlife
Ms. Michele Robinson, Washington Department of Fish & Wildlife
Ms. Patty Burke, Oregon Department of Fish & Wildlife
Mr. Burnie Bohn, Oregon Department of Fish & Wildlife
Ms. Jean McCrae, Oregon Department of Fish & Wildlife
Mr. LB Boydston, California Department of Fish & Wildlife
Ms. Marija Vojkovich, California Department of Fish & Wildlife
Mr. Hans Radtke, Chair, Pacific Fishery Management Council
Mr. Don McIsaac, Executive Director, Pacific Fishery Management Council
Coastal Pelagic Species Management Team
Coastal Pelagic Species Advisory Subpanel
Mr. Jim Morgan, National Marine Fisheries Service
Mr. Svein Fougner, National Marine Fisheries Service

CALIFORNIA WETFISH PRODUCERS ASSOCIATION

RECEIVED

AUG 22 2002

PPMC

**2194 SIGNAL PLACE
SAN PEDRO, CA 90731**

AUGUST 20, 2002

VANESSA DELUCA
STATE FISH
COMPANY

JOHN CAR
TRI-MARINE FISH
Co.

PETE GUGLIELMO
SOUTHERN CA
SEAFOOD

FRANK TOMICH
TOMICH BROS.
SEAFOOD

PETER DIVONA
CRS / STANDARD
SEAFOOD

JOE BURCH
OCEAN GEM
SEAFOOD

MR. ROD MCINNIS, REGIONAL ADMINISTRATOR
NATIONAL MARINE FISHERIES SERVICE - SWR
501 W. OCEAN BOULEVARD, SUITE 4200
LONG BEACH, CA 90802-4213

DEAR ROD,

WE'RE WRITING IN RESPONSE TO THE FORMAL REQUEST FOR
EMERGENCY REALLOCATION OF SOUTHERN CALIFORNIA'S SARDINE
HARVEST GUIDELINE SUBMITTED BY NORTHERN PROCESSING INTERESTS.
WE WOULD GREATLY APPRECIATE YOUR CONSIDERATION OF THE
FOLLOWING POINTS BEFORE MAKING A DECISION ON THIS SERIOUS
ISSUE.

AS I'M SURE YOU'RE AWARE, SOUTHERN CALIFORNIA'S WETFISH
INDUSTRY, INCLUDING BOTH FISHERMEN AND PROCESSORS, EXPRESSES
GRAVE CONCERN OVER THE CURRENT UNBRIDLED EXPANSION OF THE
SARDINE FISHERY IN THE PACIFIC NORTHWEST, EXPANSION THAT IS
OCCURRING IN THE ABSENCE OF DIRECT RESEARCH ON STOCKS IN THAT
AREA.

AS WE'VE DISCUSSED BEFORE, AT THE TIME CALIFORNIA'S SARDINE
FISHERY CAME UNDER FEDERAL MANAGEMENT, FISHERY MANAGERS DID
NOT ENVISION A FISHERY IN THE PACIFIC NORTHWEST, THUS THE
TRADITIONAL HARVEST STRATEGY ALLOCATING A THIRD OF THE QUOTA TO
NORTHERN CALIFORNIA AND TWO-THIRDS TO SOUTHERN CALIFORNIA
WAS ADOPTED INTO THE CPS FMP WITH NO THOUGHT THAT AN OPEN
ACCESS FISHERY OUTSIDE CALIFORNIA WOULD DEVELOP, MUCH LESS
EXPAND TO THE DEGREE THAT IT HAS. FISHERY SCIENTISTS EXPRESS
CONFIDENCE IN THE STOCK ASSESSMENTS DEVELOPED FOR CA WATERS;
HOWEVER THE PROJECTION OF COASTWIDE BIOMASS IS EXTRAPOLATED
WITH A FAIR BIT OF UNCERTAINTY ATTACHED, AS TO DATE NO BASELINE
SURVEYS OF SPAWNING BIOMASS HAVE BEEN CONDUCTED IN THE PACIFIC
NORTHWEST, OR, FOR THAT MATTER, EVEN AS FAR NORTH AS SAN
FRANCISCO. LACK OF FUNDING IS THE USUAL REASON GIVEN FOR THIS
OMISSION.

CALIFORNIA'S WETFISH INDUSTRY SUFFERED THROUGH A SIMILAR SCENARIO A DECADE AGO, WHEN FISHERMEN REPORTED A HUGE BODY OF FISH IN THE OCEAN, BUT HARVEST QUOTAS WERE SMALL DUE TO LACK OF MONEY TO FUND THE NECESSARY RESEARCH. THE INDUSTRY RESPONDED BY COOPERATING, THROUGH THE CALIFORNIA SEAFOOD COUNCIL AND OUT OF POCKET, TO HELP FUND INDEPENDENT RESEARCH (WHICH LED TO DEVELOPMENT OF THE ORIGINAL CANSAR MODEL) AND EXPANSION OF SPAWNING BIOMASS SURVEYS. IN ADDITION, THE INDUSTRY PAYS A VERY HIGH LANDING TAX FOR SARDINES, WHICH HAS CONTRIBUTED MORE THAN \$2 MILLION TO THE STATE IN THE PAST THREE YEARS.

BY COOPERATING IN THE JOINT STATE-FEDERAL BIOMASS SURVEYS, WE WERE ABLE TO FURTHER KNOWLEDGE OF CALIFORNIA'S SARDINE RESOURCE, LEADING TO A FIVEFOLD INCREASE IN QUOTA, WHICH JUMPED FROM 12,000 TONS TO 54,000 TONS IN ONE YEAR DUE TO THE EXPANDED RESEARCH. TO DATE WE HAVE SEEN NO SIMILAR EFFORTS BY THE PACIFIC NORTHWEST INDUSTRY, NOR COOPERATION FROM THE NORTHWEST REGION, TO HELP FUND THE RESEARCH ESSENTIAL FOR ACCURATE MANAGEMENT OF THE FISHERY. FOLLOWING PRECAUTIONARY PRINCIPLES MANDATED IN THE MAGNUSON ACT, THE SARDINE HARVEST IN THE PACIFIC NORTHWEST SHOULD NOT BE ALLOWED TO EXPAND ABSENT RESEARCH TO MEASURE THE SPAWNING BIOMASS IN THAT AREA. FUTURE QUOTAS SET FOR THE PACIFIC NORTHWEST SHOULD BE BASED ON THOSE ASSESSMENTS.

WE WOULD ALSO APPRECIATE YOUR CONSIDERATION OF THE FOLLOWING POINTS, ADDRESSING ARGUMENTS MADE IN THE REQUEST FOR EMERGENCY ACTION REGARDING PROCESSING CAPACITY AND CURRENT UNFULFILLMENT OF THE SOUTHERN CALIFORNIA HARVEST ALLOCATION.

1. PLEASE CONSIDER THE EXTREME HARDSHIP THAT FACED SOUTHERN CALIFORNIA FISHERMEN AND PROCESSORS IN 2002, PRECIPITATED BY THE CLOSURE OF MAJOR MARKETS DUE TO VHS VIRUS AND DOMOIC ACID. SARDINE HARVESTING IN SOUTHERN CALIFORNIA VIRTUALLY CEASED FOR A SIGNIFICANT PART OF THE YEAR DUE TO THESE ABNORMAL CONSTRAINTS. RECENTLY AUSTRALIA REOPENED ITS MARKET TO THE IMPORTATION OF SARDINES AND MACKEREL. FURTHER, MARKET RESTRICTIONS CAUSED BY THE FINDING OF DOMOIC ACID IN SOUTHERN SARDINES HAVE BEEN LIFTED, THUS THE SOUTHERN CALIFORNIA WETFISH INDUSTRY CAN FINALLY MAKE UP FOR LOST TIME. SEPTEMBER IS TYPICALLY A STRONG HARVEST MONTH IN SOUTHERN CALIFORNIA, AS WELL AS THE BEGINNING OF THE PEAK HARVEST SEASON. FISHING AND PACKING AT PEAK CAPACITY, SOUTHERN CALIFORNIA PROCESSORS COULD UTILIZE THE ENTIRE REMAINING SOUTHERN ALLOCATION BEFORE THE END OF SEPTEMBER, WEATHER PERMITTING (EMPLOYING A FORMULA SIMILAR TO THE PROJECTION GIVEN IN THE REQUEST FOR EMERGENCY REALLOCATION).

2. REGARDING THE POTENTIAL SHUT-DOWN OF THE MONTEREY INDUSTRY ALLEGED IN THE REQUEST, WE POINT OUT THAT IN THE PAST, MONTEREY PROCESSORS HAVE HARVESTED SARDINES IN SOUTHERN CALIFORNIA IN SEPTEMBER, WHICH WERE LANDED IN PT. HUENEME AND TRUCKED TO MONTEREY. IN FACT MONTEREY PROCESSORS ENJOY THE BEST OF BOTH WORLDS, ABLE TO FISH ON BOTH THE NORTHERN AND SOUTHERN SUB-ALLOCATIONS. WE WOULD STRONGLY ENCOURAGE THE PACIFIC NORTHWEST INDUSTRY AND NORTHWEST REGION, IF INTERESTED IN INCREASING THEIR HARVEST ALLOCATION, TO ACTIVELY PROMOTE AND SPONSOR THE RESEARCH NECESSARY TO DETERMINE THE EXTENT OF SPAWNING BIOMASS IN THAT AREA, THE SIZE OF OVER-WINTERING STOCKS, IF ANY, AND WHETHER OR NOT A SEPARATE SUBPOPULATION EXISTS. AS NOTED ABOVE, A SUB-ALLOCATION FOR THE PACIFIC NORTHWEST SHOULD BE BASED ON THOSE ESTIMATES, RATHER THAN EXTRAPOLATED FROM SARDINE STOCKS SURVEYED IN SOUTHERN CALIFORNIA.

3. A FEW ADDITIONAL COMMENTS ON PROCESSING CAPACITY, WE NOTE THAT THE NORTHERN FISHERY HAS UTILIZED JUST OVER HALF OF ITS SUB-ALLOCATION (51%, ACCORDING TO THE LETTER), NEARING THE END OF THE PEAK HARVEST PERIOD IN THE PACIFIC NORTHWEST, AND MORE THAN HALFWAY THROUGH THE SUMMER SEASON. EXAMINING PRIOR YEAR LANDINGS, JULY AND AUGUST ARE THE PEAK HARVEST MONTHS IN THE PACIFIC NORTHWEST, AND MONTEREY'S PEAK ACTIVITY GENERALLY COMES LATER IN THE FALL. WE FEEL THE PROJECTIONS GIVEN IN THE REQUEST FOR EMERGENCY ACTION ARE VERY OPTIMISTIC, AND PERHAPS UNREALISTIC, GIVEN THE ACKNOWLEDGEMENT THAT 19,000 TONS REMAIN ON THE NORTHERN SUB-ALLOCATION THROUGH MID-AUGUST. IT WOULD SEEM THAT THE NORTHERN FISHERY IS RIGHT ON COURSE.

FURTHER, AS NOTED IN THE LETTER, THE ISSUE OF FUTURE ALLOCATION SCHEMES WILL AGAIN BE DISCUSSED AT THE SEPTEMBER CPS ADVISORY SUBPANEL MEETING. SOUTHERN CALIFORNIA INTERESTS WILL BE PRESENT AND LOOK FORWARD TO THOSE DISCUSSIONS.

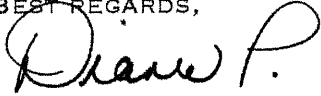
4. ONE FURTHER POINT TO CONSIDER REGARDING PREMATURE REALLOCATION OF THE SOUTHERN SARDINE SUBQUOTA IS THE PENDING EL NIÑO FORECAST FOR THIS YEAR. THIS ENSO EVENT, EVEN THOUGH EXPECTED TO BE MILD, LIKELY WILL HAVE A SIGNIFICANT, PERHAPS HUGE, IMPACT ON THE SOUTHERN CALIFORNIA FISHERY; THE 1992 EL NIÑO IS AN EXAMPLE. IN THE ABSENCE OF SQUID, SOUTHERN CALIFORNIA FISHERMEN AND PROCESSORS WILL FOCUS ON SARDINES TO MAINTAIN OPERATIONS, THUS NOVEMBER, DECEMBER AND JANUARY WILL BE IMPORTANT MONTHS FOR THE SOUTHERN SARDINE HARVEST. REALLOCATING SARDINE SUBQUOTA EARLY, BEFORE THE SOUTHERN FISHERY HAS A CHANCE TO UTILIZE ITS FULL ALLOCATION IN SEPTEMBER, WILL HAVE A NEGATIVE IMPACT ON THE FISHERY, PRECIPITATING SIGNIFICANT ECONOMIC HARDSHIP LATER IN THE YEAR, WHEN THE SARDINE HARVEST WILL BE IMPORTANT.

IN CLOSING, WE AGAIN REITERATE OUR CONCERN OVER ALLOWING EXPANSION OF THE PACIFIC NORTHWEST FISHERY WITHOUT THE REQUISITE BASELINE RESEARCH ON THE FAR NORTHERN STOCKS. ALLOCATION NOTWITHSTANDING, THE LARGER ISSUE IS - WHAT IS THE IMPACT OF INCREASED HARVESTING IN THE PACIFIC NORTHWEST ON SARDINE SPAWNING BIOMASS? IS THIS HARVEST REMOVING SPAWNERS THAT ARE ESSENTIAL TO THE TRADITIONAL FISHERY? IS THERE AN OVERWINTERING BIOMASS, OR PERHAPS A SEPARATE SUBSTOCK? AT PRESENT BIOLOGISTS HAVE LITTLE KNOWLEDGE OF THOSE STOCKS, EXCEPT THAT THEY ARE LARGE FISH. THE EXISTENCE OF AN OVERWINTERING STOCK OR EVEN A SEPARATE SUBSTOCK ARE CRITICAL PIECES OF KNOWLEDGE ON WHICH TO DETERMINE A SUBQUOTA FOR THE REGION. ALLOWING CONTINUED EXPANSION WITHOUT THAT KNOWLEDGE IS INVITING DISASTER, PERHAPS ONE AS DIRE AS THE CURRENT GROUND FISH CRISIS, WHICH CAME ABOUT THROUGH INADEQUATE RESEARCH.

IN MAKING YOUR DETERMINATION, PLEASE CONSIDER THAT CALIFORNIA REPRESENTS CLOSE TO 90 PERCENT OF THE HISTORIC SARDINE FISHERY; OREGON AND WASHINGTON COMBINED ACCOUNTED FOR ONLY 2.7 PERCENT OF TOTAL COASTWIDE LANDINGS DURING THEIR ENTIRE PERIOD OF ACTIVITY—1935-36 TO 1948-49. CALIFORNIA'S WETFISH INDUSTRY REPRESENTS 84 PERCENT BY VOLUME OF THE ENTIRE FISHING INDUSTRY IN CALIFORNIA TODAY, AND SARDINES CONTRIBUTE A MAJOR PORTION OF THOSE LANDINGS. AS WE KNOW, THE QUOTA IS DECLINING AS THE OCEAN ENTERS A COLD-WATER PDO CYCLE; IN LIGHT OF THIS, FURTHER GROWTH OF THE PACIFIC NORTHWEST SARDINE FISHERY IS MOST LIKELY UNSUSTAINABLE. FINALLY, THE LACK OF KNOWLEDGE OF THE RESOURCE BEYOND CALIFORNIA, COUPLED WITH THE CURRENT UNBRIDLED EXPANSION OF THE PACIFIC NORTHWEST FISHERY, SHOULD RING LOUD ALARM BELLS AND EMPHASIZE THE ABSOLUTE NEED TO DO THE EXPANDED RESEARCH QUICKLY. PERHAPS THIS REQUEST FOR EMERGENCY ACTION WILL SERVE AS THE CATALYST FOR FUNDING.

THANK YOU, ONCE AGAIN, FOR CONSIDERING THESE POINTS. WE REQUEST THAT YOU DEFER YOUR DECISION UNTIL RECEIVING THE LATEST SCIENTIFIC DATA ON THE STATUS OF SARDINE STOCKS, OR AUTOMATIC REALLOCATION SET FOR OCTOBER 1 OCCURS, WHICHEVER COMES FIRST.

BEST REGARDS,



DIANE PLESCHNER-STEELE
FOR CALIFORNIA WETFISH PRODUCERS ASSOCIATION

CC: JIM MORGAN, NMFS
JOHN HUNTER, NMFS
PAUL SMITH, NMFS
KEVIN, HILL, CDFG
LB BOYDSTUN, CDFG
MARIJA VOJKOVICH, CDFG
PATTY WOLF, CDFG
HANS RADKE, CHAIR, PFMC
DON MCISAAC, EXEC. DIRECTOR, PFMC
DAN WALDECK, CPS STAFF, PFMC





CITY OF ASTORIA
OFFICE OF THE MAYOR

RECEIVED

AUG 20 2002

PFMC

August 12, 2002

Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 200
Portland, OR 97220-1384

Dear Councilors:

I am writing on behalf of the citizens of Astoria and at the request of the Astoria City Council to ask for your full consideration of proposals before you regarding adjustments to the Coastal Pelagic Species Fishery Management Plan.

Astoria has a very long and very rewarding history. Fish and fisheries have been a constant central thread in that history. In recent decades most developments in our fisheries have been negative, much to the decrement of Astoria's economic well being. The recent emergence of the sardine fishery has been a beacon of hope for improved economic times. There are now four sardine-processing operations in Astoria providing jobs and an influx of capital and operating funds to the area.

We are advised that your agenda includes a request for an adjustment of sardine quotas between Southern Region and Northern Region areas. We believe that this action is appropriate and indicated. We ask that you give it your fullest professional consideration. We are confident that you will arrive at a decision that is just and equitable. Thank you for your consideration.

Sincerely,

THE CITY OF ASTORIA

A handwritten signature in black ink, which appears to read "Willis L. Van Dusen".

Willis L. Van Dusen
Mayor

RECEIVED

AUG
AUG 19 2002

PFMC

August 13, 2002

Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 200
Portland, OR 97220-1384

Dear Councilors;

I am writing on behalf of the Port of Astoria district and at the request of the Port of Astoria Commission to ask for your full consideration of proposals before you regarding adjustments to the Coastal Pelagic Species Fishery Management Plan.

The north coast of Oregon has a very long and very rewarding history. Fish and fisheries have been a constant central thread in that history. In recent decades most developments in our fisheries have been negative, much to the decrement of our regional economic well being. The recent emergence of the sardine fishery has been a beacon of hope for improved economic times. There are now four sardine-processing operations in Astoria providing jobs and an influx of capital and operating funds to the area. Three of these facilities are located on port owned property generating over 120 jobs.

We are advised that your agenda includes a request for an adjustment of sardine quotas between Southern Region and Northern Region areas. We believe that this action is appropriate and indicated. We ask that you give it your fullest professional consideration. We are confident that you will arrive at a decision that is just and equitable. Thank you for your consideration.

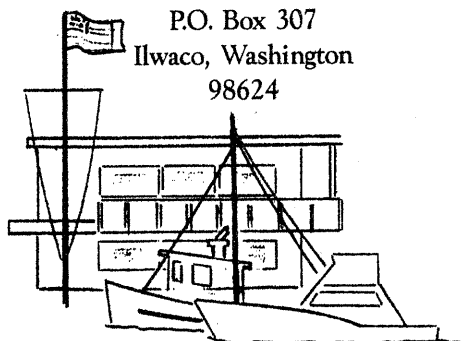
Sincerely,
The Port of Astoria



Glenn Taggart
Commission President

Commissioners
FRANK UNFRED
chairman
PAUL C. POLILLO
secretary
JIM STIEBRITZ

PORT OF ILWACO



Mack Funk
manager
Area Code 360
Phone 642-3143
FAX 642-3148
www.portofilwaco.c

August 5, 2002

Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 200
Portland, OR 97220-1384

RE: Sardine Allocations

The sardine fishing industry is rapidly growing at the Port of Ilwaco. Due to favorable ocean conditions, sardines are one of the few bright spots in the commercial fishing business. There are two processors at the port, Jessie's Ilwaco Fish Co. and Sunrise Seafoods, and they are the largest employers in our small coastal community.

For that reason we are vitally interested in the sardine regulations and we have recently become aware of a problem that needs to be corrected. The sardine catch is allocated between two distinct geographic regions:

1. Southern California and
2. Northern California, Oregon and Washington

Currently, the management plan contains an automatic provision that reallocates total unharvested sardines 50:50 between Northern and Southern regions on October 1st each year. The problem is that date is too late, the fishery is ending due to weather. We recommend that the reallocation date be set on June 15 and the PFMC amend Section 5.2.2 of the Coastal Pelagic Species Fishery Management Plan as follows:

Section 5.2.2 Formulas for Allocating Pacific Sardine

The northern area allocation is 33% of the Pacific sardine harvest guideline, and the southern area allocation is 66% of the Pacific sardine harvest guideline. ~~Nine months after the start of the fishing season,~~ *Six months after the start of the fishing season, but not later than June 15 of each year,* any uncaught portion of the sardine harvest guideline will be totaled and reallocated with 50% of the total allocated to the northern area and 50% of the total allocated to the southern fishery area. Reallocation will be carried out by the NMFS Regional Administrator as an automatic measure as described in Section 2.1.

Thank you for your consideration,

A handwritten signature in cursive script that reads "Frank Unfred".

Frank Unfred
Chairman

RECEIVED

AUG 12 2002

PFMC

ASTORIA HOLDINGS, INC.Exhibit G.2.d
Supplemental Public Comment 2
September 2002

Mr. Rod McInnis, Regional Administrator
National Marine Fisheries Service
Southwest Region
501 W Ocean Blvd, Suite 4200
Long Beach, CA 90802-4213

August 17, 2002

Dear Mr. McInnis:

I am writing to you on behalf of Astoria Holdings, Inc., a Pacific sardine processor located in Astoria, Oregon. The cause for this communication is alarm at the approaching closure of the sardine fishery in this area.

As you are aware, the sardine fishery is enjoying a period of resurgence all along the West Coast. Landings into Oregon and Washington have expanded from just 1 ton in 1998 to 23,907 tons last year. Landings this year continue at a higher pace yet. Clearly, the sardine fishery in this area is thriving and expanding rapidly. Indications are that the sardine stock is healthy and robust. Things look good.

Until yesterday, when we heard that big sardine landings are starting to come into Monterey. We share the same Northern Region Pacific sardine Guideline Harvest allocation with Northern California. If we all continue catching sardines at the present rate, the fishery will run out of fish soon.

The best landings data that we have suggests that 20,314 tons have landed into Oregon and Washington as of August 11. We don't have updated data from Northern California yet, but we understand that landings increased dramatically beginning August 12. We know that the fishing has continued to be very good out of Astoria during the past week.

Oregon and Washington packers have been processing about 600 tons per day. We think that total capacity in both states is about 850 tons per day. We understand that Monterey processors anticipate production at 800 tons per day. Combined production is likely to be at least 1400 tons per day.

The Northern Region guideline harvest is only 39,481 tons, and of that less than 19,000 tons remain available. We are probably going to run out of fish in less than two weeks.

The Coastal Pelagic Species FMP in Section 5.2.2 allows for reallocation of Pacific sardines on October 1st each year, as an **automatic measure**. Section 2.1 of the same FMP states that the Regional Administrator can initiate Automatic Actions without "...prior public notice, opportunity to comment, or a Council meeting." An examples of

One 9th Street, Astoria, OR 97103 (503) 338-1288
Mailing Address: 12 Bellwether Way #209, Bellingham, WA 98225

ASTORIA HOLDINGS, INC.

an automatic actions included in that Section is *"...an in season release of geographic allocations (all seasons and fishery segments)..."*

We know that the allocation to the Southern Region is only about 35% harvested. We know that approximately 51,000 tons remain available in that allocation. We also know that for the past 20 years the total harvest in the Southern region has never exceeded 44,709 tons.

Two bad things are going to happen if we all have to wait for an Automatic Action to occur in October in order to get more sardine allocation in the Northern Region. First, the entire Northern Region sardine fishery will be shut down for at least a month, and 2) the Oregon and Washington fisheries will be shutdown for the year because bad weather which typically moves in sometime after the Autumnal Equinox, and curtails the fishery anyway.

We need you to do something to allow our fishery to continue. We are producing a great product out of a robust resource that is in strong demand worldwide. This industry is expanding and energizing the entire region. It is wrong to stall this momentum and make us wait for an Automatic reallocation to occur.

If you cannot initiate this Automatic action on your own authority please consider this letter as a formal request to the National Marine Fisheries Service to implement an Emergency Rule to reallocate the Pacific sardine guideline harvest as soon as possible.

Thank you and please feel free to contact me anytime if you have any questions on this matter. My contact numbers are in the heading at the top.

Respectfully,

Joe Childers

Tel (206) 729-8083, Fax (206) 374-2459

Cc:

Jerry Thon, Astoria Holdings, Inc.

Svein Fougner

Jim Morgan

Jean McCrae

Michele Robinson

Dan Waldeck

Heather Munro

Mitch Mitchum

Dave Hansen

CALIFORNIA WETFISH PRODUCERS ASSOCIATION

2194 SIGNAL PLACE
SAN PEDRO, CA 90731

SEPTEMBER 3, 2002

THE NEED FOR SARDINE RESEARCH NOW BY DB PLESCHNER-STEELE

FOR PRESENTATION TO
THE PACIFIC FISHERY MANAGEMENT COUNCIL, CPS ADVISORY SUB-PANEL AND
CPS MANAGEMENT TEAM

VANESSA DELUCA
STATE FISH
COMPANY

JOHN CAR
TRI-MARINE FISH
CO.

PETE GUGLIELMO
SOUTHERN CA
SEAFOOD

FRANK TOMICH
TOMICH BROS.
SEAFOOD

PETER DIVONA
CRS / STANDARD
SEAFOOD

JOE BURCH
OCEAN GEM
SEAFOOD

BACKGROUND:

AT ITS HEIGHT IN THE 1930S AND '40S, THE PACIFIC SARDINE FISHERY WAS THE LARGEST FISHERY IN NORTH AMERICA. CALIFORNIA'S SARDINE INDUSTRY HARVESTED AND PROCESSED ABOUT 97 PERCENT OF THE U.S. SARDINE CATCH IN THE HISTORIC SARDINE FISHERY, 1916-1968. OREGON AND WASHINGTON COMBINED ACCOUNTED FOR ONLY 3 PERCENT OF TOTAL U.S. LANDINGS DURING THEIR ENTIRE PERIOD OF ACTIVITY—1935-36 TO 1948-49. THEN SARDINES DISAPPEARED: FIRST FROM THE PACIFIC NORTHWEST, THEN FROM MONTEREY, AND LATER, FROM SOUTHERN CALIFORNIA.

SCIENTISTS LATER REALIZED THAT SARDINE ABUNDANCE IS CYCLICAL, PEAKING DURING WARM-WATER OCEANIC CYCLES. THE OCEAN ENTERED A COLD-WATER CYCLE IN THE LATE 1940S. THE SARDINE FISHERY COLLAPSED IN THE 1950S AND WAS CLOSED FROM THE EARLY 1970S UNTIL 1989. LARGE-SCALE CYCLES (CALLED PACIFIC DECADAL OSCILLATION OR PDO) TYPICALLY EXTEND ABOUT 30 YEARS; A WARM-WATER CYCLE AGAIN TRANSFORMED THE OCEAN BEGINNING IN THE MID-1970S. THE SARDINE RESOURCE EXPANDED IN THE ENSUING YEARS, GROWING AT AN AVERAGE RATE ESTIMATED AT 30 PERCENT PER YEAR. THE CA LEGISLATURE APPROVED A 1,000 TON HARVEST FOR CALIFORNIA IN 1989, WHEN BIOLOGISTS ESTIMATED THE SPAWNING BIOMASS EXCEEDED 20,000 TONS. SCIENTISTS DECLARED THE PACIFIC SARDINE RESOURCE "FULLY RECOVERED" IN 1998, WITH SPAWNING BIOMASS ESTIMATED AT MORE THAN ONE MILLION TONS. (THE HISTORIC BIOMASS WAS ESTIMATED AT ABOUT FOUR MILLION TONS.)

TODAY THE PACIFIC SARDINE FISHERY IS REGULATED UNDER THE FEDERAL COASTAL PELAGIC SPECIES FISHERY MANAGEMENT PLAN (CPS FMP). THE COAST-WIDE BIOMASS IS EXTRAPOLATED FROM SPAWNING STOCK SURVEYS CONDUCTED ALMOST EXCLUSIVELY IN THE SOUTHERN CALIFORNIA BIGHT. THE HARVEST GUIDELINE (HG) IS ALSO BASED ON THE SAME SOUTHERN CA SPAWNING BIOMASS SURVEYS. THE CPS FISHERY IN CALIFORNIA IS MANAGED UNDER A LIMITED ENTRY PROGRAM; HOWEVER, "OPEN ACCESS" FISHERIES HAVE EMERGED AND ARE RAPIDLY EXPANDING IN OREGON AND WASHINGTON.

THE SITUATION:

AT THE TIME CALIFORNIA'S SARDINE FISHERY CAME UNDER FEDERAL MANAGEMENT, FISHERY MANAGERS DID NOT ENVISION A FISHERY IN THE PACIFIC NORTHWEST, THUS THE TRADITIONAL HARVEST STRATEGY ALLOCATING ONE THIRD OF THE QUOTA TO NORTHERN CALIFORNIA (MONTEREY) AND TWO-THIRDS TO SOUTHERN CALIFORNIA WAS ADOPTED INTO THE CPS FMP.

HOWEVER, THE FEDERAL PLAN EXTENDED THE NORTHERN ALLOCATION TO COVER OREGON AND WASHINGTON IN ADDITION TO MONTEREY. THE ORIGINAL ALLOCATION WAS SET TO PROVIDE MONTEREY ACCESS TO SARDINES LATER IN THE YEAR, WHEN FISH WERE LARGER. THE FEDERAL FMP INCLUDED THE TRADITIONAL ALLOCATION SCHEME WITH NO THOUGHT THAT AN OPEN ACCESS FISHERY OUTSIDE CALIFORNIA WOULD DEVELOP, MUCH LESS EXPAND TO THE DEGREE THAT IT HAS.

IN FOUR SHORT YEARS, THE P.NW SARDINE HARVEST HAS GROWN FROM FROM ONE PERCENT (854 MT) OF THE U.S. PACIFIC SARDINE CATCH IN 1999 TO ABOUT 47 PERCENT (ABOUT 30,000 MT) THROUGH AUGUST 2002.

—THIS EXPANSION HAS OCCURRED IN THE VIRTUAL ABSENCE OF RESEARCH ON PACIFIC NORTHWEST SARDINE STOCKS.

THE FIRST NATIONAL STANDARD OF THE MAGNUSON SUSTAINABLE FISHERIES ACT (SFA):

"CONSERVATION AND MANAGEMENT MEASURES SHALL PREVENT OVERFISHING ...

THE WORD "SHALL" DENOTES THAT THIS IS AN OVER-ARCHING TENET OF THE SFA.

QUESTION: HOW CAN FISHERY MANAGERS PREVENT OVERFISHING BY ALLOWING THE UNBRIDLED EXPANSION OF A NEW FISHERY TARGETING PRIMARILY MATURE SPAWNING STOCKS, WITHOUT BASELINE RESEARCH ON THE SIZE OR RELATIONSHIP OF THAT STOCK TO THE RESOURCE

—WHEN SPAWNING BIOMASS ESTIMATES (AND HARVEST GUIDELINES) HAVE DECLINED FOR THE PAST TWO YEARS, ARE LIKELY TO DECLINE FURTHER THIS YEAR,

—AND THE OCEAN, BY ALL SIGNS, HAS ENTERED ANOTHER COLD-WATER CYCLE, WHICH WILL FURTHER HASTEN THE NATURAL DECLINE OF THESE STOCKS?

WHAT WE KNOW ABOUT SARDINES:

—SARDINE ABUNDANCE IS CYCLICAL — CORE SAMPLES INDICATE PERIODS OF ABUNDANCE AND ABSENCE, CORRELATED WITH WARM AND COLD-WATER OCEANIC CYCLES. PERIODS OF ABUNDANCE EXTEND ABOUT 30 YEARS. THE LAST WARM-WATER CYCLE BEGAN IN THE MID 1970S. SCIENTISTS NOW BELIEVE THE OCEAN IS ENTERING ANOTHER COLD-WATER CYCLE. (PARRISH, 2000)

—SARDINES ARE COASTAL PELAGIC SPECIES; THEY MIGRATE NORTH AND SOUTH ALONG THE COAST. THE LARGEST SARDINES (MATURE SPAWNING STOCK) MAY RANGE AS FAR NORTH AS BRITISH COLUMBIA IN SUMMERTIME, THEN RETURN SOUTH IN FALL.

—IN THE HISTORIC FISHERY, OVERFISHING OCCURRED NOT DURING THE PEAK OF THE SARDINE FISHERY, BUT IN THE WANING YEARS, WHEN FISHING CONTINUED ON SPAWNING STOCKS DURING THEIR NATURAL DECLINE IN PRODUCTIVITY (PARRISH, 2000).

WHAT WE DON'T KNOW:

—ARE P.NW SARDINES A SEPARATE SUBPOPULATION, AS CA BIOLOGISTS THEORIZED 50 YEARS AGO? (P.NW SARDINES DISAPPEARED BEFORE SCIENTISTS COULD CONDUCT THE RESEARCH.)

—DOES THE NORTHWARD MIGRATING "OUTSIDE" SARDINE STOCK OVERWINTER IN THE P.NW (AS THE CURRENT STOCK ASSESSMENT MODEL ASSUMES)?

—OR DOES THE P.NW. SARDINE STOCK RETURN TO S.CA. IN FALL AND WINTER, COMPRISING THE ADULT SPAWNING STOCK THAT FUELS THE TRADITIONAL CA FISHERY?

— CA'S WETFISH INDUSTRY HAS PAID A HIGH PRICE FOR SARDINE RECOVERY.

THIS INDUSTRY SUFFERED THROUGH A MORATORIUM LASTING NEARLY TWO DECADES.

THE INDUSTRY HAS COOPERATED, THROUGH THE CALIFORNIA SEAFOOD COUNCIL AND OUT OF POCKET, TO HELP FUND INDEPENDENT RESEARCH (WHICH LED TO DEVELOPMENT OF THE ORIGINAL CANSAR MODEL) AND EXPANSION OF SPAWNING BIOMASS SURVEYS.

IN ADDITION, THE INDUSTRY PAYS A VERY HIGH LANDING TAX FOR SARDINES, WHICH HAS CONTRIBUTED MORE THAN \$2 MILLION TO THE STATE IN THE PAST THREE YEARS.

CALIFORNIA'S WETFISH INDUSTRY REPRESENTS 84 PERCENT BY VOLUME OF THE ENTIRE FISHING INDUSTRY IN CALIFORNIA TODAY, AND SARDINES CONTRIBUTE A MAJOR PORTION OF THOSE LANDINGS. (FURTHER, IN RECENT YEARS SOUTHERN CALIFORNIA PORTS HAVE LANDED ON AVERAGE 80 PERCENT OF THE STATEWIDE SARDINE HARVEST.)

IN LIGHT OF THE IMPORTANCE OF THE SARDINE RESOURCE TO CALIFORNIA, FISHERMEN AND PROCESSORS ALIKE EXPRESS CONCERN OVER THE RAPID EXPANSION OF THE SARDINE FISHERY IN THE PACIFIC NORTHWEST, EXPANSION THAT IS OCCURRING IN THE ABSENCE OF DIRECT RESEARCH ON STOCKS IN THAT AREA.

—CONCERN IS MAGNIFIED BY UNDERSTANDING THE HISTORY OF THE SARDINE RESOURCE, AND REALIZING THAT—50 YEARS AFTER THE HISTORIC SARDINE CRASH— WE ARE ONCE AGAIN AT THE SAME CROSSROADS:

- THE OCEAN IS ENTERING A COLD-WATER CYCLE;
- SARDINE SPAWNING BIOMASS IS DECLINING, ACCORDING TO MODERN MEASUREMENTS, THE HARVEST GUIDELINE IS ALSO DECLINING AND MAY SOON DROP FROM A 15 PERCENT HARVEST RATE TO FIVE PERCENT.

HEEDING THE LESSONS OF THE PAST, THIS SHOULD BE A TIME OF CAUTION.

YET NORTHERN INTERESTS, WHICH ACCOUNTED FOR ONLY 3 PERCENT OF THE SARDINE HARVEST DURING THE HISTORICAL FISHERY'S HEYDAY, NOW ADVOCATE EXPANDING THEIR THEIR NEW-FOUND INDUSTRY—INCREASING THE TAKE OF PRIMARILY MATURE SPAWNING STOCKS AT THE BEGINNING OF A DOWN CYCLE, WITHOUT FIRST CONDUCTING RESEARCH TO DETERMINE THE EXTENT OF THE STOCK OR ITS RELATIONSHIP TO THE SARDINE RESOURCE AS A WHOLE. (FRANCES CLARK MUST BE ROLLING IN HER GRAVE.)

CA FISHERY SCIENTISTS EXPRESS CONFIDENCE IN THE STOCK ASSESSMENTS DEVELOPED FOR CA WATERS; HOWEVER THE PROJECTION OF COAST-WIDE BIOMASS IS EXTRAPOLATED WITH A FAIR BIT OF UNCERTAINTY ATTACHED, AS TO DATE NO BASELINE SURVEYS OF SPAWNING BIOMASS HAVE BEEN CONDUCTED IN THE PACIFIC NORTHWEST, OR, FOR THAT MATTER, EVEN AS FAR NORTH AS SAN FRANCISCO. MOREOVER, WE HAVE SEEN VIRTUALLY NO EFFORTS BY THE PACIFIC NORTHWEST INDUSTRY, NOR COOPERATION FROM THE NORTHWEST REGION, TO HELP FUND THE RESEARCH ESSENTIAL FOR ACCURATE MANAGEMENT OF THE FISHERY.

IN LIGHT OF THE ONCOMING COLD-WATER PDO AND EXPECTED FURTHER DECLINES IN SPAWNING BIOMASS AND HARVEST GUIDELINE, THE PACIFIC NORTHWEST SARDINE FISHERY IS UNSUSTAINABLE EVEN AT ITS CURRENT HARVEST LEVEL. CERTAINLY THE LACK OF KNOWLEDGE OF THE RESOURCE BEYOND CALIFORNIA, COUPLED WITH THE CURRENT RAPID EXPANSION OF THE PACIFIC NORTHWEST FISHERY, SHOULD RING LOUD ALARM BELLS AND EMPHASIZE THE ABSOLUTE NEED TO DO THE EXPANDED BIOMASS RESEARCH QUICKLY, WHILE SARDINES ARE STILL THERE.

FOLLOWING PRECAUTIONARY PRINCIPLES MANDATED IN THE MAGNUSON ACT, THE SARDINE HARVEST IN THE PACIFIC NORTHWEST SHOULD NOT BE ALLOWED TO EXPAND ABSENT RESEARCH TO MEASURE THE OVER-WINTERING SPAWNING BIOMASS IN THAT AREA. FUTURE QUOTAS SET FOR THE PACIFIC NORTHWEST SHOULD BE BASED ON THOSE ASSESSMENTS.

THE RESEARCH PROPOSAL:

ROD McINNIS, REGIONAL ADMINISTRATOR, NATIONAL MARINE FISHERIES SERVICE (NMFS) SOUTHWEST REGION, RECOGNIZES THE NEED TO EXPAND THE SARDINE SPAWNING BIOMASS SURVEYS CURRENTLY CONDUCTED IN SOUTHERN CALIFORNIA TO INCLUDE THE PACIFIC NORTHWEST. CONDUCTING THE RESEARCH NOW, WHILE SARDINES STILL INHABIT PACIFIC NORTHWEST WATERS, WILL PRODUCE IMMEDIATE AND LONG-TERM BENEFITS:

- IMPROVE KNOWLEDGE OF COASTWIDE SARDINE STOCK(S), PROVIDING FOR MORE ACCURATE SPAWNING BIOMASS ESTIMATES AND HARVEST GUIDELINES
- PROVIDE BASELINE KNOWLEDGE OF P.NW. SARDINE STOCKS, ON WHICH TO BASE FUTURE SUBQUOTAS FOR THE P.NW FISHERY
- COULD INCREASE THE OVERALL HARVEST GUIDELINE, ALLEVIATING THE GROWING ALLOCATION CONFLICT IN THE SHORT TERM
- CONDUCTING PROACTIVE RESEARCH NOW WILL AVOID ANOTHER "ROCKFISH CRISIS"

ROD McINNIS HAS DISCUSSED THE IMMEDIATE NEED FOR SARDINE RESEARCH WITH DR. WILLIAM HOGARTH, ASS'T. ADMINISTRATOR, NMFS. DR. HOGARTH EXPRESSED HIS DESIRE TO HEAD OFF A FUTURE CRISIS WITH THE SARDINE STOCK. HE ASKED FOR A PROPOSAL FROM THE SOUTHWEST REGION SO HE COULD LOOK FOR FUNDS IN THE FY 2003 NMFS BUDGET TO SUPPORT THE ADDITIONAL WORK.

JOHN HUNTER, SW FISHERIES SCIENCE CENTER, HAS SKETCHED OUT A RESEARCH PROTOCOL INCLUDING, PRELIMINARILY, THE FOLLOWING COMPONENTS:

- SWEEP TRAWL SURVEY TO MEASURE STOCK COMPOSITION PLUS EGG PUMP SURVEY TO ASSESS SPAWNING RATES CONDUCTED OFFSHORE THE P.NW COAST, ROUGHLY FROM SEATTLE TO SAN FRANCISCO, TIMED FOR JULY 2003;
 - CONCURRENT SURVEY OF TRADITIONAL SPAWNING GROUNDS IS ALSO NEEDED TO MINIMIZE THE POSSIBILITY OF DOUBLE-COUNTING SPAWNING FISH.
- THIS COASTWIDE SURVEY WOULD BE FOLLOWED BY
- SWEEP TRAWL SURVEY CONDUCTED OFFSHORE THE P.NW COAST, TIMED FOR JANUARY 2004, TO MEASURE OVER-WINTERING SARDINE POPULATION

THE ESTIMATED COST FOR THE TWO P.NW. CRUISES (BUDGETED FOR 21 DAYS EACH) IS \$250,000.

ENVISIONED AS A COLLABORATIVE PROJECT LED BY NMFS SW REGION, HOPEFULLY WITH COOPERATION FROM NW REGION, STATE BIOLOGISTS AND FISHERMEN, THIS BASELINE RESEARCH WOULD GO A LONG WAY TOWARD IMPROVING THE STATE OF KNOWLEDGE OF THE PACIFIC SARDINE RESOURCE. CERTAINLY THE COST IS SMALL IN COMPARISON TO THE VALUE OF THE FISHERY, INCLUDING BOTH THE TRADITIONAL FISHERY IN CALIFORNIA AND THE EMERGING FISHERY IN THE PACIFIC NORTHWEST.

WE ENCOURAGE THE COUNCIL, CPSAS AND CPS MANAGEMENT TEAM TO VOICE UNANIMOUS SUPPORT FOR THE NEED FOR THIS RESEARCH IMMEDIATELY, AND TO ENCOURAGE DR. HOGARTH TO ALLOCATE THE NECESSARY BASE FUNDS TO ACCOMPLISH THE RESEARCH IN 2003-2004.

FURTHER, WE STRONGLY ENCOURAGE THE PACIFIC NORTHWEST INDUSTRY AND NORTHWEST REGION, IF INTERESTED IN INCREASING THEIR HARVEST ALLOCATION, TO ACTIVELY PROMOTE AND SPONSOR THE RESEARCH NECESSARY TO DETERMINE THE EXTENT OF SPAWNING BIOMASS IN THAT AREA, THE SIZE OF OVER-WINTERING STOCKS, AND WHETHER OR NOT A SEPARATE SUBPOPULATION EXISTS. AS NOTED ABOVE, A SUB-ALLOCATION FOR THE PACIFIC NORTHWEST SHOULD BE BASED ON THOSE ESTIMATES, RATHER THAN EXTRAPOLATED FROM SARDINE STOCKS SURVEYED IN SOUTHERN CALIFORNIA.

ALLOCATION NOTWITHSTANDING, THE LARGER ISSUE IS – WHAT IS THE IMPACT OF INCREASED HARVESTING IN THE PACIFIC NORTHWEST ON SARDINE SPAWNING BIOMASS?

—IS THIS HARVEST REMOVING SPAWNERS THAT ARE ESSENTIAL COMPONENTS OF THE TRADITIONAL FISHERY?

—IS THERE AN OVER-WINTERING BIOMASS, OR PERHAPS A SEPARATE SUBSTOCK?

AT PRESENT BIOLOGISTS HAVE LITTLE KNOWLEDGE OF P.NW. STOCKS, EXCEPT THAT THEY ARE PRIMARILY LARGE FISH. THE EXISTENCE OF AN OVER-WINTERING STOCK OR EVEN A SEPARATE SUBSTOCK ARE CRITICAL PIECES OF KNOWLEDGE ON WHICH TO DETERMINE A SUBQUOTA FOR THE REGION.

ALLOWING CONTINUED EXPANSION WITHOUT SUCH KNOWLEDGE IS INVITING DISASTER, PERHAPS ONE AS DIRE AS THE CURRENT GROUND FISH CRISIS, WHICH CAME ABOUT THROUGH SHORT-TERM CONSIDERATION OF OY BEFORE ABC, COUPLED WITH INADEQUATE RESEARCH.

IN CLOSING, WE AGAIN REITERATE OUR CONCERN OVER ALLOWING EXPANSION OF THE PACIFIC NORTHWEST FISHERY WITHOUT THE REQUISITE BASELINE RESEARCH ON THE FAR NORTHERN STOCKS. CONSIDER THE HISTORY OF THE SARDINE FISHERY. MOTHER NATURE HAS GIVEN US ANOTHER OPPORTUNITY TO "DO IT RIGHT." PLEASE DO THE RESEARCH NOW. TIME IS OF THE ESSENCE. THANK YOU FOR YOUR ATTENTION.

SINCERELY,



DIANE PLESCHNER-STEELE FOR
CALIFORNIA WETFISH PRODUCERS ASSOCIATION

A Monterey Sardine Story

by Richard H. Parrish
Pacific Fisheries Environmental Group
National Marine Fisheries Service

Monterey and the sardine fishery are linked by history and the stories of their close relationship often contain as much fiction as the novels of Steinbeck. In fact, the stories of the demise of the sardine are as varied as the people who fished, canned and studied them. Was it overfishing, ocean currents, or the ocean disposal of nerve gas off of San Francisco following WW II that caused the disappearance of sardine from Monterey Bay? Did the fish simply move to Peru or Chile or South Africa, to be followed a couple of years later by the machinery sold from the bankrupt processing plants along Cannery Row?

What really happened?

I arrived in Monterey in 1966 as the new California Department of Fish and Game marine biologist responsible for monitoring the wetfish fishery. Wetfish are the fish that are canned "wet" and then cooked in the can, i.e. sardine, anchovy, squid and mackerels. I was extremely lucky to share an office for my first few years with the only other marine fisheries biologist in the region, Julie Phillips. Julie had come to Monterey with a similar background to my own, however, he came about forty years earlier. Julie was just about the closest thing to a sardine textbook that was available in 1966, or 2000 for that matter. He had been the wetfish biologist through the development, peak and collapse of the sardine fishery. By 1966 there were just two canneries/reduction plants still operating on Monterey Bay, the Hoyden Cannery on Cannery Row and the Santa Cruz Cannery in Moss Landing. The Santa Cruz Cannery was the only plant still canning sardines. There were also just two purse-seiners left, the New Roma and the Vitina A, although there was still a fleet of small lampara boats. The only sardines being landed were 12-14 inch, 10-14 year-old female sardines taken as trace amounts in 30-60 ton catches of jack mackerel made by the New Roma. In the intervening 34 years I have studied sardines from most of the sub-tropical area of the world in which they occur, and for the last 26 years I have worked with a team of physical oceanographers involved in research on interaction between climate variations and fisheries in the Pacific.

So what follows is my version of what happened, with a bit of help from Julie.

The short of it is that the collapse occurred in slow motion and a lot of things went wrong for sardines over an extended period. The primary ingredients were overfishing, a long term cooling in the California Current, WW II, El Niño and nobody home in the California Legislature. The seasoning included technological innovation in fishing gear and processing methods, a difference in opinion between the state and federal scientific communities, and the fishermen's fear of the precedent of closing a major commercial fishery.

Canning of sardines started in San Francisco in 1889 and in Monterey in 1902. After a slow start, the central California fishery increased rapidly during the 1920s reaching an annual harvest of 120,000 tons by the 1928 season. From 1936 to 1945 the central California fishery averaged 332,000 tons per year with a peak of 460,000 tons in 1939. Landings fell sharply from 251,000 tons in 1945 to only 18,700 in 1947 and then rose to 148,000 tons when the last great year-class of sardines (1947) entered the fishery in 1949. The central California landings then fell to 33,000 tons in 1950, to 961 tons in 1951 and to 1-ton in 1953. Landings in central California over the next 30 years totaled only 28,191 tons with 23,335 of this landed during the first El Niño to be recognized in California. I will come back to this event later as it plays a major role in the sardine story. The southern California sardine fishery developed more slowly increasing from 27,000 tons in the 1916 season to a peak of 204,000 tons in 1942. The only year it exceeded this level was in 1950 (306,000 tons) during the collapse of the central California fishery, when the bulk of the Monterey fleet abandoned Monterey Bay to fish in southern California.

The people who developed the sardine fishery were a varied mix of immigrants mostly from fishing cultures elsewhere in the world. The fishermen were primarily from the Mediterranean, the Adriatic and the Sea of Japan. The processors were from New England, the North Sea, the Bay of Biscay and the Baltic Sea. This fertile mix of experience and backgrounds resulted in a rapid development of fishing and fish processing

methodology that revolutionized the industry and allowed the industry to achieve the harvesting and processing capacity that put the sardine at risk.

Contrary to many stories you will hear, overfishing was rampant near the end of the sardine fishery, however this was not the case during the peak of the fishery. For example, during the peak (1932-47) the average annual harvest, or exploitation rate, was 25% of the sardine biomass and the biological production rate (surplus production) was 20% of the biomass. The difference of 5% per year represents only modest overfishing. The real overfishing occurred during the period when the fishery was collapsing in southern California. At this time (1958-64) the average exploitation rate rose to 50% and the production rate fell to 7%. The result was an average annual over harvest of 43% of the biomass. Excessive exploitation probably continued and may have even increased during many of the years between 1965 and 1974, although estimates of exploitation rate are not available as the stock had become too small to measure.

In contrast, during the period of the recovery (1983--97) the average harvest rate was just under 9%, the average production rate was huge (57% per year) and the biomass increased at an average rate of nearly 50% per year. However, the highest biological production rates (101% per year) occurred at the beginning of the recovery when the sardine biomass was less than 100,000 tons. During the period when the biomass was between a tenth and a half million tons the production rate was 43%. In recent years when the biomass has been over a half million tons the rate has declined to 23%, not markedly larger than it was during the peak of the fishery.

Fishery Biological Exploitation Production Difference Rate:

Fishery Peak	1932-47	25%	20%	-5
After Peak	1948-57	27%	19%	-8
Fishery Collapse	1958-64	50%	7%	-43
After Collapse	1965-82	NA	NA	NA
Fishery Recovery	1983-97	<9%	57%	+49
Early Recovery	1983-87	<9%	101%	+92
Mid Recovery	1988-93	<9%	43%	+32
Late Recovery	1984-97	<9%	23%	+14

What was the role of the ocean?

Large multi-decadal climate shifts in the Pacific Ocean Basin are now all the rage; however, there was little reason to suspect this type of climatic variation during the collapse of the sardine. In spite

of this, Garth Murphy, the biologist who did the classic sardine population analysis in 1966, used increased natural mortality rates starting in 1949 as he felt that there was clear evidence that something had changed. In hindsight it is clear that the warm oceanic climate of the mid 1920s to mid-1940s was largely the cause of the bloom in the sardine population that allowed the fishery to expand from the late 1920s to mid-1940s. By the early 1950s the environment in the California Current had changed. The onset of generally cold sea surface temperatures, along with altered circulation patterns in the North Pacific, were working against the sardine.

So how does the temperature of the California Current Region affect sardines? First the abundance of the plankton (on which sardine feed) increases from south to north in the California Current. The temperature tolerance of sardines largely prevents them from occupying regions with sea surface temperatures below about 50 degrees Fahrenheit (10°C). Sardine eggs and larvae are most common between 57-61 degrees (14-16°C) and spawning concentrations are seldom found in areas with the sea surface temperature below about 55 degrees (12.5°C). In the warmest years the critical 50 degree surface water extends as far south as the center of Vancouver Island at about 49°N in late winter; in the coldest years it extends clear down to the California-Oregon border (42°N). Therefore, sardine can winter in the southern Canada to Oregon region during warm years, but not during the cold years. In the warmest years, just before the onset of spawning temperatures is between San Francisco and Point Conception; including the plume of colder productive water that extends south and offshore of Point Conception. In contrast, in the coldest years the area of preferred temperatures is displaced far to the south, between the Mexican Border and Point Eugenia in Baja, California. In the warmest years sardines spawn in the productive waters of central California and the adults migrate to feeding grounds in the very productive waters of the Pacific Northwest. In the coldest years they spawn in the very unproductive waters of northern Baja, California and they feed in the unproductive waters of southern California and, to a lesser extent, in the productive waters of central California.

The net effect of these temperature-dependent geographic dislocations in their spawning and feeding grounds is that during extensive warm periods sardines increase their population size by about 30% per year. During protracted cold periods their population size decreases even without a fishery. The rate at which this natural decline occurs

is not well known because the decline during the 1950s occurred along with a very extensive fishery. However, it is well known from palio-sediment analyses that the sardine population off of California has been rising and falling for thousands of years with an average cycle of about 55-60 years. Historical evidence also shows that the Japanese sardine (the same species as the California sardine) and the Baltic herring have been fluctuating throughout recorded history with similar periodicities.

What did World War II have to do with the Monterey Sardine?

In the late 1930s a small group of heroic fishery biologists from the California Department of Fish and Game, including Julie Phillips, was approaching the point where I believe they would have convinced the California Legislature that a 250,000 ton quota should be adopted. I use the term heroic in the old fashioned sense, denoting those who continue to fight even though they have lost every battle they have ever been in. During WW II the regulation of the sardine fishery, which had been the responsibility of the California Legislature, was taken over by the federal government with the overriding goal of maximizing the amount of canned fish for the war effort. After WW II authority over the fishery was returned to the California Legislature; however, it was a number of years before the fisheries research community was reestablished. By the time they were ready to act, the sardine was already in extremely serious trouble.

Prior to WW II research and monitoring of the sardine population was primarily carried out by biologists from the California Department of Fish and Game (CDF&G), with some input from biologists from Oregon, Washington and especially Canada. After WW II the U.S. federal government entered the fray. An early post-WW II decision split research into three major camps; oceanography went to the Scripps Institution of Oceanography, studies on the fishery and research on adult fishes were retained by the CDF&G and the federal government undertook studies of the eggs and larvae. In 1950 an extensive series of co-operative surveys for eggs and larvae as well as oceanographic research was established. This research effort started just when the California Current turned colder and the sardine population was collapsing. The first years of the research survey were carried out during the extremely cold years of the early 1950s when there was virtually no sardine spawning north of Point Conception and the majority of spawning was off of Baja, California. By the mid 1950s even the

southern California fishery had collapsed; California landings in the 1952-53 and 1953-54 seasons were only about 5,000 tons. And then along came the massive 1958-59 El Niño resulting in a northern displacement of the small surviving sardine stock into southern California and a sharp increase in the number of eggs and larvae taken in the surveys. The state biologists were of the opinion that the increase in sardine landings and increased numbers of eggs and larvae was minor and that the fishery should be strictly regulated. The federal scientists were of the opinion that the marked increase in eggs and larvae in southern California showed that there was a strong recovery underway.

You will never guess what side the fishermen were on.

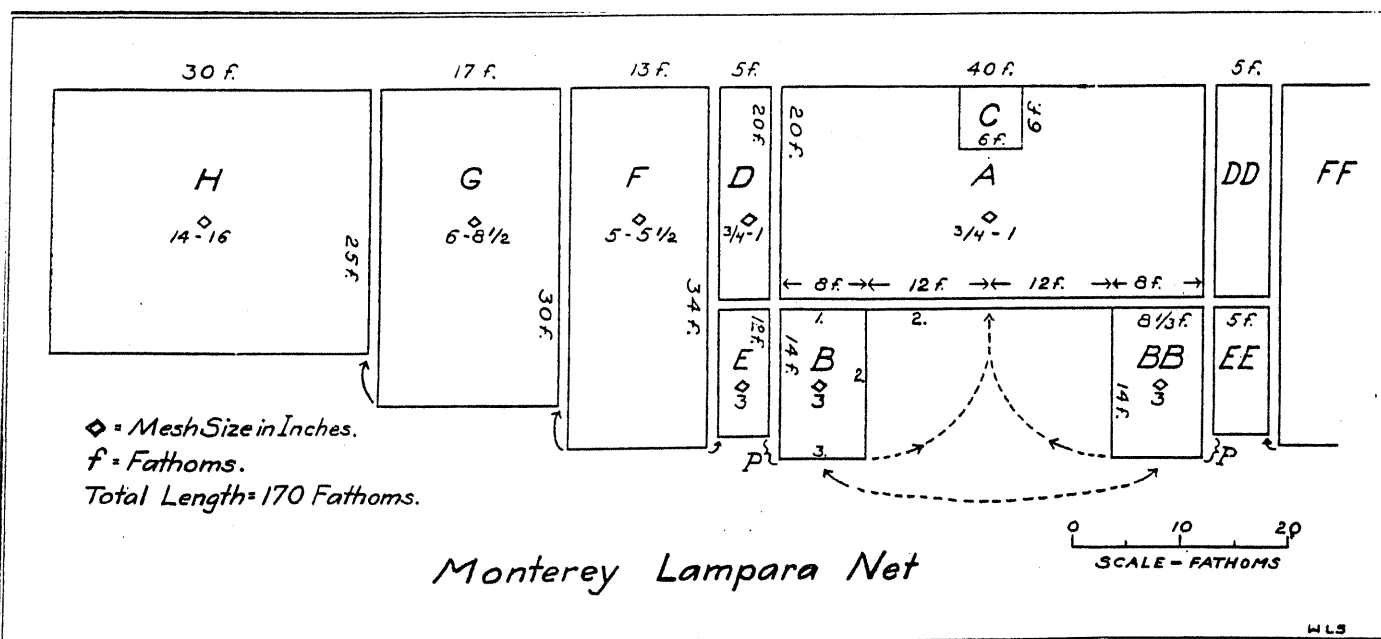
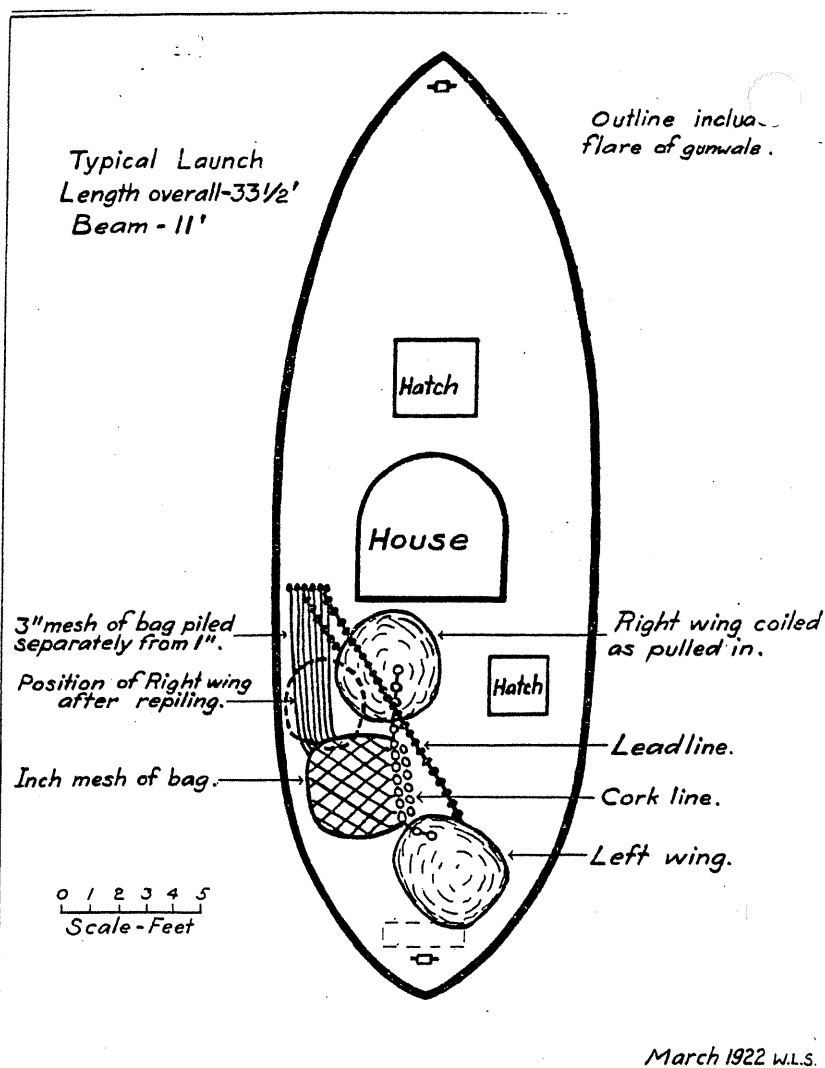
The California Legislature did nothing. It should be noted that the collapse of a major marine fishery was outside of anyone's experience. Of course, the fishermen and half of the scientists were on one side and only the biologists from the California Department of Fish and Game were on the other side. The California Legislature established a pattern that they were to follow for many of California's fisheries, instead of regulating the sardine fishery they decided to study it. By the early 1960s it was all over. The cold ocean returned and Cannery Row in Monterey was well on its way to becoming a legend. In June 1967, sixteen years after the collapse of the sardine fishery in Monterey Bay, the California Legislature closed the directed sardine fishery in California.

The ultimate reason that the sardine fishery collapsed is that the California Legislature failed to adequately protect the resource. Even long after the collapse, when biologists from the California Department of Fish and Game finally persuaded the Legislature to do something, they only passed a partial solution. When they "closed" the sardine fishery in 1966 the Legislature included a provision that allowed 15 percent of any fish landing to be sardines. So to land 5 tons of sardines, that were valued at \$500-\$1,000 per ton, all a fisherman had to do was catch 30 tons of anchovy or jack mackerel that were valued at \$32-\$60 per ton. Then in 1969 the legislature liberalized the regulations further; allowing a directed, 250 ton per year dead bait fishery. A moratorium on the sardine fishery was finally achieved in 1974, twenty-three years after the Monterey Bay sardine fishery collapsed.

In 1934 the biomass of the California sardine stock was over 4,000,000 tons (about 32 billion fish). In 1966 the biomass was about 4,000 tons, one tenth of one percent of its peak biomass. Population estimates are not available for the sardine

from 1966-1982 and it is likely that we will never know how low the stock level was at the end of fishing in 1974. In 1975 sea surface temperatures in the California Current reached the coldest levels for which we have good records. Then in 1976-77 the oceanic climate changed again and an extended warm period began. The best guess is that the California sardine population was between a couple of hundred tons and a couple of thousand tons when the warm water returned. The warm period continued through the 1980s and 1990s and it included several extensive El Niño events. The sardine fishery remained closed during the late 1970s and by the early 1980s small numbers of sardines were again seen in southern and central California. A minor and very tightly regulated California fishery was allowed in the late 1980s and by 1990 the combined California and Mexican catch increased to 14,000 tons. By 1997 the estimated biomass exceeded 1 million tons and the combined total landings by the regulated California fishery and the unregulated Mexican fishery exceeded 110,000 tons.

It is now mid-February 2000, 50 degree surface temperatures are once again just north of the California-Oregon border and the early signs of a return to a pattern of cold temperatures in the California Current are evident.



CALIFORNIA WETFISH PRODUCERS ASSOCIATION

2194 SIGNAL PLACE
SAN PEDRO, CA 90731

SEPTEMBER 5, 2002

SARDINE ALLOCATION DISCUSSION PAPER

Prepared by DB Pleschner-Steele
<dpleesch@earthlink.net>

VANESSA DELUCA
STATE FISH
COMPANY

JOHN CAR
TRI-MARINE FISH
CO.

PETE GUGLIELMO
SOUTHERN CA
SEAFOOD

FRANK TOMICH
TOMICH BROS.
SEAFOOD

PETER DIVONA
CRS / STANDARD
SEAFOOD

JOE BURCH
OCEAN GEM
SEAFOOD

DIVERGENT VIEWS EXIST BETWEEN PACIFIC NORTHWEST AND CALIFORNIA INTERESTS ENGAGED IN THE PACIFIC SARDINE FISHERY. THIS PAPER PROVIDES A DISCUSSION OF ALLOCATION OPTIONS IDENTIFIED BY THE COASTAL PELAGIC SPECIES ADVISORY SUB-PANEL AT THE JUNE 2002 MEETING OF THE CPSAS, COMBINING BOTH VIEWPOINTS.

IN POINT-COUNTER POINT FORMAT, UTILIZING DIFFERENT FONTS, THIS PAPER WILL QUOTE STATEMENTS PREPARED BY HEATHER MUNRO IN HER DRAFT SARDINE ALLOCATION DISCUSSION PAPER, FOLLOWED BY COMMENTS OF THE CALIFORNIA WETFISH PRODUCERS ASSOCIATION.

THIS PAPER IS PREPARED FOR CONSIDERATION BY THE CPSAS, COASTAL PELAGIC SPECIES MANAGEMENT TEAM (CPSMT) AND THE PACIFIC FISHERY MANAGEMENT COUNCIL.

TOPICS INCLUDED IN THIS PAPER:

1. HISTORICAL BACKGROUND OF THE SARDINE FISHERY
2. REVIEW OF CURRENT FMP ALLOCATION AND HARVEST GUIDELINES
3. RECENT DEVELOPMENTS IN THE SARDINE FISHERY
4. REVIEW OF CURRENT ALLOCATION CONFLICT
5. DISCUSSION OF FUTURE ALLOCATION OPTIONS
6. TABLE OF LANDINGS BY AREA, MONTH AND YEAR, 1995-2002
7. TABLE OF ANNUAL LANDINGS - HISTORICAL FISHERY 1916-1968

1. HISTORICAL BACKGROUND:

AT ITS HEIGHT IN THE 1930S AND '40S, THE PACIFIC SARDINE FISHERY WAS THE LARGEST FISHERY IN NORTH AMERICA. CALIFORNIA'S SARDINE INDUSTRY HARVESTED AND PROCESSED ABOUT 97 PERCENT OF THE U.S. SARDINE CATCH IN THE HISTORIC SARDINE FISHERY, 1916-1968. OREGON AND WASHINGTON COMBINED ACCOUNTED FOR 3 PERCENT OF TOTAL U.S. LANDINGS DURING THEIR PERIOD OF ACTIVITY—1935-36 TO 1948-49. THEN SARDINES DISAPPEARED: FIRST FROM THE PACIFIC NORTHWEST, THEN FROM MONTEREY, AND LATER, FROM SOUTHERN CALIFORNIA.

SCIENTISTS HAVE SINCE DISCOVERED THAT SARDINE ABUNDANCE IS CYCLICAL, PEAKING DURING WARM-WATER OCEANIC CYCLES. THE OCEAN ENTERED A COLD-WATER CYCLE IN THE LATE 1940S. THE SARDINE FISHERY COLLAPSED IN THE 1950S AND WAS CLOSED FROM THE EARLY 1970S UNTIL 1989. LARGE-SCALE OCEANIC CYCLES (TERMED PACIFIC DECADEAL OSCILLATION OR PDO) TYPICALLY EXTEND ABOUT 30 YEARS; A WARM-WATER CYCLE AGAIN TRANSFORMED THE OCEAN BEGINNING IN THE MID-1970S. THE SARDINE RESOURCE EXPANDED IN THE ENSUING YEARS, GROWING AT AN ANNUAL RATE ESTIMATED AT 30 PERCENT.

THE CA LEGISLATURE APPROVED A 1,000 TON HARVEST FOR CALIFORNIA IN 1989, WHEN BIOLOGISTS ESTIMATED THE SPAWNING BIOMASS EXCEEDED 20,000 TONS. SHORTLY AFTER THE FISHERY REOPENED, MONTEREY PROCESSORS APPEALED TO THE DEPARTMENT OF FISH AND GAME AND CDFG GRANTED AN ALLOCATION OF ONE THIRD OF THE QUOTA TO ENSURE MONTEREY'S ACCESS TO FISH LATER IN THE YEAR, WHEN SARDINES RETURNED FROM THEIR NORTHERLY MIGRATION AS LARGER FISH. ON OCTOBER 15TH OF EACH YEAR, ANY UNUSED QUOTA WAS TOTALED AND DIVIDED 50/50 TO NORTHERN AND SOUTHERN AREAS. THE LINE BETWEEN NORTHERN AND SOUTHERN CA FISHERIES WAS ESTABLISHED AT PT. PIEDRAS BLANCAS.

FISHERY SCIENTISTS DECLARED THE PACIFIC SARDINE RESOURCE "FULLY RECOVERED" IN 1998, WITH SPAWNING BIOMASS ESTIMATED AT MORE THAN ONE MILLION TONS. (THE HISTORIC BIOMASS WAS ESTIMATED AT ABOUT FOUR MILLION TONS.)

2. REVIEW OF CPS FMP ALLOCATION AND HARVEST GUIDELINES

FOLLOWING PUBLICATION OF THE FINAL RULE IN DECEMBER 1999, THE PACIFIC SARDINE FISHERY HAS BEEN REGULATED UNDER THE FEDERAL COASTAL PELAGIC SPECIES FISHERY MANAGEMENT PLAN (CPS FMP). UNDER THE FMP, CALIFORNIA'S CPS FISHERY IS MANAGED UNDER A LIMITED ENTRY PROGRAM, WITH A NORTHERN DEMARCATION LINE AT PT. ARENA IN NORTHERN CA. THE COAST-WIDE BIOMASS IS EXTRAPOLATED FROM SPAWNING STOCK SURVEYS CONDUCTED ALMOST EXCLUSIVELY IN THE SOUTHERN CALIFORNIA BIGHT. THE HARVEST GUIDELINE (HG) IS ALSO BASED PRIMARILY ON SOUTHERN CA SPAWNING BIOMASS SURVEYS.

AT THE TIME CALIFORNIA'S SARDINE FISHERY CAME UNDER FEDERAL MANAGEMENT, FISHERY MANAGERS DID NOT ENVISION A SARDINE FISHERY IN THE PACIFIC NORTHWEST. WHEN AMENDMENT 8 WAS DRAFTED IN 1998, THE CPS PLAN DEVELOPMENT TEAM AND CPS ADVISORY SUB-PANEL ADOPTED THE TRADITIONAL HARVEST STRATEGY APPROVED BY CDFG, ALLOCATING ONE THIRD OF THE HARVEST GUIDELINE (QUOTA) TO NORTHERN CALIFORNIA (MONTEREY) AND TWO-THIRDS TO SOUTHERN CALIFORNIA. HOWEVER, THE FEDERAL PLAN EXTENDED THE NORTHERN ALLOCATION LINE TO THE CANADIAN BORDER, INCLUDING OREGON AND WASHINGTON IN ADDITION TO MONTEREY.

BY 2000, HOWEVER, "OPEN ACCESS" FISHERIES HAD EMERGED IN THE PACIFIC NORTHWEST (P.N.W.), AND THIS "NEW" SARDINE INDUSTRY HAS EXPANDED RAPIDLY. THE P.N.W SARDINE HARVEST HAS GROWN FROM ONE PERCENT (854 MT) OF THE U.S. PACIFIC SARDINE CATCH IN 1999 TO APPROXIMATELY 47 PERCENT (APPROX. 30,000 MT) THROUGH AUGUST 2002. THIS EXPANSION HAS OCCURRED IN THE VIRTUAL ABSENCE OF BASELINE RESEARCH ON P.N.W. SARDINE STOCKS.

(NOTE: THE PRELIMINARY 2002 HARVEST PERCENTAGE RATIO IS MISLEADING, IN THAT FISH WERE NOT AVAILABLE TO MONTEREY EARLY IN THE SEASON, AND SOUTHERN CALIFORNIA WAS PREEMPTED FROM FISHING THROUGH MUCH OF THE YEAR DUE TO MARKET RESTRICTIONS: DEPARTMENT OF HEALTH SERVICES PROHIBITED SALE OF SARDINES FOR HUMAN CONSUMPTION AND PET FOOD AFTER DOMOIC ACID LEVELS EXCEEDED 20PPM, THE ACTION LIMIT; FURTHER, A FINDING OF TRACE VHS VIRUS IN CA SARDINES PRECIPITATED CLOSURE OF THE AUSTRALIAN BAIT MARKET FOR VIRTUALLY THE ENTIRE SPRING-SUMMER SEASON. MARKETS REOPENED IN EARLY SEPTEMBER AND THE SOUTHERN CA FISHERY HAS BEGUN TO "MAKE UP FOR LOST TIME." HARVEST ACTIVITY USUALLY INCREASES IN THE FALL IN THE MONTEREY FISHERY.)

CPS FMP AMENDMENT 8 LANGUAGE PROVIDES THE FOLLOWING GUIDELINES REGARDING ALLOCATION:

5.2 NORTH-SOUTH ALLOCATION FOR DIRECTED FISHERY

THIS FMP AUTHORIZES ALLOCATIONS OF PACIFIC SARDINE HARVEST GUIDELINE TO PARTICIPANTS BY NORTHERN AND SOUTHERN AREAS (DEFINED BELOW). NOTHING IN THIS FMP PRECLUDES ADDITIONAL ALLOCATIONS BASED ON OTHER GEOGRAPHIC AREAS OR OTHER FACTORS DEVELOPED UNDER THE AUTHORITY OF THIS FMP.

5.2.1 DEFINITION OF NORTHERN AND SOUTHERN FISHERY SEGMENT

THE DIVISION BETWEEN NORTHERN AND SOUTHERN AREAS FOR THE U.S. PACIFIC SARDINE FISHERY IS POINT PIEDRAS BLANCAS (35°40' N LATITUDE). LANDINGS (OR CATCHES IF THEIR LOCATION IS KNOWN) NORTH OF POINT PIEDRAS BLANCAS AND SOUTH OF 39° N LATITUDE (POINT ARENA) APPLY TO THE NORTHERN AREA. LANDINGS (OR CATCHES IF THEIR LOCATION IS KNOWN) SOUTH OF POINT PIEDRAS BLANCAS APPLY TO THE SOUTHERN AREA.

5.2.2 FORMULAS FOR ALLOCATING PACIFIC SARDINE

THE NORTHERN AREA ALLOCATION IS 33% OF THE PACIFIC SARDINE HARVEST GUIDELINE, AND THE SOUTHERN AREA ALLOCATION IS 66% OF THE PACIFIC SARDINE HARVEST GUIDELINE. NINE MONTHS AFTER THE START OF THE FISHING SEASON, ANY UNCAUGHT PORTION OF THE HARVEST GUIDELINE WILL BE TOTALED AND REALLOCATED WITH 50% OF THE TOTAL ALLOCATED TO THE NORTHERN AREA AND 50% OF THE TOTAL ALLOCATED TO THE SOUTHERN FISHERY AREA. REALLOCATION WILL BE CARRIED OUT BY THE NMFS REGIONAL ADMINISTRATOR AS AN AUTOMATIC MEASURE AS DESCRIBED IN SECTION 2.1.

THE FINAL RULE PUBLISHED IN THE FEDERAL REGISTER ON DECEMBER 15, 1999 FURTHER DEFINED THE SUB-AREAS:

SUB-AREA A COVERS THAT PORTION OF THE EEZ BETWEEN THE U.S.-CANADA PROVISIONAL INTERNATIONAL BOUNDARY AND PT. PIEDRAS BLANCAS, CALIFORNIA (35° 40'00" N. LATITUDE); SUB-AREA B COVERS THAT PORTION OF THE EEZ BETWEEN PT. PIEDRAS BLANCAS, CALIFORNIA, AND THE U.S.-MEXICO INTERNATIONAL BOUNDARY

HARVEST GUIDELINE FOR THE 2002 SEASON

THE PACIFIC SARDINE FISHING SEASON BEGINS ON JANUARY 1 AND ENDS ON DECEMBER 31, OR WHEN THE HARVEST GUIDELINE IS REACHED.

IN 2002, THE COAST-WIDE HARVEST GUIDELINE FOR THE PACIFIC SARDINE FISHERY WAS 118,442 METRIC TONS (MT). THE NORTHERN ALLOCATION WAS SET AT 39,481 MT; THE SOUTHERN ALLOCATION WAS 78,961 MT. NINE MONTHS AFTER THE START OF THE FISHERY, ON OCTOBER 1ST, THE FMP AUTHORIZES THE NMFS REGIONAL ADMINISTRATOR TO TOTAL ALL UNUSED QUOTA FROM BOTH AREAS AND REALLOCATE 50% TO THE NORTHERN FISHERY AND 50% TO THE SOUTHERN FISHERY. REALLOCATION IS AN AUTOMATIC ACTION PROVIDED IN THE FMP TO HELP ENSURE THAT THE OPTIMUM YIELD WILL BE ACHIEVED. (FEDERAL REGISTER, DECEMBER 27, 2000)

3. RECENT DEVELOPMENTS IN THE SARDINE FISHERY

(NOTE: THE FOLLOWING SECTION IS QUOTED FROM HEATHER MUNRO'S DISCUSSION DRAFT)

In 1999 Pacific sardine became available off the coasts of Oregon and Washington and since that time commercial fisheries have taken place off these states. These fisheries continue to expand as availability has remained constant. At this point, both Oregon and Washington State are managing their fisheries separately. However, all fish landed into either state is subtracted from the coast-wide federal harvest guideline. Fisheries in both Washington and Oregon have typically begun in June when the fish become available to the fishery.

The following table summarizes the landings in both states from 1999 through the present.

YEAR	Oregon Landings	Washington Landings	Total
1999	775.7 mt	0	775.7 mt
2000	9,524 mt	4,791 mt	14,315 mt
2001	12,780 mt	11,127 mt	23,907 mt
2002	17,941 mt*	12,000 mt**	29,941 mt

- preliminary data as of August 31st, 2002
- ** preliminary data as of August 31st, 2002 (NOTE: WA LANDINGS ARE ESTIMATED.)

Oregon

Oregon's fishery is managed under the Developmental Fisheries Program. While Oregon does not place a cap on the amount of fish that can be caught, the number of permits that may be issued is limited. For 2002 twenty permits were issued.

Washington

Washington's fishery is managed under regulations for a trial commercial fishery. These regulations prevent the state from limiting participation in the fishery through number of permits issued. However, the regulations do allow the state to place a cap on the amount of fish that may be landed. Beginning in 2001, the state implemented their own "harvest guideline" of 15,000 metric tons. This number was originally computed by taking approximately one-third of the northern allocation of the coast-wide quota (44,912 mt in 2001). For 2002 the state continued the harvest guideline of 15,000 mt.

(CWPA NOTE: SOME MEMBERS OF CALIFORNIA'S FISHING INDUSTRY QUESTION THE LEGALITY OF ACTIONS BY P.NW STATES ENCOURAGING EXPANSION OF A FEDERALLY MANAGED FISHERY, PARTICULARLY CONSIDERING THE LACK OF FEDERAL REGULATIONS GOVERNING SUCH OPERATION AND THE ABSENCE OF RESEARCH ON P.NW. SARDINE STOCKS. THEY ARGUE THAT CA'S FISHERY WAS NOT ALLOWED TO EXPAND WITHOUT BASELINE RESEARCH ON CA SARDINE STOCKS. IN FACT, CA'S WETFISH INDUSTRY HAS CONTRIBUTED MILLIONS OF DOLLARS TO THE STATE, AND HAS COOPERATED TO EXPAND SURVEYS OF SPAWNING BIOMASS IN CA. TO DATE P.NW HAS INVESTED LITTLE TIME OR MONEY IN RESEARCH ON P.NW SARDINE STOCKS. EXPANSION WITHOUT KNOWLEDGE JEOPARDIZES THE FUTURE OF THE RESOURCE AS WELL AS THE TRADITIONAL FISHERY IN CA.)

4. REVIEW OF CURRENT ALLOCATION CONFLICT

(NOTE: THE FOLLOWING SECTION IS QUOTED FROM HEATHER MUNRO'S DISCUSSION DRAFT)

Problems Associated with Current Allocation System

During the year 2000, concerns were raised by the State of Oregon that perhaps the northern California fishery would preclude the Oregon fishery from taking place. The fear was that Monterey fishermen would catch the available northern allocation before Oregon fishermen had access to the fish on the Oregon fishing grounds. At that time, the Council directed the Team to analyze whether or not this potential problem existed. The Team did the analysis and presented its findings to the Council at their June meeting. The Team discovered that the exact opposite situation was potentially more likely than the one Oregon was concerned with. Historically, when there was sardine fishing in Oregon (in the 1940's) the fish were available to the fishery beginning in late Spring and early Summer. Sardine generally do not become available to the Monterey fishery until well into the Fall. Depending on conditions and markets there was the potential that Monterey fishermen could be precluded from fishing if the Oregon and Washington fisheries caught the available northern quota prior to fish showing up in Monterey Bay.

In November of 2000 and April of 2001 the CPSAS made recommendations to the Council to implement changes in the allocation system that would alleviate unnecessary allocation conflicts in the future. At both meetings the Council declined to act preferring instead to wait and see what fisheries developed in Washington and Oregon and what problems may arise. [1]

(SEE CWPA NOTES 1, 2 AND 3 FOLLOWING THIS SECTION.)

For the 2002 season an allocation conflict is looming. As of August 31st in Oregon and Washington, 29,941 metric tons have been landed into Oregon and Washington ports. Combined with the 4,177 metric tons landed into Monterey, 34,118 metric tons total have been landed against the northern allocation amount of 39,481 mt, or just over 86% of the available allocation. These

Oregon

Oregon's fishery is managed under the Developmental Fisheries Program. While Oregon does not place a cap on the amount of fish that can be caught, the number of permits that may be issued is limited. For 2002 twenty permits were issued.

Washington

Washington's fishery is managed under regulations for a trial commercial fishery. These regulations prevent the state from limiting participation in the fishery through number of permits issued. However, the regulations do allow the state to place a cap on the amount of fish that may be landed. Beginning in 2001, the state implemented their own "harvest guideline" of 15,000 metric tons. This number was originally computed by taking approximately one-third of the northern allocation of the coast-wide quota (44,912 mt in 2001). For 2002 the state continued the harvest guideline of 15,000 mt.

(CWPA NOTE: SOME MEMBERS OF CALIFORNIA'S FISHING INDUSTRY QUESTION THE LEGALITY OF ACTIONS BY P.NW STATES ENCOURAGING EXPANSION OF A FEDERALLY MANAGED FISHERY, PARTICULARLY CONSIDERING THE LACK OF FEDERAL REGULATIONS GOVERNING SUCH OPERATION AND THE ABSENCE OF RESEARCH ON P.NW. SARDINE STOCKS. THEY ARGUE THAT CA'S FISHERY WAS NOT ALLOWED TO EXPAND WITHOUT BASELINE RESEARCH ON CA SARDINE STOCKS. IN FACT, CA'S WETFISH INDUSTRY HAS CONTRIBUTED MILLIONS OF DOLLARS TO THE STATE, AND HAS COOPERATED TO EXPAND SURVEYS OF SPAWNING BIOMASS IN CA. TO DATE P.NW HAS INVESTED LITTLE TIME OR MONEY IN RESEARCH ON P.NW SARDINE STOCKS. EXPANSION WITHOUT KNOWLEDGE JEOPARDIZES THE FUTURE OF THE RESOURCE AS WELL AS THE TRADITIONAL FISHERY IN CA.)

4. REVIEW OF CURRENT ALLOCATION CONFLICT

(NOTE: THE FOLLOWING SECTION IS QUOTED FROM HEATHER MUNRO'S DISCUSSION DRAFT)

Problems Associated with Current Allocation System

During the year 2000, concerns were raised by the State of Oregon that perhaps the northern California fishery would preclude the Oregon fishery from taking place. The fear was that Monterey fishermen would catch the available northern allocation before Oregon fishermen had access to the fish on the Oregon fishing grounds. At that time, the Council directed the Team to analyze whether or not this potential problem existed. The Team did the analysis and presented its findings to the Council at their June meeting. The Team discovered that the exact opposite situation was potentially more likely than the one Oregon was concerned with. Historically, when there was sardine fishing in Oregon (in the 1940's) the fish were available to the fishery beginning in late Spring and early Summer. Sardine generally do not become available to the Monterey fishery until well into the Fall. Depending on conditions and markets there was the potential that Monterey fishermen could be precluded from fishing if the Oregon and Washington fisheries caught the available northern quota prior to fish showing up in Monterey Bay.

In November of 2000 and April of 2001 the CPSAS made recommendations to the Council to implement changes in the allocation system that would alleviate unnecessary allocation conflicts in the future. At both meetings the Council declined to act preferring instead to wait and see what fisheries developed in Washington and Oregon and what problems may arise. [1]

(SEE CWPA NOTES 1, 2 AND 3 FOLLOWING THIS SECTION.)

For the 2002 season an allocation conflict is looming. As of August 31st in Oregon and Washington, 29,941 metric tons have been landed into Oregon and Washington ports. Combined with the 4,177 metric tons landed into Monterey, 34,118 metric tons total have been landed against the northern allocation amount of 39,481 mt, or just over 86% of the available allocation. These

numbers are also preliminary and will undoubtedly increase as outstanding fish tickets are calculated. Monterey landings are expected to increase steadily as market quality sardine began showing up in the bay in large quantities on August 12th. The current rate of fishing 4-5,000 mt per week in the three areas [2] will ensure a fishery that ends shortly after the beginning of September, perhaps within a week. Through August 29th, southern California has landed 32,933 mt of the southern allocation of 78,961 mt, or 42% of the southern allocation [3]. It is very likely that the northern fishery will be closed prior to October 1st, when all unused portions of the coast-wide harvest guideline are re-allocated 50/50 to both areas.

CWPA NOTES:

[1] THE NOVEMBER 2000 SUPPLEMENTAL CPSAS REPORT NOTED, "...THE MAJORITY OF THE PANEL BELIEVES THAT A COAST-WIDE QUOTA...WOULD BETTER SERVE ALL PARTICIPANTS OF THE FISHERY." SOUTHERN CA REPRESENTATIVES WERE (AND CONTINUE TO BE) OPPOSED TO THIS RECOMMENDATION, BUT THEY WERE OUTNUMBERED BY MEMBERS REPRESENTING NORTHERN INTERESTS. THIS VOTE CLEARLY ILLUSTRATES THE NEED FOR A BALANCE OF INTERESTS ON THE SUB-PANEL, INCLUDING THE SOUTHERN CALIFORNIA PROCESSING SECTOR.

THE APRIL 2001 CPSAS RECOMMENDATION WAS TO CHANGE THE REDISTRIBUTION DATE FROM THE 9TH TO THE 7TH MONTH. AGAIN, SOUTHERN CA PROCESSING INTERESTS WERE NOT REPRESENTED. THEY OPPOSE REALLOCATING UNUSED QUOTA PRIOR TO THE CURRENT DATE OF OCTOBER 1 BECAUSE SEPTEMBER IS NORMALLY A STRONG HARVEST MONTH FOR SARDINES IN SOUTHERN CA. CWPA MEMBERS ARE GRATEFUL THAT THE PFMC DECLINED TO ACT ON THESE RECOMMENDATIONS.

[2] AS STATED IN THE CWPA LETTER TO MR. ROD MCINNIS, COMMENTING ON THE EMERGENCY REQUEST BY NORTHERN INTERESTS FOR AN EMERGENCY REALLOCATION IN 2002 PRIOR TO OCTOBER 1, "WE FEEL THAT THE PROJECTIONS GIVEN...ARE VERY OPTIMISTIC, AND PERHAPS UNREALISTIC..." THIS COMMENT PERTAINS AS WELL TO ESTIMATES OF FISHING RATES, CONSIDERING THAT P.NW LANDINGS BEGAN TO DECLINE BY THE LATTER PART OF AUGUST, AS THEY NORMALLY DO, AND THE P.NW. FISHERY IS USUALLY "WEATHERED-OUT" BY THE END OF SEPTEMBER.

[3] AS NOTED EARLIER, SOUTHERN CALIFORNIA'S SARDINE FISHERY WAS SEVERELY RESTRICTED IN MUCH OF 2002 DUE TO MARKET CLOSURES CAUSED BY DOMOIC ACID AND TRACE VHS VIRUS.

Landings vs. allocation since implementation of CPS Plan

	Southern Area (So. California)			Northern Area (No. CA, OR & WA)		
Year	landings	allocation	percent of allocation caught	landings	allocation	percent of allocation caught
2000	42,296 mt	124,527 mt	34%	20,895 mt	62,264 mt	36%
2001	44,708 mt	89,825 mt	50%	31,009 mt	44,912 mt	69%
2002	32,933 mt*	78,961 mt	42%	34,118 mt**	39,418 mt	86%

*through August 29th

** through August 31st

CWPA NOTE: THIS TABLE ILLUSTRATES THE RAPID EXPANSION OF THE HARVEST OF MATURE SPAWNING STOCKS IN THE P.NW., DESPITE THE VIRTUAL LACK OF KNOWLEDGE OF STOCK COMPOSITION, SIZE OF OVER-WINTERING BIOMASS, IF ANY, OR RELATIONSHIP TO SPAWNING STOCKS IN SOUTHERN CA.

BEYOND ALLOCATION, THE LARGER ISSUE IS – WHAT IS THE IMPACT OF INCREASED HARVESTING IN THE PACIFIC NORTHWEST ON SARDINE SPAWNING BIOMASS?

—IS THIS HARVEST REMOVING SPAWNERS THAT ARE ESSENTIAL COMPONENTS OF THE CA FISHERY?

—IS THERE AN OVER-WINTERING BIOMASS IN THE P.NW., OR PERHAPS A SEPARATE SUBSTOCK?

AT PRESENT BIOLOGISTS HAVE LITTLE KNOWLEDGE OF P.NW. SARDINE STOCKS, EXCEPT THAT THEY ARE PRIMARILY LARGE FISH. THE EXISTENCE OF AN OVER-WINTERING STOCK OR EVEN A SEPARATE SUBSTOCK ARE CRITICAL PIECES OF KNOWLEDGE ON WHICH TO DETERMINE A SUBQUOTA FOR THE REGION.

Sardine season and stock availability to geographic areas

The federal Pacific sardine season is set from January 1 to December 31st of each year, or until the quota is reached, at which time the coast-wide fishery would close. However, fish are available at different geographic areas at different times during the season. Sources report that sardines are generally available in southern California throughout the year, but that fishermen tend to switch over to squid fishing during the spring and summer months [4].

The following table lists months when the sardine are generally available to the various fisheries.

Area	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
So. CA	X	X	X	X	X	X	X	X	X	X	X	X
No. CA	X	X	X						X	X	X	X
OR						X	X	X	X	X (?)		
WA						X	X	X	X	X (?)		

CWPA NOTE:

[4] IN SOUTHERN CALIFORNIA THE SQUID FISHERY OPERATES PRIMARILY IN WINTER MONTHS, USUALLY BEGINNING IN LATE OCTOBER OR NOVEMBER AND EXTENDING THROUGH FEBRUARY. GENERALLY RELATIVELY LITTLE SQUID FISHING OCCURS IN S.CA. DURING SPRING AND SUMMER. THE MONTEREY SQUID FISHERY TAKES PLACE DURING SPRING AND SUMMER MONTHS. THE CPS FLEET GENERALLY FISHES FOR THE MOST PROFITABLE CPS SPECIES, ACCORDING TO MARKET DEMAND AND MARKET ORDER. FLEXIBILITY TO SWITCH BETWEEN FISHERIES IS ESSENTIAL FOR ECONOMIC STABILITY.

ACCORDING TO MONTHLY LANDING STATISTICS FROM THE P.NW SARDINE FISHERY, HARVESTING IS USUALLY CURTAILED BY WEATHER BY THE END OF SEPTEMBER.

5. DISCUSSION OF FUTURE ALLOCATION OPTIONS

AT THE JUNE 2002 CPSAS MEETING, THE FOLLOWING OPTIONS WERE IDENTIFIED FOR DISCUSSION DURING THE SEPTEMBER MEETING. FOR THIS SECTION, THE NARRATIVE PROVIDED IN HEATHER MUNRO'S DISCUSSION DRAFT WILL BE QUOTED, FOLLOWED BY COMMENTS AND ANALYSIS BY CWPA IN BOLDFACE TYPE.

THE LIST PROVIDED IN HEATHER MUNRO'S DISCUSSION DRAFT INCLUDED:

- i. Status quo
- ii. Change current re-allocation date
- iii. Change current sub-area definitions
- iv. Change current allocation percentages
- v. Implement three sub-quotas vs. two
- vi. Eliminate allocation entirely

THE ORIGINAL LIST DEVELOPED AT THE MEETING ALSO INCLUDED THE OPTION TO CHANGE THE SEASON OPENING DATE. THIS OPTION WAS NOT INCLUDED IN MUNRO'S DISCUSSION DRAFT.

HOWEVER, CPS MANAGEMENT TEAM MEMBERS NOTE THAT IF A SEASON OPENING DATE WERE CONSIDERED PRIOR TO JANUARY (E.G. SEPTEMBER OR OCTOBER), THE TEAM WOULD NOT HAVE TIME TO ANALYZE HARVEST DATA PRIOR TO THE BEGINNING OF SEASON.

i. Status quo

The status quo option would retain the current system of allocation. On January 1st of each year, two-thirds of the annual harvest guideline would be allocated to Southern California while the remaining one-third would be allocated to Northern California, Oregon & Washington. Unused portion of the either allocation will be combined and split 50/50 between the two areas on October 1st of each year (nine months after the beginning of the season as outlined in the FMP).

Continued fishery expansion in Washington and Oregon is expected to occur. This expansion combined with relatively normal water temperatures in Monterey (the last three years have been La Nina years) will most likely provide for continued strong landings in the northern allocation zone. If the current allocation scheme remains in place, allocation conflicts will be exacerbated, as the northern allocation will be reached prior to October 1st, forcing a shut-down of operations in Monterey, Oregon & Washington until after the reallocation occurs.

CWPA COMMENT:

THIS ALLOCATION SCHEME GUIDED THE CA FISHERY PRIOR TO THE CPS FMP. (NOTE THAT THIS LINE WAS SET FOR POLITICAL / ALLOCATION PURPOSES IN THE CA FISHERY, NOT BASED ON BIOLOGY. THIS LINE WAS ADOPTED IN THE FEDERAL CPS FMP; AT THE TIME FISHERY MANAGERS DID NOT ENVISION A FISHERY DEVELOPING IN THE P.NW.

CWPA ACKNOWLEDGES A POTENTIAL PROBLEM EXISTS IF "OPEN ACCESS" FISHERIES IN OR AND WA EXPAND AND HARVEST THE NORTHERN ALLOCATION BEFORE MONTEREY/N.CA. HAS ACCESS TO FISH.

WE ALSO EXPRESS CONCERN OVER AUTHORIZING FURTHER EXPANSION OF P.NW FISHERY ABSENT EXPANDED SPAWNING BIOMASS SURVEYS AND BETTER KNOWLEDGE OF P.NW SARDINE STOCKS. FURTHER, WE NOTE AN INCREASING NUMBER OF SCIENTISTS BELIEVE THE OCEAN HAS ENTERED A COLD-WATER CYCLE, WHICH WILL LEAD TO NATURAL DECLINE IN SPAWNING BIOMASS, BEGINNING IN THE P.NW.

ANALYSIS:

RETAINING THE CURRENT ALLOCATION SCHEME WOULD REDUCE THE HG AVAILABLE TO NORTHERN FISHERY, INCLUDING P.NW (AS WELL AS SOUTHERN FISHERY) AS THE ESTIMATE OF SPAWNING BIOMASS DECLINES. POTENTIAL ALLOCATION CONFLICT BETWEEN P.NW AND MONTEREY WOULD INCREASE IF P.NW. INDUSTRY CAUGHT FISH PRIOR TO AVAILABILITY IN MONTEREY. AS THE COLD-WATER PDO CONTINUES, SARDINE ABUNDANCE WILL NATURALLY DECLINE IN P.NW, AS IT DID IN HISTORIC FISHERY. INCREASING HARVEST OF P.NW STOCKS AT THE BEGINNING OF A COLD-WATER CYCLE COULD HASTEN NATURAL DECLINE. DEPENDING ON RELATIONSHIP BETWEEN P.NW STOCKS AND SPAWNING STOCKS IN SOUTHERN CA, INCREASED P.NW HARVEST COULD ALSO NEGATIVELY IMPACT SPAWNING BIOMASS IN S.CA.

ii. Change current re-allocation date

Change the current reallocation date from nine months after the season begins to some time earlier in the year.

By reviewing the historical data available, this approach appears to alleviate some user conflicts. A major portion of southern California landings appear to occur during the first three months of the year. By implementing a reallocation date sooner than October 1st, a shut down in the northern area can be avoided, while still preserving enough fish for southern California to continue with their normal fishery, which data shows is steady through the end of the year. A proposal to change the current reallocation date to 7 months after the season begins had been presented to the Council and subsequently rejected.

CWPA COMMENT:

NORTHERN INTERESTS HAVE RECOMMENDED CHANGING THE HG REALLOCATION DATE SO IT FALLS EARLIER IN THE SEASON, E.G. AUGUST 1 OR SEPTEMBER 1 INSTEAD OF CURRENT DATE OF OCTOBER 1. THIS SOLUTION WAS PROPOSED BECAUSE THE P.NW FISHERY TYPICALLY DOES NOT OPERATE BY OCTOBER 1 DUE TO INCLEMENT WEATHER, THUS DOES NOT BENEFIT BY THE LATER ALLOCATION DATE. IN CONTRAST, MONTEREY'S PREFERRED HARVEST SEASON USUALLY BEGINS IN FALL, WHEN LARGE FISH RETURN FROM THEIR NORTHWARD MIGRATION.

CONTRADICTING MUNRO'S RATIONALE FOR THIS PROPOSAL, HOWEVER, LANDINGS DATA SHOW THE S.CA. SARDINE FISHERY TYPICALLY BEGINS ITS PEAK SEASON IN SEPTEMBER, CONTINUING LARGE LANDINGS THROUGH THE EARLY MONTHS OF THE FOLLOWING YEAR. SEPTEMBER IS USUALLY A STRONG HARVEST MONTH. THEREFORE S.CA. WETFISH INDUSTRY OPPOSES THIS EFFORT TO REMOVE HARVEST OPPORTUNITY OR REDUCE ALLOCATION PRIOR TO OCTOBER.

ANALYSIS:

MOVING THE REALLOCATION DATE TO AUGUST OR SEPTEMBER POTENTIALLY WOULD PROVIDE MORE FISH TO THE NORTHERN FISHERY, INCLUDING P.NW. INDUSTRY, ASSUMING HG IS LARGER THAN AVAILABLE MARKETS.

HOWEVER, PROVIDING MORE FISH TO THE P.NW FISHERY WITHOUT RESEARCH TO DETERMINE STOCK COMPOSITION OR RELATIONSHIP TO SOUTHERN SPAWNING BIOMASS COULD NEGATIVELY IMPACT THE RESOURCE, AS WELL AS THE SOUTHERN FISHERY.

AS HG DECLINES IN THE COLD-WATER OCEANIC CYCLE, REGIONAL ALLOCATION MAY BE SMALLER THAN AVAILABLE MARKETS, THUS ALLOCATION WOULD BE TAKEN AND NO REALLOCATION WOULD OCCUR.

iii. Change current sub-area definitions

Change the current sub-area definitions to include all of California as the southern area and Oregon and Washington as the northern area.

At the rate the fisheries are progressing in Oregon & Washington, this option will likely not solve the current problem. In 2002 landings from Oregon and Washington already amount to 74% of the northern allocation (as of August 31st in Oregon and August 24th in Washington).

CWPA COMMENT:

CHANGE ALLOCATION LINE (NOW PT. PIEDRAS BLANCAS, CONTINUED FROM TRADITIONAL CA FISHERY MANAGEMENT) TO MATCH THE LIMITED ENTRY LINE (PT. ARENA)

WHILE P.NW. AND MONTEREY FISHERIES BOTH HARVEST THE NORTHERN ALLOCATION, RAPID FISHERY EXPANSION IN THE P.NW. THREATENS MONTEREY'S ABILITY TO ACCESS FISH LATER IN THE FALL. MOVING THE ALLOCATION LINE NORTH TO MATCH THE LIMITED ENTRY LINE WOULD PROVIDE SEPARATE ALLOCATIONS TO OPEN ACCESS AND LIMITED ENTRY FISHERIES, POTENTIALLY ALLEVIATING THE ALLOCATION CONFLICT.

NOTE: UNLESS ALLOCATION PERCENTAGES ARE CHANGED AS WELL, THE POTENTIAL ALLOCATION CONFLICT WOULD SHIFT FROM P.NW VS. MONTEREY TO MONTEREY VS. S.CA. (THE ORIGINAL CONFLICT THAT PRECIPITATED ESTABLISHMENT OF THE LINE AT PT. PIEDRAS BLANCAS).

MUNRO'S DISCUSSION DRAFT FINDS THIS OPTION UNWORKABLE, PROJECTING CONTINUED EXPANSION OF THE P.NW. SARDINE FISHERY. HOWEVER, FURTHER EXPANSION WITHOUT BASELINE RESEARCH TO MEASURE THE EXTENT OF THE STOCK AND ITS RELATIONSHIP TO SOUTHERN SARDINES COULD HASTEN THE NATURAL DECLINE OF SARDINES AS THE OCEAN PROGRESSES INTO ITS COLD-WATER CYCLE. FURTHER, INCREASED HARVESTING OF MATURE P.NW. STOCKS COULD NEGATIVELY IMPACT THE SARDINE SPAWNING BIOMASS AS A WHOLE.

AS NOTED ABOVE, CWPA OPPOSES EXPANSION OF THE P.NW FISHERY UNTIL BASELINE RESEARCH IS CONDUCTED TO DETERMINE OVER-WINTERING SPAWNING BIOMASS IN THE AREA. FUTURE ALLOCATIONS TO THE P.NW FISHERY SHOULD BE BASED ON "LOCAL" SPAWNING BIOMASS ESTIMATES.

A COMBINATION OF OPTIONS, INCLUDING MOVING THE ALLOCATION LINE TO PT. ARENA AND ADJUSTING THE ALLOCATION PERCENTAGE BETWEEN REGIONAL FISHERIES, COULD ALLEVIATE THE CONFLICT.

MOVING THE ALLOCATION LINE TO PT. ARENA, PROVIDING SEPARATE SUBQUOTAS FOR LIMITED ENTRY AND OPEN ACCESS FISHERIES MAKES SENSE FROM MANAGEMENT STANDPOINT, AND MAKES PRACTICAL SENSE IF ACCOMPANIED BY A CHANGE IN ALLOCATION PERCENTAGE TO ACCOUNT FOR ADDITION OF THE MONTEREY HARVEST IN THE "SOUTHERN" ALLOCATION. (SEE DISCUSSION UNDER IV.)

ANALYSIS:

AS NOTED, MOVING THE ALLOCATION LINE NORTH TO PT. ARENA, PROVIDING SEPARATE ALLOCATIONS TO LIMITED ENTRY FISHERY IN CA AND "OPEN ACCESS" IN P.NW WOULD ALLEVIATE THE IMPACT OF OPEN ACCESS FISHERY EXPANSION ON MONTEREY. RESTORING A SUBALLOCATION BETWEEN MONTEREY AND S.CA. WOULD PROVIDE SEASONAL ACCESS TO FISH IN EACH AREA. IN ESSENCE, THIS WOULD RESULT IN A SEPARATE ALLOCATION FOR EACH REGIONAL FISHERY, WITH THE ALLOCATION LINE BETWEEN CA LIMITED ENTRY AND P.NW OPEN ACCESS FISHERIES MOVED NORTH TO PT. ARENA. (SEE 3 SUBQUOTA OPTION FOR FURTHER DISCUSSION.)

P.NW. REQUEST FOR INCREASED ALLOCATION IS BASED ON RECENT NORTHERN FISHERY EXPANSION COUPLED WITH UNUSED HG IN S.CA. ALTHOUGH S.CA. HAS NOT FILLED ITS ALLOCATION, THE SOUTHERN STOCK MAY BE DIFFERENT FROM THE NORTHERN STOCK HARVESTED IN P.NW. RESEARCH ON P.NW SARDINE STOCKS WHILE THEY ARE PRESENT LIKELY WILL INCREASE BOTH KNOWLEDGE OF RESOURCE AND BIOMASS ESTIMATE IN THE SHORT TERM, LEADING TO MORE ACCURATE HG PROJECTIONS. HOWEVER, AS SARDINE BIOMASS FOLLOWS ITS NATURAL DECLINE, HARVEST GUIDELINES WILL ALSO DECLINE. THE P.NW HARVEST WILL NOT BE SUSTAINABLE AT CURRENT RATE AS THE STOCK DECLINES FROM NORTH TO SOUTH. FURTHER EXPANSION IN P.NW. FISHERY MAY HASTEN DECLINE OF P.NW BIOMASS AND POSSIBLY NEGATIVELY IMPACT THE COAST-WIDE SARDINE RESOURCE.

iv. Change current allocation percentages

Change the current allocation percentages (2/3 to the south and 1/3 to the north). Options include a 50/50 split or a 2/3 for the north and 1/3 for the south.

CWPA COMMENT: A CHANGE IN ALLOCATION PERCENTAGE, COUPLED WITH OTHER OPTIONS, COULD ALLEVIATE THE ALLOCATION CONFLICT WITHIN CA. HOWEVER, IT IS CLEAR THAT P.NW INTERESTS ARE CAMPAIGNING TO INCREASE P.NW PORTION OF HG, NOTWITHSTANDING THE LACK OF RESEARCH ON P.NW SARDINE STOCKS. CWPA IS OPPOSED TO EXPANSION OF P.NW HARVEST UNTIL BASELINE RESEARCH MEASURES EXTENT OF P.NW. SPAWNING BIOMASS, PERCENT OVER-WINTERING, AND RELATIONSHIP TO SOUTHERN SARDINE STOCKS.

IN ADDITION TO MUNRO'S ALLOCATION OPTIONS, CWPA SUGGESTS THE FOLLOWING OPTIONS FOR REVISED ALLOCATION PERCENTAGES:

- [A] **BASED ON HISTORICAL PARTICIPATION:**
CONSIDERING U.S. LANDINGS IN HISTORIC SARDINE FISHERY, OR/WA HARVEST REPRESENTED 3%, CA ACCOUNTED FOR 97%.
REVISE ALLOCATION PERCENTAGES TO:
N (OPEN ACCESS FISHERIES) = 3% OF COASTWIDE US SARDINE HG
S (LIMITED ENTRY FISHERY, INCLUDING MONTEREY AND S.CA.) = 97% OF US SARDINE HG

ANALYSIS: THIS ALLOCATION, THE MOST CONSERVATIVE OPTION, LIKELY WOULD HAVE MINOR IMPACT ON THE SPAWNING BIOMASS; HOWEVER, THE SMALL HARVEST LEVEL WOULD NOT SATISFY P.NW FISHERY.

- [B] **BASED ON LATEST COMPLETE 3-YEAR AVERAGE HARVEST:**
COMBINED OR/WA HARVEST IN 3-YEAR PERIOD 1999-2001 EQUALED 38,791.54 MT (23,617.4 MT 2001; 14,319.3 MT 2000; 854.84 MT OR ONLY 1999) THE TOTAL WEST COAST SARDINE HARVEST DURING THAT TIME PERIOD WAS 210,594 MT.
REVISE ALLOCATION PERCENTAGES TO:
N (OPEN ACCESS FISHERIES) = 18% OF US SARDINE HG
S (CA LIMITED ENTRY FISHERY) = 82% OF US SARDINE HG

ANALYSIS: THE AVERAGE P.NW. HARVEST LEVEL WOULD RESULT IN P.NW. HARVEST BELOW CURRENT LEVEL; HOWEVER IN LIGHT OF CHANGING OCEANIC CYCLE AND PROJECTED DECLINE OF SARDINE STOCKS, EVEN AN AVERAGE OF RECENT ACTIVITY MAY NOT BE SUSTAINABLE EXCEPT IN THE SHORT TERM. IN THE ABSENCE OF RESEARCH TO MEASURE EXTENT OF SPAWNING BIOMASS IN P.NW AND ITS RELATIONSHIP TO RESOURCE AS A WHOLE, AUTHORIZING CONTINUED P.NW HARVEST AT A LEVEL REQUESTED BY INDUSTRY COULD HASTEN THE NATURAL DECLINE OF P.NW SARDINES, AND POTENTIALLY COULD NEGATIVELY IMPACT SOUTHERN SPAWNING BIOMASS AS WELL, PRECIPITATING A STEEP DECLINE OF THE RESOURCE.

- [C] **AVERAGE BASED ON HISTORIC PARTICIPATION PLUS RECENT YEAR HARVEST**
OR/WA HISTORIC LANDINGS = 3% OF TOTAL WEST COAST HARVEST. AVERAGE OF PAST THREE COMPLETE YEARS HARVEST = 18%. MIDPOINT = 11%.
REVISE ALLOCATION PERCENTAGES TO:
N (OPEN ACCESS FISHERIES) = 11% OF US SARDINE HG
S (CA LIMITED ENTRY FISHERY) = 89% OF US SARDINE HG

ANALYSIS: A HARVEST ALLOCATION REPRESENTING THE MIDPOINT BETWEEN HISTORIC AND RECENT AVERAGES WOULD RESULT IN A CONSERVATIVE HARVEST, LOWER THAN CURRENT LEVEL AND LOWER THAN DESIRED BY P.NW INDUSTRY, BUT PERHAPS SUFFICIENT TO SUSTAIN INDUSTRY UNTIL RESEARCH PROVIDES AN ACCURATE BIOMASS ESTIMATE AND HG FOR P.NW SARDINE POPULATION.

NOTE: YEAR 2002 LANDINGS WERE NOT FIGURED IN AVERAGES BECAUSE YEAR IS INCOMPLETE AND SOUTHERN CA HARVEST WAS RESTRICTED, DISTORTING PERCENTAGE TAKEN BY P.NW FISHERY.

v. Implement 3 sub-quotas

Implement a 3 sub-quota fishery based on available biomass in each geographic area. This option requires a significant increase in the current research program for Pacific sardine. (Munro's revised draft discussion included some background language suggested by CWPA.).

CWPA COMMENT: ESTABLISH THREE SUB-QUOTAS

BACKGROUND: HISTORICAL BIOLOGISTS THEORIZED THAT P.NW SARDINE STOCKS PERHAPS CONSTITUTED A SEPARATE FAR NORTHERN SUB-STOCK; HOWEVER, THE FISH DISAPPEARED BEFORE RESEARCH COULD BE ACCOMPLISHED. WITH THE RECOVERY OF THE SARDINE POPULATION COASTWIDE, ANOTHER OPPORTUNITY EXISTS TO SURVEY THE P.NW BIOMASS TO DETERMINE ITS RELATIONSHIP TO S.CA. STOCKS.

P.NW SARDINE STOCKS APPEAR DIFFERENT FROM STOCKS HARVESTED IN S.CA. ARE THESE FISH THE ADULT SPAWNERS THAT PROVIDE THE BIOMASS FOR THE TRADITIONAL CA FISHERY? ARE THEY A SEPARATE SUBSTOCK? THIS INFORMATION IS CURRENTLY UNKNOWN. THE RECENT RAPID EXPANSION OF THE SARDINE FISHERY IN OR AND WA EMPHASIZES THE NEED TO DO THIS RESEARCH ASAP.

ONE OPTION FOR SARDINE ALLOCATION IS TO ESTABLISH 3 SUB-QUOTAS TO PROVIDE HARVEST OPPORTUNITY FOR THE THREE DIFFERENT FISHERIES, ASSURING EACH AREA AN OPPORTUNITY TO HARVEST DURING REGIONAL WINDOWS OF SARDINE AVAILABILITY: P.NW IN SUMMER; MONTEREY IN FALL, AND S.CA. YEAR-ROUND.

P.NW HARVEST GUIDELINE (FOR OPEN ACCESS FISHERY IN OR AND WA) ULTIMATELY SHOULD BE BASED ON SURVEYS OF SPAWNING BIOMASS IN THE P.NW.

POSSIBLE INTERIM SOLUTION, WHILE RESEARCH IS UNDERWAY:
FISHERY SCIENTISTS EXPRESS CONFIDENCE IN STOCK ASSESSMENTS DEVELOPED FOR CA, BASED ON CALCOFI SURVEYS. MONTEREY AND S.CA. SUB-ALLOCATIONS COULD REMAIN 1/3-2/3 AS IN THE TRADITIONAL CA FISHERY, OR SET AT A PERCENTAGE REFLECTING PERFORMANCE AVERAGE (E.G. 21% MONTEREY, 79% S.CA. FOR 1995-2001 OR ROUNDED UP TO 25/75).

THE CURRENT COASTWIDE STOCK ASSESSMENT AND PROJECTION OF COASTWIDE BIOMASS / HG IS EXTRAPOLATED FROM CA DATA WITH A FAIR BIT OF UNCERTAINTY.

FOLLOWING PRECAUTIONARY PRINCIPLES MANDATED IN THE MAGNUSON ACT, IN THE ABSENCE OF DIRECT RESEARCH ON P.NW SARDINE SPAWNING STOCK(S), ESTABLISH 3 SUB-QUOTAS (FOLLOWING FORMULA IN IV[C]) :

P.NW SUB-ALLOCATION = 11% OF US HG

N.CA SUB-ALLOCATION = 25% OF REMAINING 89% HG

S.CA. SUB-ALLOCATION = 75% OF REMAINING 89% HG

(ALLOCATIONS WITHIN CA LIMITED ENTRY FISHERY WOULD BE DIVIDED AT PT. PIEDRAS BLANCAS, AS IN TRADITIONAL FISHERY)

REALLOCATION OF UNUSED HG WOULD OCCUR OCTOBER 1, AS IN CURRENT FMP.

THE P.NW ALLOCATION WOULD BE SUBJECT TO INCREASE BASED ON FINDINGS OF SPAWNING BIOMASS SURVEYS NORTH OF PT. ARENA.

IN ADDITION, SOME MONTEREY PROCESSORS HAVE BEEN ACTIVE IN THE P.NW FISHERY SINCE IT EMERGED IN 1999. IN 2002 THESE CA-BASED PROCESSORS LANDED APPROX. ONE THIRD OF THE TOTAL NORTHERN ALLOCATION IN P.NW. ALLOWING CA PROCESSORS TO DECLARE A PORTION OF THE MONTEREY HG FOR SUMMER HARVEST IN P.NW FISHERY WOULD HELP TO INCREASE THE TOTAL CATCH IN P.NW, BENEFITING LOCAL INDUSTRY, WHILE STILL RESERVING A PORTION OF THE MONTEREY HG FOR HARVEST LATER IN THE YEAR IN MONTEREY. (A PERCENTAGE OF THE MONTEREY ALLOCATION WOULD BE RESERVED FOR EXCLUSIVE USE IN MONTEREY, ASSURING FISH FOR INDUSTRY NOT INVOLVED IN P.NW AS WELL AS LATE FALL HARVEST.)

NOTE: ALSO SEE SUBQUOTA DISCUSSION UNDER #III AND VII.

ANALYSIS:

ESTABLISHING THREE SUBQUOTAS WOULD PROVIDE HARVEST OPPORTUNITY FOR ALL THREE REGIONS, ALLEVIATING DIRECT COMPETITION FOR A SINGLE ALLOCATION. THE INTERIM ALLOCATION OPTION WOULD PROVIDE A CONSERVATIVE HARVEST TO P.NW, WITH POTENTIAL FOR INCREASE BASED ON ACTIVITY IN P.NW OF MONTEREY INDUSTRY. MONTEREY INDUSTRY COULD DECIDE WHEN AND WHERE TO HARVEST FISH, MAXIMIZING THE VALUE OF THE RESOURCE. MONTEREY WOULD CONTROL ITS OWN ACTIVITY, THUS ENSURING ITS FALL HARVEST. THE P.NW FISHERY ALSO WOULD BE GUARANTEED A BASELINE HARVEST, PLUS THE OPPORTUNITY FOR ADDITIONAL FISH FROM THE MONTEREY ALLOCATION. SOUTHERN CA ALSO WOULD ALSO BE ASSURED ITS ALLOCATION FOR THE FIRST NINE MONTHS OF THE YEAR. ANY UNUSED SOUTHERN CA ALLOCATION (WHICH MAY CONSIST OF A DIFFERENT STOCK OF

FISH), WOULD BE REALLOCATED UNDER EXISTING FMP GUIDELINES, E.G. OCTOBER 1 TO 50/50 WITHIN LE FISHERY AND DEC. 1 TO OPEN HARVEST.

REALLOCATION ASSUMES THE P.NW FISHERY IS CLOSED BY WEATHER PRIOR TO OCTOBER 1; HOWEVER, CONSIDERING POSSIBLE REALLOCATION FROM UNUSED S.CA. QUOTA FOR LATE FALL HARVEST, MONTEREY COULD DECLARE A LARGER PERCENTAGE OF ITS ALLOCATION FOR SUMMER HARVEST IN P.NW.

OR AND WA HARVEST WOULD BE REDUCED FROM CURRENT LEVELS (ALTHOUGH WITH 118,000 TON HG, THE TOTAL ALLOCATED TO PNW PLUS MONTEREY'S ALLOCATION APPROACHES THE 2002 NORTHERN ALLOCATION).

HOWEVER, AS NOTED REPEATEDLY IN EARLIER SECTIONS, THE SARDINE BIOMASS IS EXPECTED TO DECLINE WITH THE ADVENT OF A COLD-WATER CYCLE, AND ALL HARVEST ALLOCATIONS WILL DECLINE. FOLLOWING THE HISTORIC PATTERN, THE SARDINE DECLINE WILL BE APPARENT FIRST IN THE P.NW, THUS THE CURRENT HARVEST LEVEL IS UNSUSTAINABLE.

vi. Eliminate allocation entirely

Initially the allocation was put in place to protect Monterey fishermen's access to fish while the quota was extremely low. Coast-wide harvest guidelines for sardine during recent years have been very large and the optimum yield for the fishery has not been close to being reached. Recent stock assessments continue to estimate a large biomass of Pacific sardine. The allocation as initially implemented is no longer appropriate. This option would eliminate the current allocation. If and when stock biomass begins to decline a different allocation scheme could be implemented to protect geographic regions if necessary. This allocation scheme could be based on historical and current participation in the fishery.

CWPA COMMENT:

ELIMINATE SUBALLOCATIONS – ONE COASTWIDE HG

RETAINING A JANUARY 1 START DATE, THIS OPTION WOULD ALLOW THE CA FISHERY TO BEGIN PRIOR TO P.NW SUMMER SEASON, HOWEVER THE ABSENCE OF ALLOCATION GUIDELINES WOULD ENCOURAGE A DERBY FISHERY MENTALITY, ALONG WITH FURTHER EXPANSION OF P.NW HARVEST WITHOUT BASELINE RESEARCH ON P.NW STOCKS.

MOREOVER, IN YEARS WITH LOW HG, THE RUSH TO FISH IN THE P.NW WOULD CREATE THE SAME CONFLICT AS CURRENTLY EXISTS BETWEEN SUMMER FISHERY IN P.NW AND FALL FISHERY IN MONTEREY. AS QUOTAS DECLINE, LANDINGS IN S.CA. COULD PREEMPT SUMMER FISHING IN THE P.NW.

MUNRO'S DISCUSSION DRAFT STATES THAT RECENT STOCK ASSESSMENTS CONTINUE TO ESTIMATE A LARGE BIOMASS OF SARDINES. THAT IS ONLY HALF THE STORY, HOWEVER. BIOMASS ESTIMATES AND HARVEST GUIDELINES HAVE DECLINED FOR THE PAST TWO SUCCESSIVE YEARS AND ARE EXPECTED TO DECLINE AGAIN THIS YEAR. IN ADDITION, THE THREE-YEAR AVERAGE WATER TEMPERATURE IS NEARING THE THRESHOLD THAT WILL TRIGGER A REDUCTION IN HARVEST RATE FROM 15% TO 5%. AN INCREASING NUMBER OF SCIENTISTS BELIEVE THE OCEAN HAS ENTERED A COLD-WATER PDO, CAUSING A NATURAL DECLINE FOR SARDINE STOCKS.

CWPA OPPOSES THIS OPTION. SOUTHERN CA WETFISH PRODUCERS DO NOT SUPPORT ANY ALLOCATION SCHEME THAT ENCOURAGES FURTHER EXPANSION OF THE P.NW FISHERY WITHOUT RESEARCH ON P.NW SPAWNING BIOMASS AND ITS RELATIONSHIP TO COASTWIDE SARDINE STOCK(S).

ANALYSIS: ELIMINATING SUBALLOCATIONS, ESTABLISHING ONE COASTWIDE HARVEST GUIDELINE, WOULD BENEFIT THE P.NW FISHERY BY REMOVING CONSTRAINTS ON HARVEST. HOWEVER, THE EXPANSION ENCOURAGED BY "WIDE OPEN" FISHING WOULD NOT BE SUSTAINABLE LONG TERM. FURTHER, INCREASED HARVESTING OF MATURE FISH FOUND IN THE P.NW. COULD HASTEN THE DISAPPEARANCE OF SARDINES IN THE P.NW, AND POSSIBLY COULD NEGATIVELY IMPACT CALIFORNIA SPAWNING STOCKS AS WELL, IF RESEARCH DETERMINES THAT P.NW STOCKS SUBSTANTIALLY CONTRIBUTE TO THE SOUTHERN CA SARDINE BIOMASS.

All options require an FMP amendment except status quo.

CWPA COMMENT:

CPS FMP SEC. 5.2 STATES, IN PART:

"NOTHING IN THIS FMP PRECLUDES ADDITIONAL ALLOCATIONS BASED ON OTHER GEOGRAPHIC AREAS OR OTHER FACTORS DEVELOPED UNDER THE AUTHORITY OF THIS FMP."

WE INTERPRET THIS TO MEAN THAT UNDER THE EXISTING FRAMEWORK, AUTHORITY EXISTS TO SET A SEPARATE ALLOCATION FOR PACIFIC NORTHWEST FISHERY, WITH DEMARCATION LINE SET AT PT. ARENA, THE LINE SEPARATING THE CA LIMITED ENTRY AND P.NW. "OPEN-ACCESS" FISHERIES.

(TABLES APPENDED)

ANALYSIS of SARDINE HARVEST TRENDS

Prepared by DB Pleschner
Rev. September 3, 2002

2002	N. CA.	%	S. CA.	%	Total CA.	%	OR	%	WA	%	TOTAL COAST
									(estimated)		
Jan	226.07		4,772.48		4,998.54	100%					4,998.54
Feb	1,120.22		7,668.72		8,788.94	100%					8,788.94
Mar	161.60		6,354.62		6,516.22	100%					6,516.22
Apr	64.42		5,144.11		5,206.58	100%					5,206.58
May	0.00		2,052.08		2,052.08	100%			0.00		2,052.08
Jun	0.00		514.66		514.66	15%	2,500.00	73%	417.70	12%	3,432.36
Jul	281.12		2,021.42		1,875.93	14%	7,138.00	54%	4,122.99	31%	13,136.92
Aug	3,080.90		1,912.56		3,713.82	19%	8,303.00	42%	7,599.07	39%	19,615.89
Sep	178.51		35.38				65.00				65.00
Oct											0.00
Nov											0.00
Dec											0.00
SubTotal - MT	5,112.84	8%	30,476.03	48%	33,666.77	53%	18,006.00	28%	12,139.76	19%	63,812.53
SubTotal % CA		15%		91%							

	North	South	Total
2002 HG (MT)	39,480.63	78,961.25	118,442.00
2002 HG (ST)	43,507.00	87,015.00	130,522.00

2001	N. CA.	%	S. CA.	%	Total CA.	%	OR	%	WA	%	TOTAL COAST
Jan	668.38		8,057.80		8,726.18	100%					8,726.18
Feb	8.42		6,381.68		6,390.10	100%					6,390.10
Mar	0.18		6,189.35		6,189.54	100%					6,189.54
Apr	97.40		2,048.79		2,146.19	100%					2,146.19
May	0.00		3,443.28		3,443.28	100%			0.00		3,443.28
Jun	0.00		1,272.73		1,272.73	35%	2,288.50	63%	48.50	1%	3,609.73
Jul	1.37		1,827.02		1,828.39	16%	4,897.70	42%	4,906.00	42%	11,632.09
Aug	0.87		4,318.12		4,318.99	36%	3,392.80	29%	4,138.00	35%	11,849.79
Sep	240.52		3,965.89		4,206.41	54%	1,993.10	26%	1,551.00	20%	7,750.51
Oct	2,442.66		3,626.31		6,068.98	94%	208.30	3%	193.50	3%	6,470.78
Nov	2,284.23		2,147.05		4,431.28	100%					4,431.28
Dec	1,497.51		1,437.00		2,934.50	100%					2,934.50
SubTotal - MT	7,241.54	10%	44,715.02	59%	51,956.57	69%	12,780.40	17%	10,837.00	14%	75,573.97
SubTotal % CA		14%		86%							

	North	South	Total
2001 HG (MT)	44,912.29	89,824.58	134,737.00
2001 HG (ST)	49,493.00	98,987.00	148,480.00

2000	N. CA.	%	S. CA.	%	Total CA.	%	OR	%	WA	%	TOTAL COAST
Jan	530.29		6,243.77		6,774.06						6,774.06
Feb	0.00		9,398.14		9,398.14						9,398.14
Mar	0.00		10,908.44		10,908.44						10,908.44
Apr	19.76		4,712.84		4,732.60						4,732.60
May	149.49		2,077.18		2,226.67				0.00		2,226.67
Jun	585.46		779.36		1,364.92		205.00		62.30	4%	1,632.22
Jul	1,221.74		516.15		1,737.89		2,456.80		912.30	18%	5,106.99
Aug	1,604.40		1,330.80		2,935.20		3,959.50		2,239.20	25%	9,133.90
Sep	4,245.31		1,118.20		5,363.50		2,598.90		1,455.20	15%	9,417.60
Oct	2,936.31		1,666.01		4,602.32		302.80		122.40	2%	5,027.52
Nov	74.42		2,523.54		2,597.96		2.60				2,600.56
Dec	0.36		5,561.03		5,561.39		2.30				5,563.69
SubTotal - MT	11,367.54	16%	46,835.46	65%	58,203.09	80%	9,527.90	13%	4,791.40	7%	72,522.39
SubTotal % CA		20%		80%							

	North	South	Total
2000 HG (MT)	62,263.60	124,527.21	186,791.00
2000 HG (ST)	68,615.00	137,229.00	205,844.00

ANALYSIS of SARDINE HARVEST TRENDS

Prepared by DB Pleschner
Rev. August 22, 2002

DATA in SHORT TONS (CPS managed by PFMC effective 2000)

1999	N. CA.	%	S. CA.	%	Total CA.	%	OR	%	WA	%	TOTAL COAST
Jan	5,400.86		6,700.76		12,101.62						12,101.62
Feb	2,690.07		7,202.82		8,982.89						8,982.89
Mar	248.09		7,692.60		7,940.69						7,940.69
Apr	97.70		2,728.10		2,825.80						2,825.80
May	80.68		1,999.79		2,080.47		0.10				2,080.57
Jun	15.36		186.43		201.79		55.57				257.36
Jul	559.07		3,159.87		3,718.94		262.86				3,981.80
Aug	337.18		3,260.37		3,597.55		422.22				4,019.77
Sep	1,224.21		4,927.21		6,151.42		114.09				6,265.51
Oct	1,770.97		4,024.85		5,795.82						5,795.82
Nov	540.46		2,445.16		2,985.62						2,985.62
Dec	2,339.79		2,920.40		5,260.19						5,260.19
SubTotal - ST	15,304.44	24%	47,248.36	76%	61,642.80	99%	854.84	1%			62,497.64
SubTotal % CA		25%		77%							

1999 Quota (ST) North South Total
44,254.00 88,508.00 132,762.00

1998	N. CA.	%	S. CA.	%	Total CA.	%	OR	%	WA	%	TOTAL COAST
Jan	1,139.65		2,415.30		3,554.95						3,554.95
Feb	1,395.61		2,321.58		3,717.19						3,717.19
Mar	286.12		6,584.93		6,871.05						6,871.05
Apr	138.73		8,892.40		9,031.13						9,031.13
May	67.63		719.99		787.62						787.62
Jun	0.02		113.48		113.50						113.50
Jul	76.33		94.34		170.67						170.67
Aug	325.27		12.67		337.94						337.94
Sep	712.87		1,058.97		1,771.84						1,771.84
Oct	1,380.19		3,332.97		4,713.16						4,713.16
Nov	1,592.81		4,125.19		5,718.00						5,718.00
Dec	2,894.59		5,574.19		8,468.78						8,468.78
SubTotal - ST	10,009.82	22%	35,246.01	78%	45,255.83						45,255.83

1998 Quota (ST) North South Total
15,996.00 31,991.00 47,987.00

1997	N. CA.	%	S. CA.	%	Total CA.	%	OR	%	WA	%	TOTAL COAST
Jan	100.08		2,017.54		2,117.62						2,117.62
Feb	0.00		2,718.37		2,718.37						2,718.37
Mar	0.03		3,403.62		3,403.65						3,403.65
Apr	84.05		2,778.82		2,862.87						2,862.87
May	108.31		1,600.24		1,708.55						1,708.55
Jun	84.50		183.90		268.40						268.40
Jul	916.45		1,371.60		2,288.05						2,288.05
Aug	1,105.77		903.08		2,008.85						2,008.85
Sep	2,831.65		3,846.26		6,677.91						6,677.91
Oct	4,777.04		9,111.38		13,888.42						13,888.42
Nov	2,624.60		5,556.27		8,180.87						8,180.87
Dec	2,094.06		2,705.27		4,799.33						4,799.33
SubTotal - ST	14,726.54	29%	36,196.35	71%	50,922.89						50,922.89

1997 Quota (ST) North South Total
17,995.00 35,990.00 53,985.00

ANALYSIS of SARDINE HARVEST TRENDS

Prepared by DB Pleschner
Rev. August 22, 2002

1996	N. CA.	%	S. CA.	%	Total CA.	%	OR	%	WA	%	TOTAL COAST
Jan	82.80		3,922.23		4,005.03						4,005.03
Feb	228.90		2,854.19		3,083.09						3,083.09
Mar	133.90		3,886.54		4,020.44						4,020.44
Apr	718.19		3,045.24		3,763.43						3,763.43
May	218.58		466.35		684.93						684.93
Jun	1,357.92		1,709.09		3,067.01						3,067.01
Jul	494.03		774.19		1,268.22						1,268.22
Aug	1,229.78		31.77		1,261.55						1,261.55
Sep	1,702.61		1,624.03		3,326.64						3,326.64
Oct	1,260.19		8,193.64		9,453.83						9,453.83
Nov	1,167.52		1,151.71		2,319.23						2,319.23
Dec	1,199.74		87.21		1,286.95						1,286.95
SubTotal - ST	9,794.16	26%	27,746.19	74%	37,540.35						37,540.35

1996 Quota (ST)	North	South	Total
	12,780.00	25,560.00	38,340.00

1995	N. CA.	%	S. CA.	%	Total CA.	%	OR	%	WA	%	TOTAL COAST
Jan	0.00		6,990.13		6,990.13						6,990.13
Feb	183.02		5,785.22		5,968.24						5,968.24
Mar	56.02		2,942.33		2,998.35						2,998.35
Apr	0.00		4,623.06		4,623.06						4,623.06
May	2.01		6,616.20		6,618.21						6,618.21
Jun	246.90		4,042.44		4,289.34						4,289.34
Jul	148.97		924.70		1,073.67						1,073.67
Aug	137.95		55.45		193.40						193.40
Sep	2,392.67		354.34		2,747.01						2,747.01
Oct	1,455.23		5,433.77		6,889.00						6,889.00
Nov	620.76		871.98		1,492.74						1,492.74
Dec	188.50		1,662.38		1,850.88						1,850.88
Subtotal - ST	5,432.03	12%	40,302.00	88%	45,734.03						45,734.03

1995 Quota (ST)	North	South	Total
	17,377.00	34,753.00	52,130.00

**West Coast Pacific Sardine Landings (MT)
1916-1917 through 1967-1968 Seasons**

Season	BC	%	WA	%	OR	%	CA	%	Baja	%	Total (MT)
1916-17	0	0.0%	0		0		24,975	100%	0		24,975
1917-18	73	0.1%	0		0		65,844	99.9%	0		65,917
1918-19	3,302	4.6%	0		0		68,529	95%	0		71,832
1919-20	2,976	4.7%	0		0		60,809	95%	0		63,785
1920-21	3,992	10.3%	0		0		34,882	90%	0		38,873
1921-22	898	2.6%	0		0		33,113	97%	0		34,011
1922-23	925	1.5%	0		0		59,067	98%	0		59,993
1923-24	880	1.1%	0		0		76,141	99%	0		77,021
1924-25	1,243	0.8%	0		0		156,963	99%	0		158,206
1925-26	14,470	10.4%	0		0		124,531	90%	0		139,000
1926-27	43,999	24.2%	0		0		138,084	76%	0		182,083
1927-28	62,079	26.8%	0		0		169,881	73%	0		231,960
1928-29	73,038	24.0%	0		0		230,863	76%	0		303,901
1929-30	78,327	21.0%	0		0		294,992	79%	0		373,319
1930-31	68,103	28.9%	0		0		167,940	71%	0		236,043
1931-32	66,770	30.9%	0		0		149,365	69%	0		216,134
1932-33	40,234	15.0%	0		0		227,424	85%	0		267,659
1933-34	3,674	1.0%	0		0		347,845	99%	0		351,519
1934-35	39,009	6.7%	0		0		539,829	93%	0		578,839
1935-36	41,114	7.2%	9	0.0%	23,796	4.1%	508,480	89%	0		573,399
1936-37	40,325	5.6%	5,951	0.8%	12,882	1.8%	658,735	92%	0		717,893
1937-38	43,618	9.6%	15,513	3.4%	15,114	3.3%	377,904	84%	0		452,149
1938-39	46,965	7.7%	24,023	3.9%	15,440	2.5%	521,897	86%	0		608,325
1939-40	5,008	0.9%	16,112	3.0%	20,258	3.8%	487,405	92%	0		528,782
1940-41	26,100	5.8%	735	0.2%	2,867	0.6%	417,839	93%	0		447,541
1941-42	54,477	8.8%	15,513	2.5%	14,379	2.3%	532,861	86%	0		617,230
1942-43	59,766	11.5%	526	0.1%	1,769	0.3%	457,825	88%	0		519,887
1943-44	80,504	15.3%	9,471	1.8%	1,651	0.3%	433,756	83%	0		525,382
1944-45	53,633	9.6%	18	0.0%	0	0.0%	503,407	90%	0		557,058
1945-46	31,117	7.8%	2,096	0.5%	82	0.0%	366,219	92%	0		399,513
1946-47	3,620	1.6%	5,570	2.5%	3,593	1.6%	212,104	94%	0		224,886
1947-48	445	0.4%	1,234	1.0%	6,287	5.3%	110,080	93%	0		118,045
1948-49	0	0.0%	45	0.0%	4,826	2.8%	166,675	97%	0		171,547
SubTotal	990,684	10.0%	96,816	1.0%	122,944	1.2%	8,726,264	88%			9,936,707
ST W. Coast			147,016	1.6%	122,944	1.4%	8,726,264	97%			8,996,224
1949-50	0		0		0		307,471	100%			307,471
1950-51	0		0		0		320,319	100%	0		320,319
1951-52	0		0		0		117,122	89%	14,682	11.1%	131,804
1952-53	0		0		0		5,181	38%	8,312	61.6%	13,493
1953-54	0		0		0		4,075	24%	12,978	76.1%	17,053
1954-55	0		0		0		62,111	85%	11,285	15.4%	73,397
1955-56	0		0		0		67,551	95%	3,817	5.3%	71,367
1956-57	0		0		0		30,521	71%	12,388	28.9%	42,908
1957-58	0		0		0		20,205	69%	9,003	30.8%	29,208
1958-59	0		0		0		94,322	82%	20,261	17.7%	114,583
1959-60	0		0		0		33,798	63%	19,456	36.5%	53,254
1960-61	0		0		0		26,198	59%	18,052	40.8%	44,250
1961-62	0		0		0		23,159	55%	19,296	45.5%	42,455
1962-63	0		0		0		3,785	22%	13,263	77.8%	17,048
1963-64	0		0		0		2,669	14%	16,678	86.2%	19,347
1964-65	0		0		0		5,537	18%	24,603	81.6%	30,140
1965-66	0		0		0		652	3%	20,182	96.9%	20,835
1966-67	0		0		0		312	2%	17,718	98.3%	18,030
1967-68	0		0		0		64	0%	25,090	99.7%	25,155
Subtotal	0		0		0		1,125,052		267,064		1,392,117
Grand Total	990,684	8.7%	96,816	0.9%	122,944	1.1%	9,851,316	87%	267,064	2.4%	11,328,824

received
9-12-02 10:08 AM

Public Comment G.2.d.
September 2002

Heather M. Munro
Munro Consulting
PO Box 1515
Newport, OR 97365
(541) 574-7767
hmunro@actionnet.net

Dr. Hans Radtke, Chair and
Council Members
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 200
Portland, OR 97220

August 3, 2002

Dear Dr. Radtke & Council Members:

These comments are respectfully submitted on behalf of the West Coast Seafood Processors Association and the following companies and organizations: Pacific Seafood Group; Astoria Pacific Seafoods, Bornstein Seafoods; Del Mar Seafoods; Monterey Fish Company; California Shellfish Company; Astoria Holdings Inc, Qualy Pak Specialty Foods and the many associated fishing vessels that fish for these companies; and the Port of Ilwaco.

We are strongly urging the Council to initiate an amendment to the Coastal Pelagic Species Fishery Management Plan (CPS FMP) in order to eliminate the current allocation scheme for Pacific sardine. The allocation is not appropriate for the current fishery, and a coast-wide harvest guideline is sufficient to meet the goals and objectives of the FMP and the Magnuson Stevens Fishery Conservation and Management Act (Magnuson Act). We believe this recommendation is both responsible and justified for the following reasons:

- The current allocation prevents the optimum yield of the fishery from being reached
- The situation for which the allocation was originally implemented no longer exists
- The catches in each management area demonstrate the inequity of the current allocation
- Eliminating the allocation will not harm any segment of the sardine industry on the west coast

The current allocation prevents the optimum yield of the fishery from being reached

National Standard (1) for Fishery Conservation and Management defined in the Magnuson Act requires:

(1) Conservation and management measures shall prevent overfishing while achieving on a continuing basis, the optimum yield from each fishery for the United States fishing industry.

The current allocation scheme in place will prevent the fishery from obtaining the optimum yield from the fishery in 2002. The northern allocation will be reached almost a month sooner then the reallocation date of October 1st. When the northern allocation is reached the fisheries in Monterey, Oregon and Washington will

be shut down, although the fish will still be available to the fishery and the southern allocation will likely be less than 50% utilized.

In 2001 a similar situation existed. Estimates that the northern allocation would be reached prior to the October 1st reallocation date were essentially a reality. Unfortunately, due to an unusually harsh storm fishing was virtually shut down for 14 days. This shut down combined with the grounding of spotter planes due to the events of September 11th, prevented the northern states from achieving their goals for landings.

The situation for which the allocation was originally implemented no longer exists

In the mid-eighties when annual quotas for sardine were extremely small, a processor from Monterey appealed to the California Department of Fish & Game (Department) to set aside a certain amount of quota for northern California fishers. The rationale for the allocation was based on the fact that the industry in San Pedro was able to catch the available quota before fish were available on the northern California fishing grounds. The appeal was considered and the allocation was granted. One-third of the total California sardine quota was allocated to boats operating north of San Simeon Point, and two thirds was allocated to boats operating to the south. On October 15th of each year, the total remaining state-wide quota was allocated 50-50 to the northern and southern areas.

When Amendment 8 (CPS Plan) was being written, the CPS Plan Development Team (Team) and the CPS Advisory Subpanel (Panel) considered the allocation process that was put in place by the Department. The Team and the Panel recommended leaving the allocation in place, but moving the northern boundary from the California / Oregon border north to the Canadian Border. At that time, sardine fishing occurred primarily off the state of California. However, the FMP called for a coast-wide harvest guideline. Coast-wide referring to California, Oregon and Washington. Simply moving the boundary north to the Canadian border seemed logical at the time because no one had considered that sardine fisheries off of the states of Oregon and Washington were strong possibilities even though historically a strong sardine fishery existed in Oregon.

The sardine biomass grew at a rate of approximately 30% annually over several (estimated at 15) years. Biomass estimates grew from only 6,000 tons to over a million tons. The most recent stock assessment completed in 2001 estimated the spawning stock biomass of 1.1 million mt. Language from the 2001 stock assessment's Executive Summary states:

Estimates of pacific sardine biomass from the 1930's (Murphy 1966 and MacCall 1979) indicate that the sardine population may have been more than three times its current size prior to the population decline and eventual collapse in the 1960's. Considering the historical perspective, it would appear that the sardine population, under the right conditions, may still have growth potential beyond its present size.

This large biomass and associated large harvest guideline eliminate the need for which the original allocation was implemented. Furthermore when the original allocation was implemented in the 1980s there was no consideration given to fisheries from Oregon and Washington although historically these states supported a very large commercial sardine fishery. Fishers in Oregon landed more than 23,000 metric tons in 1935.

The catches in each management area demonstrate the inequity of the current allocation

The following table illustrates the disparity between the southern allocation and the southern management area catch since the implementation of the CPS FMP. It also demonstrates the effect that the Oregon and Washington expansion has had on the northern area catch versus the northern allocation. The highest

landings on record for the modern fishery in the southern management area total 44,708 mt in 2001, 57% of the 2002 allocation. When the biomass grew to such large levels the southern management area was essentially awarded a windfall of allocation, significantly more than was ever caught in the area. This type of situation was most likely not intended when the Department implemented the original allocation.

	Southern Area (So. California)			Northern area (No. CA, OR & WA)		
Year	landings	allocation	percent of allocation caught	landings	allocation	percent of allocation caught
2000	42,296 mt	124,527 mt	34%	20,895 mt	62,264 mt	36%
2001	44,708 mt	89,825 mt	50%	31,009 mt	44,912 mt	69%
2002	32,933* mt	78,961 mt	42%	34,118** mt	39,418 mt	86%

* Southern California landings reported through 8/29/02

** Northern California landings reported through 8/29/02

Oregon landings reported through 8/31/02

Washington landings reported through 8/31/02

Eliminating the allocation will not harm any segment of the sardine industry on the west coast

Under recent, current and expected future fishery conditions, eliminating the current allocation scheme will not hurt any of the current participants. Attachment 1 illustrates the catch patterns of each geographic area during the last three years (2002 data is incomplete and preliminary). Notice that the majority of the fish caught in the southern management area are within the first three months of the season. This could and most likely would continue to occur. Eliminating the allocation would not preclude any segment of the fishery from fishing at any point during the season. If the biomass was to drop drastically at some point in the future, historic data and the best available science indicate that the fish would not be found off the coasts of Washington, Oregon and to some degree northern California. This would eliminate user conflicts as the fish would not be available to any of the traditional northern fishery grounds.

Conclusions

The West Coast Seafood Processors Association and other supporting companies and organizations do not want to harm any segment of the fishing industry, but rather set up a system which allows for the full utilization of the available harvest for all fishery segments, a goal of both the Magnuson Act and the Coastal Pelagic Species Fishery Management Plan. Eliminating the current allocation system will accomplish this goal. Section 5.2 of the CPS FMP states:

This FMP authorizes allocations of Pacific sardine harvest guideline to participants by northern and southern areas. Nothing in this FMP precludes additional allocations based on other geographic areas or other factors developed under the authority of this FMP.

Allowing an antiquated allocation scheme to remain in place for which the original implementation need no longer exists is unreasonable. Fishermen and processors and the supporting industries in Washington,

Oregon and northern California will be forced to shut down their businesses in the next week, causing severe economic hardship to many. At the same time, there is more of the southern allocation left for harvest than the southern management area has caught in any one year since 1981. WCSPA and others predicted this situation would occur, but the Council chose not to act until an actual problem presented itself. The 2002 season is a prime example of the significant problems associated with the current allocation system.

Dr. Radtke and Council members, we strongly urge you to take the necessary steps to eliminate the current allocation system and replace it with a fair and equitable one which benefits all users of the sardine resource off the west coast and meets the goals and objectives of the Magnuson Act and CPS FMP. We believe a coast-wide quota that can be utilized by all segments of the industry meets these goals providing the opportunity for full utilization of the available resource.

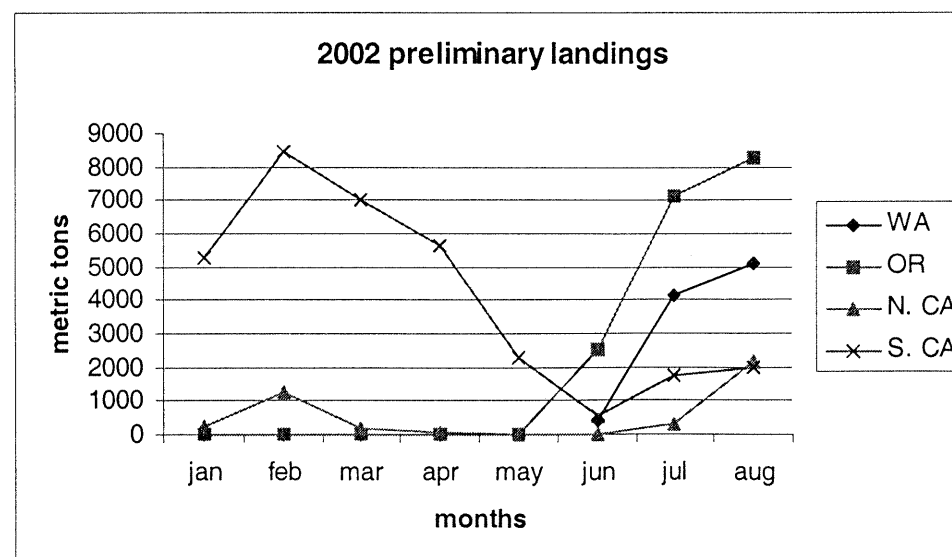
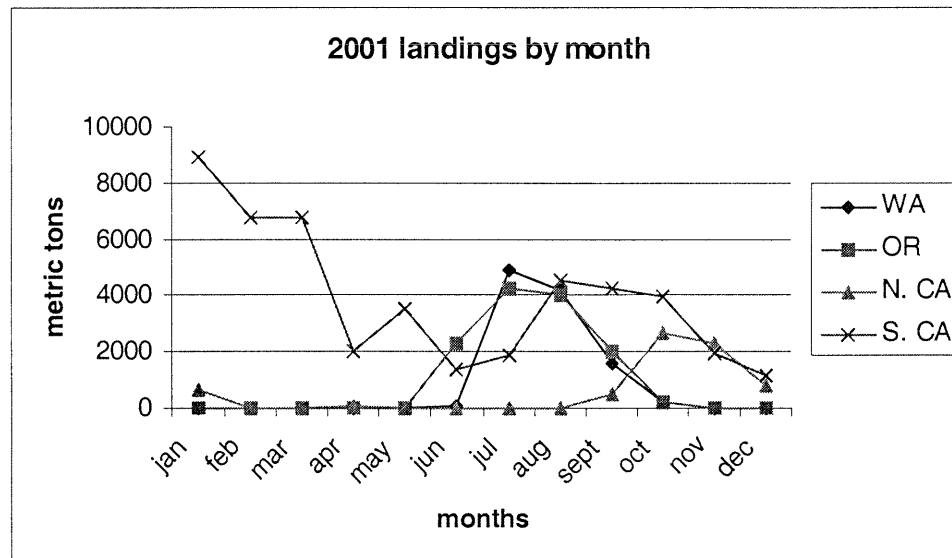
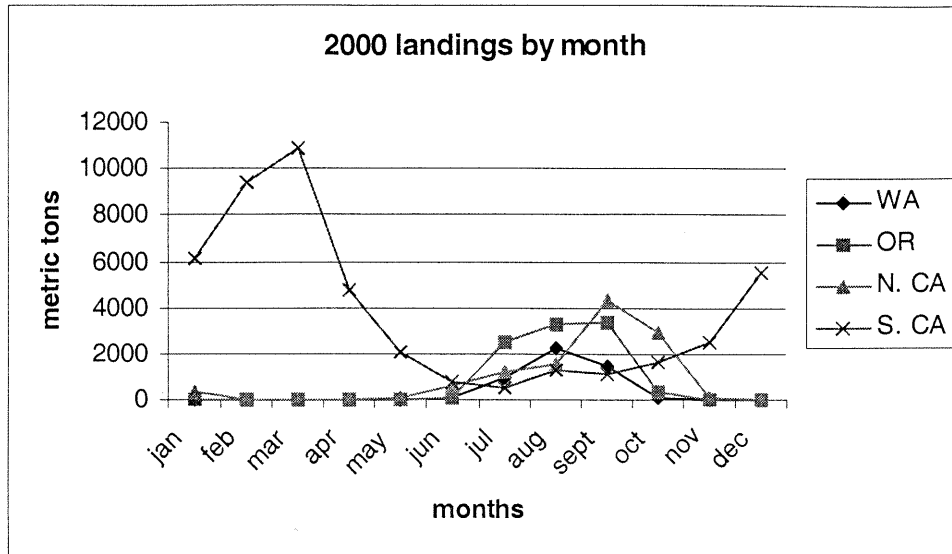
Thank you for your consideration.

Sincerely,

Heather M. Munro

cc Rod Moore, West Coast Seafood Processors Association
Don McIsaac, Pacific Fishery Management Council
Dan Waldeck, Pacific Fishery Management Council
CPS Management Team
CPS Advisory Subpanel
Rod McInnis, National Marine Fisheries Service
Rod Moore, West Coast Seafood Processors Association
Jay Bornstein, Astoria Pacific Seafoods
Darrel Kapp Astoria Pacific Sardine
Frank Dulcich, Pacific Seafood Group
Joe Cappuccio, Del Mar Seafoods
Sal Tringali, Monterey Fish Company
Anthony Tringali, Monterey Fish Company
Tom Libby, Point Adams Packing Company
Robert Cigliano, Qualy-Pak Specialty Foods
Dennis Rideman, Moreno's Seafood Inc
Pierre Marchand, Jessie's Ilwacco Fish Company
Jerry Thon, Astoria Holdings Company
Joe Childers, Childers and Associates
Mack Funk, Port of Ilwacco
Rob Zuanich, Purse Seine Vessel Owners Association
Rob Ross, California Fisheries and Seafood Institute
Diane Pleschner, California Wetfish Producers Association
Jeffrey Koenings, Washington Department of Fish & Wildlife
Phil Anderson, Washington Department of Fish & Wildlife
Michele Robinson, Washington Department of Fish & Wildlife
Patty Burke, Oregon Department of Fish & Wildlife
Burnie Bohn, Oregon Department of Fish & Wildlife

Jean McCrae, Oregon Department of Fish & Wildlife
LB Boydston, California Department of Fish & Wildlife
Marija Vojkovich, California Department of Fish & Wildlife
Jim Morgan, National Marine Fisheries Service
Svein Fougner, National Marine Fisheries Service



Public Comment
From Jim Bergeron, Commissioner, Port of Astoria
Before the Pacific Fishery Management Council
September 10, 2002

The Port of Astoria supports an adjustment of sardine quotas between the Southern Region and the Northern Region for the following reasons:

My name is Jim Bergeron. I reside at 40080 Old Highway 30, Astoria, Oregon. I am a duly elected commissioner of the Port of Astoria, a Clatsop County wide public port authority. I am appearing here today in regards to the Coastal Pelagic Species Fishery Management Plan.

The Port of Astoria was created in 1914 and has a proud history of maritime commerce. In its hay day, it would accommodate in excess of 500 vessel calls annually loading lumber, flour, feed, and canned salmon. Over the years, salmon populations and log exports have dwindled, while upriver ports grew in dominance because of their proximity to population centers. 1996 saw the last cargo vessel handled at the port.

In 1999, the port commission developed a new strategic business plan aimed at coping with the demise of its traditional business and forging the way towards survival and a means of fulfilling its charter for economic development in Clatsop County. A central theme in that plan is the creation of a Marine Service Center, a complex accommodating commercial fisherman, fish processors, ice producers, cold storage, marine supplies, gear storage, the marine trades, and vessel haulout and storage. Since adoption of the plan, precious reserves have been expended to clear old dilapidated warehouses and piers and rebuild.

It was fortuitous to have adopted the plan at the outset of the reemergence of the sardine fishery in the Northern Region. The largest warehouse pier was virtually empty in 1999, now three years later, the facility accommodates three sardine processors, who have invested approximately \$5 million and created 120 jobs.

But this is only the beginning of the process to create the Marine Service Center. We need to attract the commercial fishing boats serving this fishery to homeport at the Port of Astoria, to have their vessels maintained here, to supply their vessels and support the local marine trades. The longer the vessels are deployed in the area the longer they will stay and economically benefit the community.

Another important Marine Service Center ingredient is a cold storage facility, of which there is none on the coast. Increased fishing over longer periods of time will drive demand to a level, which can sustain a cold storage facility. At present, there is not enough demand to justify a cold storage.

The Port of Astoria supports an adjustment of sardine quotas between the Southern Region and the Northern Region.

PACIFIC SARDINE FISHERY UPDATE

Situation: The Pacific sardine fishing season began January 1, 2002 with a harvest guideline (HG) of 118,442 mt. The harvest guideline is allocated between Subarea A, north of 35°40' N latitude (Pt. Piedras Blancas) to the Canadian border, and Subarea B, south of 35°40' N latitude to the Mexican border. The northern area is allocated 33% (39,481 mt) and southern area is allocated 66% (78,961 mt) of the HG. The HG is in effect until December 31, 2002, or until it is reached and the fishery closed.

Per the coastal pelagic species (CPS) fishery management plan (FMP), nine months after the start of the fishing season (in this case, October 1, 2002) any uncaught portion of the HG will be totaled and reallocated, each subarea receives 50% of the total. The FMP authorizes National Marine Fisheries Service (NMFS) to reallocate the HG as an "automatic measure," which is an action that could be initiated by NMFS without prior public notice, opportunity for public comment, or a Council meeting.

The coastal states will each report on sardine fisheries occurring in their respective areas. The states may also report to the Council about specific aspects unique to their fisheries.

Based on this information, reports from the CPS advisors, and public testimony, the Council may consider recommending to NMFS the HG be reallocated as per the FMP.

Council Action:

1. Consider reallocation of HG per CPS FMP inseason action.

Reference Materials:

1. Exhibit G.2.b, Supplemental State Reports.
2. Exhibit G.2.c, Supplemental CPSMT Report.
3. Exhibit G.2.c, Supplemental CPSAS Report.

Agenda Order:

- a. Agendum Overview
 - b. State Agency Reports and Comments
 - c. Reports and Comments of Advisory Bodies
 - d. Public Comment
 - e. **Council Action:** Consider Reallocation of HG per CPS FMP Inseason Action
- Dan Waldeck
Phil Anderson/Burnie Bohn/LB Boydston

PFMC
08/21/02



Exhibit G.2
Supplemental NMFS Response Letter
September 2002

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802-4213

RECEIVED

AUG 26 2002

F/SWR2:JJM
1504-13-CPS-OB-010

AUG 30 2002

PFMC

Heather M. Munro
President
Munro Consulting
P.O. Box 1515
Newport, Oregon 97365

Dear Heather:

This is a response to your letter stating that an emergency exists in the fishery for Pacific sardine and that a rule should be published reallocating the unharvested portion of the harvest guideline before the October 1 date specified in the Coastal Pelagic Species Fishery Management Plan (FMP). After reviewing the status of the fishery north and south of Pt. Piedras Blancas, I have determined that the current status of the fishery does not justify action to reallocate any portion of the remaining harvest guideline before the scheduled date. This decision is based on the language in the FMP, the performance of the fishery, and National Marine Fisheries Service guidelines regarding the use of emergency rules.

The purpose of the allocation procedure is to ensure that no segment of the fishing industry preempts other segments of the industry by taking advantage of seasonal availability of the resource in particular areas along the coast. The procedure in the FMP should be maintained as long as there is substantial compliance with the purpose for which it was designed. If improvements in the procedure can be made, then the FMP should be amended.

As expected, landings north of Pt. Piedras Blancas have been higher this year than last year, and, as a result, we have been monitoring the fishery closely. The allocation north of Pt. Piedras Blancas is 39,481 metric tons (mt) and approximately 24,000 mt has been landed as of August 21. A little more than 15,000 mt remains before the scheduled reallocation. From the information available at this time, the allocation may be achieved before October 1, but it is not likely to be achieved much before that date, especially with the tapering off of landings in September in Oregon and Washington that has occurred in recent years.

Policy on the use of emergency rules was published in the *Federal Register* on August 21, 1997 (62 FR 44421). Emergency action under the authority of section 305(c) of the Magnuson-Stevens Fishery Conservation and Management Act should be reserved for extremely urgent, special circumstances, where substantial harm to or disruption



of the resource, fishery, or community would be caused in the time it would take to follow standard rulemaking procedures. In the case of reallocating Pacific sardine, substantial harm from following normal procedures does not seem likely. The standard rulemaking procedure to reallocate Pacific sardine is relatively simple.

Considering the above, reallocation before October 1 is not justified. The northern fishery is virtually a new commercial fishery with which we have only a few years experience. On the science side, we lack knowledge about the biomass of Pacific sardine and whether or not there is more than one interbreeding stock of sardines. Such information would improve management as well as our understanding of the relationship of sardine to other trophic levels in the California Current System. On the management side, with the aim of eventually making recommendations to the Pacific Fishery Management Council, the Coastal Pelagic Species Advisory Subpanel is reviewing recent experience in the fishery and is considering several alternatives to modify the allocation system to better meet the needs of the industry. The Southwest Region will work with all segments of the fishing industry to improve knowledge of the resource and bring about any needed improvements in management.

Sincerely,



for Rodney R. McInnis
Acting Assistant Administrator

cc: PFMC, D. McIssac ✓
F/NWR, R. Lohn
DB Pleschner & Associates,
D. Pleschner-Steele

General Information
September 2002

FOR IMMEDIATE RELEASE
September 9, 2002

CONTACT: Joe Sheffo (Smith)
202/228-1823
Carol Guthrie (Wyden)
202/224-5244

SMITH, WYDEN URGE NMFS TO SUPPORT PACIFIC FISHERY MANAGEMENT COUNCIL

Letter to Sec. Evans Urges NMFS to Listen to Fishers

WASHINGTON, D.C.—Senators Gordon Smith (R-OR) and Ron Wyden (D-OR) today sent a letter to Secretary of Commerce Evans asking that he intervene to ensure that the National Marine Fisheries Service (NMFS) seriously consider the recommendations of the Pacific Fishery Management Council. The request comes as the Council meets in Portland to decide its recommendations for 2003 groundfish catch limits.

A complete text of the letter is available upon request.

"The National Marine Fisheries Service should respect the insights and input of the Pacific Fishery Management Council and include them in its final decision on groundfish catch limits," said Smith. "It is my hope that Secretary Evans will direct NMFS to accept reasonable and scientifically justifiable 2003 groundfish catch guidelines made by the Council."

"Fishers who were encouraged to increase capacity a few years ago have been forced into bankruptcy by new Federal mandates. A capacity reduction program is an essential step in addressing the crisis facing West Coast fishers, and I'm working to make it happen."

Congress created the regional Council structure to better inform federal fishery management. Earlier this year, however, NMFS overturned the Council's recommendations regarding the whiting fishery. Management of the multi-species Pacific groundfish fishery has been complicated by indications of population declines in some of the groundfish species caught off the West Coast. Members of the Pacific Fishery Management Council - including fishermen, environmentalists and regulators - all agree that these fish stocks must be rebuilt and have made management recommendations consistent with this goal.

The Magnuson-Stevens Act, which established the Council, requires it to fully consider local economic impacts in making its recommendations. As such, the Council has tried to balance the need to protect and rebuild particular stocks with the continued harvesting of healthy stocks when and where possible.

###



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802-4213

September 10, 2002

Given by
Suein Fougner
4:05pm
9-10-02

Northern Allocation of Pacific Sardine Notice of Fishery Closure

CONTACT: Jim Morgan at (562) 980-4036

IMMEDIATE RELEASE

LONG BEACH, CALIFORNIA - NMFS announces that the northern allocation of Pacific sardine of 39,481 metric tons (mt) will be reached on September 14, 2002. The closure north of Pt. Piedras Blancas (35° 40' N. lat.) will remain in effect until October 1, 2002, which is the date the reallocation of the remaining portion of the coast wide harvest guideline is required by the Coastal Pelagics Species Fishery Management Plan (FMP).

For the fishing season January 1, 2002, through December 31, 2002, the harvest guideline for the Pacific coast of 118,442 mt was calculated according to the formula in the FMP, of which 39,481 mt was allocated north of Pt. Piedras Blancas and 78,961 mt was allocated south of Pt. Piedras Blancas according to the allocation procedure in the FMP. The procedure was adopted to prevent any segment of the fishing industry from gaining an unfair harvesting advantage due to the regional availability of sardine as it undergoes its normal migration pattern. On October 1 of each year, the remaining harvest guideline north and south of Pt. Piedras Blancas is totaled and divided equally between the two areas.

As of September 6, at least 35,000 mt had been landed north of Pt. Piedras Blancas, with three weeks to harvest the remaining 4,481 mt. Current harvest rates indicate that the northern allocation will be reached by September 14. Notice of the closure at 12:01 a.m. on September 14, 2002 (midnight September 13), will be published soon in the *Federal Register*. Soon after the closure, the unharvested portion of the harvest guideline will be determined and additional fish will become available to the northern area through the allocations process.

Total harvest last year north of Pt. Piedras Blancas for the period ending September 30 was 30,921 mt. South of Pt. Piedras Blancas, as of September 6, approximately 47,961 mt of the 78,961 mt allocation remained.

