

**Ad hoc Pink Shrimp Bycatch Working Group**  
**Meeting Summary**  
**February 8, 2002**

The second meeting of the ad hoc Pink Shrimp Bycatch working group was held on February 8, 2002 at the offices of the Pacific States Marine Fisheries Commission (PSMFC) in Gledstone, Oregon. The agenda included a review of the performance of the 2001 pink shrimp fishery relative to the Pacific Fishery Management Council (PFMC) canary rockfish bycatch allocation of 5.5 metric tons (mt), and a discussion of future plans. Representatives of state and federal fishery management agencies and several commercial fishing companies were in attendance (Table 1).

2001 Season Review

Washington and Oregon elected to recommend use of Bycatch Reduction Devices (BRDs) at the beginning of the 2001 season, and to make their use mandatory after August 1 for the remainder of the season. In Washington, fishers responding to a Washington Department of Fish and Wildlife (WDFW) survey on excluder usage reported using Soft-Panel or Fisheye devices exclusively. The catch of canary rockfish and of all rockfish species generally was low before August 1 and went down even more after imposition of the BRD requirement (Attachment 1). Some fishers may have been using BRDs before the use was required. A total of 0.3 mt of canary rockfish were landed during 2001 (Table 2). WDFW focused its on monitoring on the ratios of species in the landed catch (e.g., yellowtail vs. shrimp, canary vs. yellowtail, widow vs. yellowtail). Sablefish catch was not reduced as much as expected by the BRD requirement; fish behavior and timing of the rule implementation were suggested as possible explanations.

Oregon set a 3.9 mt as a goal for the maximum allowable take (including estimated discard) of canary rockfish associated with Oregon landings of pink shrimp during 2001. A total of 2.2 mt of canary rockfish were landed (Table 2), and the Oregon Department of Fish and Wildlife's (ODFW) "best guess" of the total take including discard is 3.5 mt. Since 2001 was considered to be a high volume and low price shrimp season, ODFW believes that most Oregon shrimpers did not use BRDs until they were required. Landings of rockfish declined substantially after implementation of the BRD requirement (Attachment 2). Oregon fishers were allowed to use Nordmore Grate, Soft-Panel Excluder, or Fisheye Excluder devices and all used to some extent. Vessels using Fisheye Excluders appeared to land more rockfish pounds per trip than those using other devices; placement of the Fisheye excluders may have been incorrect in some gear. ODFW believes that the delayed implementation of BRD requirements was accepted better by the Oregon fleet and was helpful in promoting BRD usage later in the season. Monitoring by ODFW is also based on species ratios in logbooks and the landed catch, which are compared to historical averages and refined by port. ODFW believes that mandatory BRD usage is not justifiable at this time because BRD technology is not fully mature. Managers still do not know how factors such as timing and fish behavior affect performance of the new and experimental BRDs, and fishers are still moving toward development and use of gears that work effectively.

California elected to make the BRD requirement mandatory for all trawl nets used in its pink shrimp fishery as a way to reduce catch of all rockfish species. The California Department of Fish and Game (CDFG) did not believe it could adequately monitor and implement a BRD requirement with a flexible date. Due to delays in the Office of Administrative Law, however, final BRD regulations could not be implemented for the 2001 season. There were no reported landings of canary rockfish in the 2001 pink shrimp fishery in California (Table 2). The new regulations that become effective on April 1, 2002 require use of one of three approved devices (Nordmore Grate, Soft-Panel Excluder, or Fisheye Excluder); a revocable experimental BRD permit may be obtained to use and test other devices. Vessels that choose to obtain an experimental permit must carry a Department-approved observer whenever the experimental BRD is used. CDFG notified all pink shrimp permit holders of this requirement via letter on January 24, 2002 (Attachment 3).

### 2002 Season Plans

In 2002 both Washington and Oregon plan to follow practices similar to those of 2001; the agencies will monitor rockfish landings based on landing receipts collected in-season, estimate total mortality by expanding for bycatch, and will require BRD usage if the canary rockfish take approaches pre-determined target levels. California will begin the season with a mandatory BRD requirement. A fisheries patrol boat is present in northern California, but no special enforcement activities are planned to monitor compliance. The National Marine Fisheries Service (NMFS) announced that once legal clarifications have been obtained, the federal Observer Program plans some observer placements on shrimp vessels during 2002 to monitor bycatch of groundfish in the shrimp fishery.

Some of what occurs during the 2002 season may depend on future stock assessments and the PFMC's plans for rockfish rebuilding. Recent stock assessments have been variable, and a new assessment of canary rockfish is expected this spring. If that assessment is down and the PFMC's ad hoc Allocation Committee recommends a reduced allocation to shrimp fishery bycatch, both Washington and Oregon may need to make BRD usage mandatory for the entire season. Several participants believed that the PFMC's policy toward rockfish harvest by the shrimp fishery is also unclear; they believed that the shrimp fishery might provide opportunities to harvest some species of rockfish without impact to others.

All agencies agreed on the importance of education as a component of their efforts in 2002. Oregon fishers were supportive of the direct-mail regulation notifications received by California fishers, and CDFG representatives were interested in the ODFW pre-season newsletter as a technique for communication with the fleet. WDFW plans to continue its survey of BRD usage, both as source of information and as a way to get back in touch with its fleet. The agencies will consult with their enforcement agents to ensure that the requirements for proper Fisheye excluder placement are clear.

Consistency of regulations was mentioned as a potential problem for 2002. California fishers near the CA/OR border are concerned by the potential for competitive disadvantage. While they must use excluders throughout the season, fishers from Oregon who fish in the EEZ off California are burdened with no similar requirement early in the

season. Representatives of ODFW and WDFW will investigate the potential for reciprocal state rules that would require fishers from Oregon or Washington to use BRDs when they fish off California. At this stage, however, it may not be possible to implement such regulations before June. CDFG representatives will verify that the count-per-pound regulations of Oregon and Washington are also enforced in California.

Workgroup members discussed the value of implementing a variety of coastwide measures, including logbooks and an interjurisdictional management plan. While both Oregon and California currently require a mandatory logbook, the California logbook does not solicit information regarding bycatch. The California logbook is not currently in active use by CDFG (the data are neither keypunched or analyzed) and that situation is not likely to change in the coming year. ODFW will share a copy of its logbook with CDFG for reference purposes. WDFW dropped its shrimp logbook requirement in 1993, and that decision is currently under review. The agency may be unable to resurrect that requirement given existing budget and resource concerns. Agency representatives generally could see value in developing a coastwide management plan, but none could commit agency time or resources toward the effort. For the present, participants agreed that meetings of the current working group should be annual at minimum, and more frequently in-season if necessary.

Table 2. Landings by directed shrimp trawl fisheries operating in PFMC areas (in metric tons). †							
State	Year	Pink Shrimp	Canary Rockfish		Other Rockfish		Flatfish
		Misc. Groundfish	Other Species				
CALIFORNIA	1990	3,946.1	0.0	24.1	2.4	4.7	0.1
		2.9					
	1991	4,701.2	0.0	20.8	2.1	3.8	0.0
		0.5					
	1992	8,474.1	0.0	12.7	0.5	2.7	0.1
		1.5					
	1993	3,228.3	0.0	11.8	1.1	1.5	0.1
		0.5					
	1994	5,069.4	0.0	35.4	5.1	7.8	0.1
		7.2					
	1995	2,558.0	1.8	30.7	5.9	4.5	0.1
		4.7					
	1996	4,244.9	1.1	25.5	6.3	4.1	2.6
	3.2						
1997	6,325.6	2.7	22.2	6.2	6.1	3.0	
	7.4						
1998	830.3	3.3	10.4	1.8	1.8	0.7	
	1.5						
1999	1,922.9	2.4	16.0	5.0	3.1	0.9	
	1.2						
2000	1,102.3	0.4	2.7	1.4	1.4	0.0	
	0.2						
2001	1,638.7	0.0	1.6	0.9	0.2	0.0	
	0.6						
OREGON	1990	14,461.8	0.0	486.2	29.6	27.9	0.3
		0.7					
	1991	9,851.9	0.0	393.5	25.3	30.1	0.2
		0.8					
	1992	21,787.5	0.0	395.1	27.9	106.8	0.3
		2.8					
	1993	12,212.1	0.0	673.6	29.0	93.7	0.3
		22.0					
	1994	7,432.6	0.0	203.5	31.0	50.9	0.1
		20.6					
	1995	5,491.1	4.9	158.9	45.5	30.1	0.2
		8.6					
	1996	7,133.5	12.1	286.1	74.9	51.0	1.7
	3.4						
1997	8,872.2	7.6	92.7	37.7	35.5	4.5	
	38.9						
1998	2,765.0	7.6	115.1	41.2	21.8	1.6	
	60.9						
1999	9,276.5	31.2	81.2	119.5	64.4	3.6	
	9.9						
2000	11,549.6	9.7	73.0	55.9	56.5	2.5	
	48.7						
2001	12,909.1	2.2	46.1	23.3	83.4	0.3	
	32.5						
WASHINGTON	1990	6,144.2	0.0	353.9	41.5	25.5	0.1
		0.4					
	1991	4,510.2	0.0	367.3	23.9	9.8	0.0
		0.4					
	1992	5,448.5	0.0	332.4	8.9	38.5	0.0
	49.5						
1993	7,010.6	0.0	612.0	32.5	141.0	0.0	

	112.6							
	1994	2,479.1	0.0	243.8	57.9	52.6	0.1	
	7.9							
	1995	3,292.4	2.5	184.8	66.2	61.3	0.1	
	0.2							
	1996	2,410.7	1.9	217.3	37.1	52.1	0.0	
	0.1							
	1997	2,248.2	0.6	60.4	10.8	11.2	0.1	
	18.0							
	1998	743.0	1.1	45.3	8.2	9.2	0.0	
	40.6							
	1999	1,199.5	1.3	24.6	15.2	6.9	0.0	
	35.6							
	2000	1,978.1	1.3	37.3	12.5	13.5	0.0	
	38.7							
	2001	2,989.3	0.3	18.0	2.1	4.9	0.0	
	52.7							
TOTAL	1990	24,552.1	0.0	864.2	73.5	58.0	0.5	
	4.0							
	1991	19,063.3	0.0	781.6	51.3	43.6	0.3	
	1.7							
	1992	35,710.2	0.0	740.2	37.3	148.0	0.3	
	53.9							
	1993	22,451.0	0.0	1,297.4	62.6	236.1	0.3	
	135.2							
	1994	14,981.0	0.0	482.7	93.9	111.3	0.3	
	35.8							
	1995	11,341.5	9.2	374.5	117.6	95.9	0.4	
	13.5							
	1996	13,789.2	15.1	528.9	118.3	107.2	4.4	
	6.7							
	1997	17,445.9	10.9	175.3	54.7	52.9	7.5	
	64.2							
	1998	4,338.2	12.0	170.8	51.1	32.7	2.4	
	103.0							
	1999	12,399.0	34.9	121.8	139.8	74.4	4.5	
	46.7							
	2000	14,630.0	11.3	113.0	69.8	71.4	2.5	
	87.7							
	2001	17,537.2	25.5	65.7	26.4	88.5	0.4	
	85.8							

† Directed fishery landings in California were trawl landings that contained more than 100 pounds of pink shrimp. Directed fishery landings in Washington and Oregon were those made using shrimp trawl gear (either single- or double-rigged).

Source: PacFIN

Advocates for Wild, Healthy Oceans

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Formerly the Center for  
Marine Conservation

A Critique of Federal Management for California Market  
Squid (*Loligo opalescens*)

The Ocean  
Conservancy



by  
Josh Sladek Nowlis

19 December 2001

## BACKGROUND

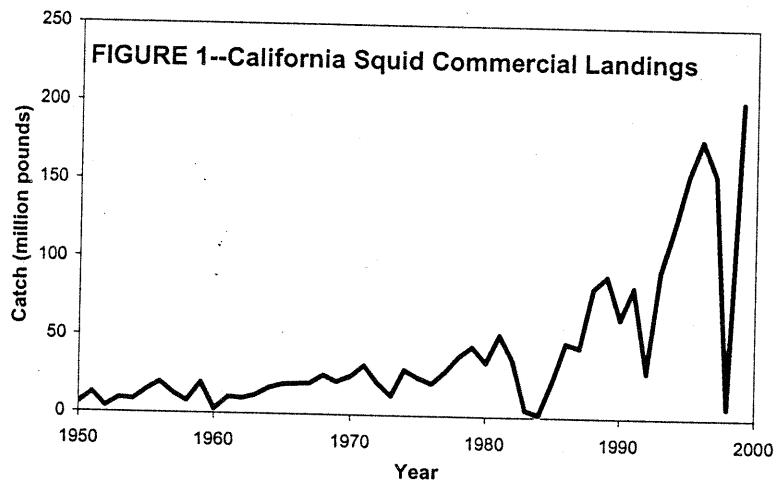
Market squid (*Loligo opalescens*) are the basis of California's largest and one of its newest fisheries. This fishery targets spawning aggregations, when adult squid are found at discrete spawning sites at very high densities. This fishery has raised environmental concerns because of the rapid increase of its catches (Fig. 1), its propensity to crash during El Niño events, and especially the importance of squid to its ecosystem as a prey source for a number of species.

## SUMMARY OF CURRENT RECOMMENDATIONS

Currently, market squid are managed primarily through California State regulations, which include weekend closures, limited entry of fishing vessels, and caps on overall catches equal to the highest seasonal catches ever recorded in the State. Federal managers have listed market squid in the Coastal Pelagic Species Fishery Management Plan. Thus far, federal efforts have focused primarily on

determining a management regime based on maximum sustainable yield, MSY, as required by the Magnuson-Stevens Fishery Conservation and Management Act.

The federal efforts have included defining an appropriate biological model for squid (model 1 with natural mortality rate =  $0.15 \text{ day}^{-1}$  and egg laying rate =  $0.45 \text{ day}^{-1}$ ), determining a threshold value for egg escapement (30 percent of the spawning potential of the individuals sampled), examining the potential management implications of El Niño events (deferred), and recommending information gaps to be targeted with future monitoring.



## MAJOR AREAS OF CONCERN

### *Overfishing*

There has been growing concern over the possibility that California market squid are being overfished. Seasonal landings have grown dramatically over the past two decades, with catches in the most recent season exceeding any pre-1980 season by a factor of 5 (Fig. 1). Additionally, squid landings have shown definite signs of El Niño related collapses since the 1980s, a phenomenon that did not appear previously.

Overfishing has also been a concern because of the great amount of uncertainty associated with the management of market squid. The Coastal Pelagic Species Management Team of the Pacific Fishery Management Council recognized several sources of uncertainty in their November 2001, report titled "Recommendations for market squid management and research." These sources of uncertainty included: the use of a new approach (by focusing on egg escapement goals), the degree to which females retain eggs after capture, and the extent to which fishing gear damages egg beds.

Effective fishery management must build in buffers to account for the level of uncertainty in a fishery. The most effective buffers ensure that a set proportion of the unfished abundance level is protected from all fishing pressure (Sladek Nowlis and Bollermann, in press). Despite high levels of uncertainty, existing and proposed management measures for squid lack any kind of buffer.

Similar uncertainties with a lack of adequate buffering have played a role in the collapse of squid fisheries elsewhere (Falklands, eastern US), whereas carefully managed squid fisheries have fared well (South Africa).

### *Ecosystem Impacts*

California market squid and other squid species play a key role in open-water ocean environments as a food source (Pauly et al., 1995; Love, 1996). A wide variety of marine mammals, seabirds, and fish rely on squid as a principal part of their diet. As such, squid play a central role in the food web of open-ocean environments.

Due to the central position of squid at the lower end of the food web, squid fisheries have the potential to negatively impact a number of other fisheries. Other fished species that rely on squid for their diet include but are not limited to: salmon, several rockfish (including bocaccio and cowcod), sablefish, lingcod, yellowtail, white seabass, all tuna species, swordfish, halibut and several other flatfish species, and several shark species (including the common thresher and shortfin mako) (Love, 1996). If squid are fished only to MSY levels, the impacts on these other fisheries could also be substantial (May et al., 1979).

A number of threatened and endangered species also rely on squid. These include fin whales, sei whales, sperm whales, and Guadalupe fur seals (Pauly et al., 1995). Reducing squid, even if only to MSY levels, has the potential to adversely impact these federally protected species.

Squid management measures should be designed to ensure adequate squid to sustain other fisheries and rare animals. At present, the management system for market squid has not adequately addressed this issue.

### *Lack of Socioeconomic Alternatives or Analysis*

Fishery management systems have profound impacts on coastal communities. The squid fishery regulations will not only affect current and future squid catches but also may affect other fisheries and tourist operations based on seeing charismatic members of open-ocean environments, including seabirds and marine mammals. As such, any fishery management plan should provide clear socioeconomic alternatives for consideration.

This issue is of particular importance to the squid fishery, which is significantly impacted by El Niño events. Recent catch levels have served to exacerbate the effects of El Niño years on the squid fishery, whereas pre-1980 catch levels showed little effects of El Niño years. Catch limits have been set equal to the highest seasonal landings on record, assuring that the industry will suffer in El Niño years. Nowhere did managers actively discuss the socioeconomic implications of this strategy, and technical advisors continue to defer the issue. The public has a right to know and managers have a responsibility to devise a plan for the bad years that are sure to come.

### **CONCLUSIONS**

Current California market squid management fails on a number of fronts. It lacks appropriate buffers to avoid overfishing; inadequately addresses impacts on open-ocean environments and the fisheries and rare species they support; and fails to present a range of socioeconomic alternatives.

### **REFERENCES**

- Love, M. 1996. *Probably More Than You Want to Know About the Fishes of the Pacific Coast*. Really Big Press, Santa Barbara. 381 p.
- May, RM, JR Beddington, CW Clark, SJ Holt, RM Laws. 1979. Management of multispecies fisheries. *Science* 205: 267-277.
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- Sladek Nowlis, J, B Bollermann. In press. Methods for increasing the likelihood of restoring and maintaining productive fisheries. *Bull. Mar. Sci.*





**FISHING VESSEL OWNERS' ASSOCIATION  
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PFMC

February 12, 2002

Dr. Donald McIsaac, Executive Director  
Pacific Fishery Management Council  
7700 N.E. Ambassador Place, Suite 200  
Portland, OR 97220-1384

**RE: Proposed Groundfish Amendments**

Dear Dr. McIsaac:

The following groundfish amendments would be compatible with the Rationalization Committee's recommendations for fixed-gear operations. The proposed action would affect fixed-gear limited-entry sablefish-endorsed and non-endorsed operations that participate in the 300-pound daily trip-limit fishery.

Currently, 12 percent of the limited-entry fixed-gear quota is set aside to be accessed by limited-entry fixed-gear vessels both endorsed and unendorsed for sablefish. This proposal would eliminate this fishery and add a fourth tier endorsement for those permit holders that are not endorsed for the tiered fishery.

**Proposal #1:** End the daily trip-limit fishery for sablefish endorsed fixed-gear limited-entry permit holders. Make a determination of what percent of the 15% set-aside has been caught by this group the last two years and add an equal amount to each of the existing tiers. The remaining portion of the set-aside would belong to the unendorsed fixed-gear license holders. Allocate the remainder equally among this group as a new tier 4.

OR

**Proposal #2:** For the endorsed permit holders who participated during the last two years in the 300 lb. set-aside fishery, allocate equally their collective share of the 15% set-aside. Add this amount to their existing tier. The remaining portion of the 15% set-aside would belong to the unendorsed fixed-gear license holders. Allocate the remainder equally among those who participated from this group as a new tier 4.

This action would be an amendment to the current tiered program and thereby, would not be a new IFQ program.

Dr. Donald McIsaac

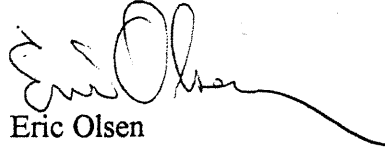
February 12, 2002

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Some of the supporting reasons for this are:

- (1) The current daily trip limit fishery generates more high grading of sablefish at a time of resource decline. This proposed action would tend to force a person to fish the allocated 4<sup>th</sup> tier in a rational-like basis more probably in one trip rather than many small costly trips.
- (2) The original intent of the 300 lbs. daily trip limit was to allow a bycatch of sablefish with the directed rock fish catchers. The new restriction on rock fish basically eliminates most directed rock fish operations by hook and line vessels. Hence, there is no need for the bycatch allowance.
- (3) The current tiered amounts will be reduced by 38 percent for the 2002 season due to needed cuts in quota. Eliminating the 300-pound daily trip limit allows a more rational harvest of quota. The 300 pound trip limit encourages more trips on the water at increased costs and potentially, more bycatch of rock fish. Allowing for a new tier and consolidation of the 12% set-aside could reduce rock fish retention as the fleet would more probably target deeper water for their sablefish.

Sincerely,



Eric Olsen  
President

cmb

Dr. Richard Gierak, Director Interactive Citizens United  
5814 Highway 96  
Yreka, Ca. 96097  
530 475-3212  
January 2, 2002

Re: "Sustainable Fisheries in the Pacific Northwest"

Gentlemen;

I would appreciate you taking the time to review this proposal and data in the interests of restoring Northwest fisheries. I have been a member of the FERC Fish Passage Advisory Team and the Hatchery Evaluation Team regarding the Klamath Basin and have presented papers at the Klamath Basin Symposium and the Ninth Annual Hoopa EPA Conference regarding this issue. Your comments would be appreciated and I look forward to continued discussion regarding this important matter. Since the enactment of the ESA in 1972 we have seen a cycle of reduced salmon for both commercial and sport fishing. Through the utilization of "junk science" and biased studies by environmental biologists we have all been led to believe that the reduction in salmonid populations was due to riparian habitat degradation, dams, agricultural runoff, ruralization, point and non-point source pollution and a plethora of other capricious claims. The reality lies within non-biased scientific data that has been collected and it clearly shows that the reduction of salmonids is due to the following factors:

(In all cases see appendix for specific scientific data)

1. Predation by pinnipeds due to overpopulation as a result of the Marine Mammal Protection Act
2. The advent of El Nino warming of the Pacific waters driving salmonids North
3. Deposition of heavy silt loads in lower basin tributaries which are the normal spawning grounds for Coho salmon.
4. The continued slaughter of salmonids by hatcheries

I believe the real question regarding the Salmonid problem rests not with fish passage or historical habitats, but, is to provide sustainable fisheries for the fishing industry, the tribes and the sports fishers.

As a member of the FERC Hatchery Evaluation Team and the FERC Fish Passage Advisory Team I assessed the Iron Gate Hatchery as meeting their mitigated goals of producing 6,00,000 Chinook, 150,000 Steelhead and 75,000 Coho annually. However, in 1997 a historic return of over 4,000 Coho returned to the hatchery and only 200 females and 400 males are required to meet their goals of Coho production. The rest were destroyed without having the opportunity to spawn naturally. In 2000 a historic return of over 71,000 Chinook returned to the hatchery and only 11,436 were required to meet the hatchery quota. In this case over 60,000 Chinook were destroyed without the ability to spawn naturally.

At the Klamath Basin Symposium in May of 2001, held at Humboldt State University, it was noted that Chinook were returning to streams and creeks off of the Klamath that were normally not utilized. This resulted as a failure at the hatchery which forced its fish ladder to be closed for a short time. The clear indication is that if the fish are not allowed to access the hatchery they will find other places to spawn naturally. At our last FPAT meeting in Yreka Mr. Mike Rode of California Fish & Game stated that over 20,000 Chinook spawned in Bogus Creek and that their offspring would be considered wild Chinook. The

argument of genetic degradation will be addressed in the appendix.

Therefore, if we truly wish to create sustainable fisheries in the Northwest then we should consider the following approaches based on the historical data from Iron Gate Hatchery located in the appendix:

1. All hatcheries to operate at full capacity as the cost would be minimal for only the food is a factor since the facilities can handle more than they are producing at this time.
2. Collection of salmonids for hatchery mitigation goals to be collected at various times during the runs and not to exceed more than 10% of their collection goals. Fish ladders would be closed between collections and uncollected salmonids to be allowed to spawn naturally.
3. Corps of Engineers to dredge the entrances to lower basin tributaries to allow fish passage into these streams which are the normal spawning grounds for Coho Salmon.
4. The culling of pinniped populations to reduce the rampant destruction of salmonids. Allow the tribes which traditionally hunted pinnipeds to resume their customs.

I wish to thank you for taking the time to review this proposal and look forward to your comments.

Sincerely;

Dr. Richard Gierak,  
Degrees in: Biology, Chemistry and the Healing Arts

## APPENDIX

### EL NINO EFFECTS ON SALMONID POPULATIONS

1993 Report by NMFS in their Oceanic report states that the El nino of 1983-1985 devastated the Coho Salmon population off the coast of California.

Dr. John Palmisano (He was a Marine mammal biologist for NMFS in Juneau, Alaska, taught fisheries and biology at U of Washington. Also an environmental scientist for a consulting firm in Bellevue, WA. (503 645-5676)) 1997: pg2. "Coastal waters from Mexico all the way to Alaska have gradually warmed since the climate shift of the 1970s and the subsequent, periodic affects of El Nino." "It is estimated that 40 - 80 percent of estuarine habitat along the Pacific Northwest has been diminished or destroyed". "It is clearly not the perceived mismanagement of inland streams and rivers that has caused the recent degradation of the salmonid population".

### SALMONID SLAUGHTER BY PINNIPEDS

1989-1990 Mid-Klamath Sub-Basin Spawning Ground Utilization Surveys indicated:

Predation: Both El Nino and the recent drought has been indicated as having an effect on the prey and predator species distribution.

Threatened California sea lions were porking out on threatened salmon.

Efforts to capture and relocate harbor seals exhibiting the same tendency have been unsuccessful in solving the problem.

The (LRP) Ch4, pages 37-39, states that estimates of mortality of anadromous salmonids from natural predators run as high as 98 percent (Fresh in Steward and Bjornn 1990) Yuroks traditionally harvested marine mammals (McEvoy 1987), but today many of these species are protected by the Marine Mammals Protection Act." In the typical logic of fisheries scientists, the report proceeds to ignore its own stated facts in favor of the politically correct.

1998 Report to Congress Prepared by NOAA, NMFS February 1998: pg 11

Conclusions: "California Sea Lions and Pacific Harbor Seals are abundant, increasing, and widely distributed on the West Coast. Many salmonid populations, which are declining due to a host of factors, are being preyed upon by pinnipeds." "Pinnipeds can have a significant negative impact on a salmonid population." Status of Pinnipeds pg 2: "California sea lions, for example, are now found in increasing numbers in northern waters, in inland waters, and upriver in freshwater in many West Coast systems. They are also now found near man-made structures such as dams or fish passage facilities with increasing frequency".

### GENETIC STUDIES OF HATCHERY AND NON-HATCHERY FISH

Sept. 10, 2001 Plaintiffs In the ninth District Federal Court argued that the NMFS argument for listing Oregon coastal Coho salmon is that "naturally spawned" and "hatchery spawned" was arbitrary and capricious and thus unlawful under the Administrative Procedures Act 5 U.S.C. 706. The NMFS listing decision, contained at 63 Federal Register 42,587, is declared unlawful and set aside as arbitrary and capricious. United States District Judge, Michael R. Hogan.

The initial statement regarding the controversy between "natural" and "hatchery" fish was made in a report by Busack and Currens in 1995, wherein they stated, "Interbreeding with hatchery fish might reduce fitness and productivity of a natural population". According to Mr. Michael Rode of the California Department of Fish and Game at a Hatchery

Evaluation meeting on September 19 at Iron Gate Hatchery disclosed that less than a 2% genetic survey has been taken to date and no genetic differences have been noted between "hatchery" or "natural" Coho Salmon.

It should be noted that the NMFS listing of Coho Salmon in Northern California and Southern Oregon in 1997, (Federal Register: May 6, 1997 (Volume 62, Number 87, 50 CFR Part 227 [Docket No. 950407093-6298-03; I.D. 012595A]) Page 24588-24609) utilized the same data as in the coastal Oregon Coho listing. This listing also distinguishes "natural coho" from "hatchery coho" and they did not count "hatchery coho" even though there is no biological distinction between the two. Therefore, the listing affecting Northern California and Southern Oregon is also unlawful and should be set aside as arbitrary and capricious.

#### SEDIMENT DEPOSITION BLOCKS ACCESS TO LOWER BASIN STREAMS

1990-1991 According to Klamath National Forest Planner Jim Anderson, studies indicate that the largest contributions to sediment load in the Klamath Basin are from natural causes, including landslides and erosion after fire.

1991 Marine Fisheries Biologist in report to NMFS indicated floods of 1955 and 1964 on the Klamath River destroyed riparian habitat and salmon spawning beds by depositing from 10 to 30 feet of sediment and debris

#### TESTIMONY OF DAVID A. VOGEL EXCERPTS

In my opinion, the National Marine Fisheries Service (NMFS) significantly and inappropriately added to the regulatory crisis in the Klamath Basin by calling for higher-than-normal releases from Iron Gate Dam under the auspices of protecting the coho salmon, a "threatened" species, from extinction.

Primary Factors Affecting Coho are in the Tributaries, Not the Mainstem Coho salmon, as a species, prefer smaller tributary habitats, as compared to larger mainstem river habitats.

The following are highly relevant facts ignored by NMFS in the agency's Biological Opinion:

Fry rearing habitat in the upper mainstem Klamath River is not as quantitatively or qualitatively important to the species as is rearing habitat in the Klamath River tributaries.

Numerically and proportionally, very small numbers of coho fry rear in the mainstem downstream of Iron Gate Dam in the reach most influenced by the Klamath Project.

The indirect effects of variable Iron Gate flow on adult coho populations in the Klamath basin are minuscule when compared to other direct factors such as incidental ocean harvest and other harvest of adult fish.

References for Mr. Vogel's testimony before Congress:  
CH2M Hill. 1985. Klamath River Basin fisheries resource plan. For U.S. Department of the Interior.  
Kier, William M., Associates. 1991. Long range plan for the Klamath River Basin conservation area fishery restoration program. The Klamath River Basin Fisheries Task Force.  
Markle, D., L. Grober-Dunsmoor, B. Hayes, and J. Kelly. 1999. Comparisons of habitats and fish communities between Upper Klamath Lake and lower Klamath reservoirs.  
Abstract in The Third Klamath Basin Watershed Restoration and Research Conference. March 1999.  
U.S. Fish and Wildlife Service. 1988. Final Rule: Endangered and

Threatened Wildlife and Plants;

2 ODFW estimates made by applying relative catch per unit of effort to previous population estimates (Fortune 1986).

3 U.S. Bureau of Reclamation. 2001. Biological Assessment for the Klamath Project.



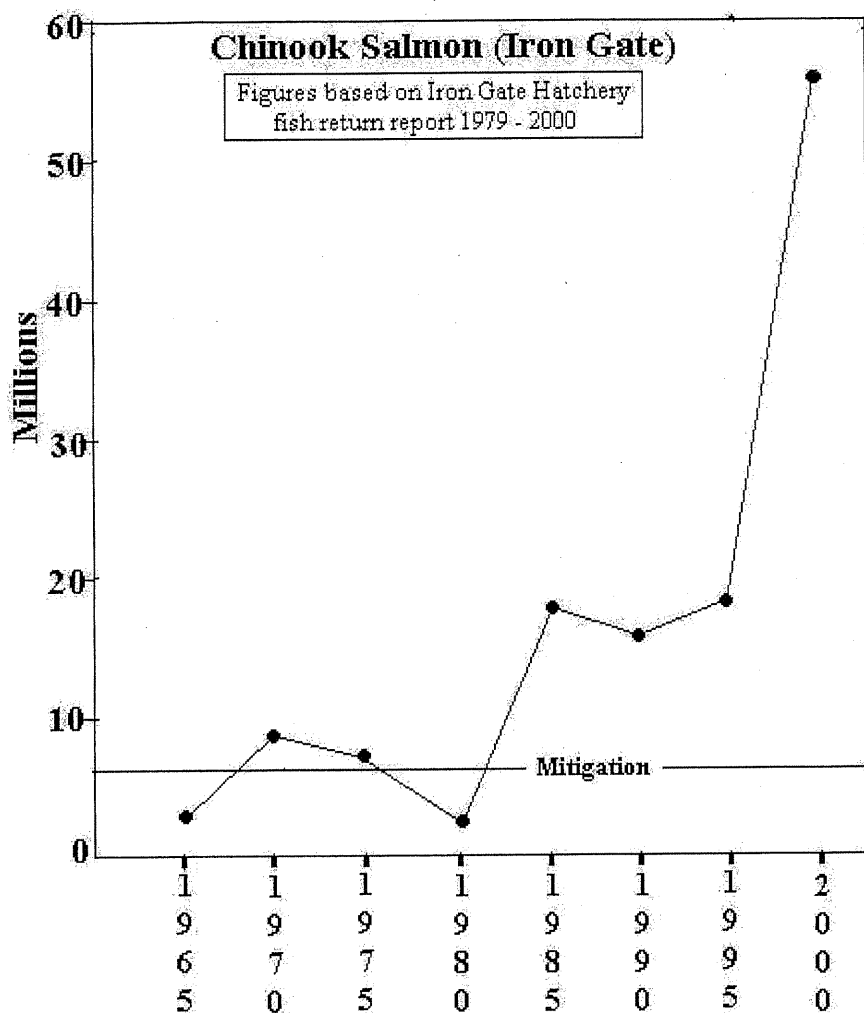


Figure 1

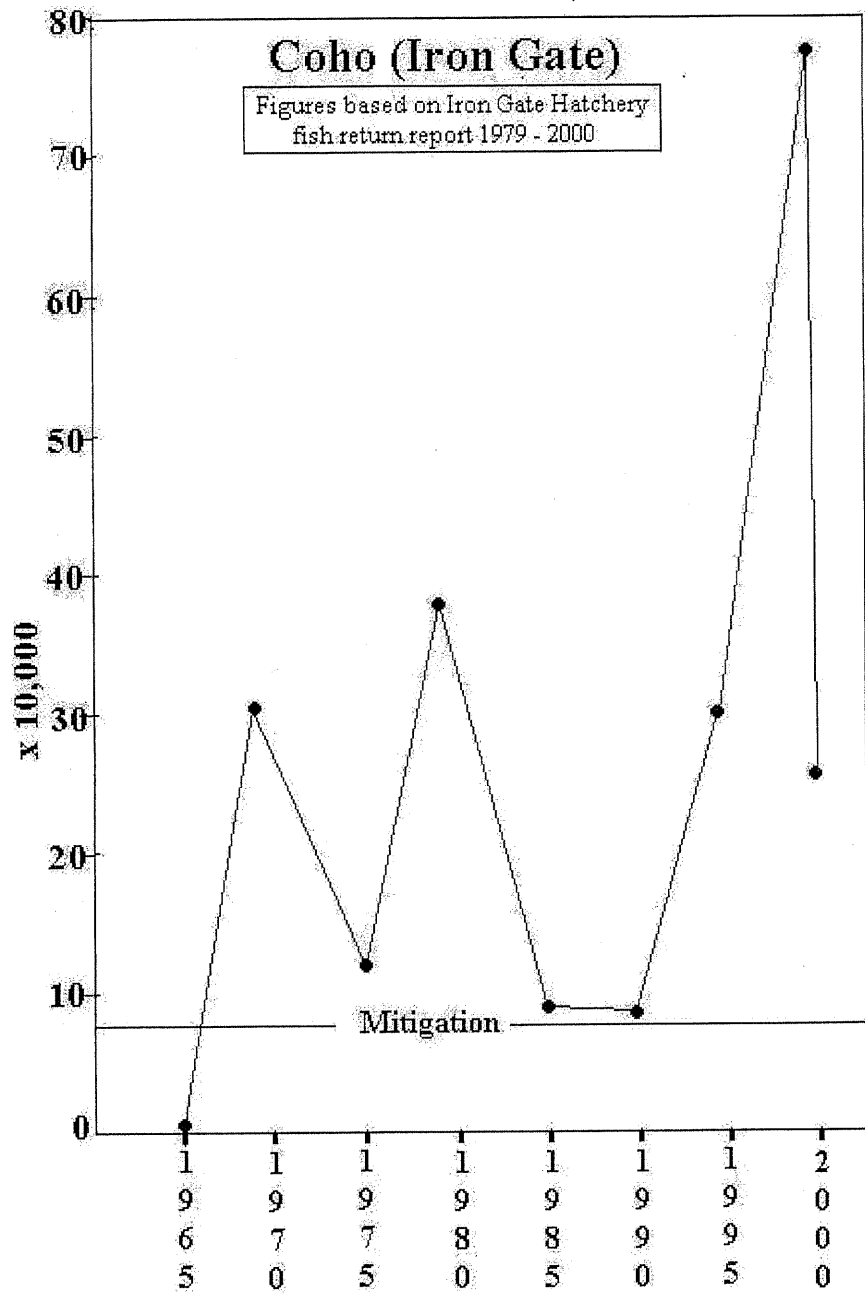


Figure 2

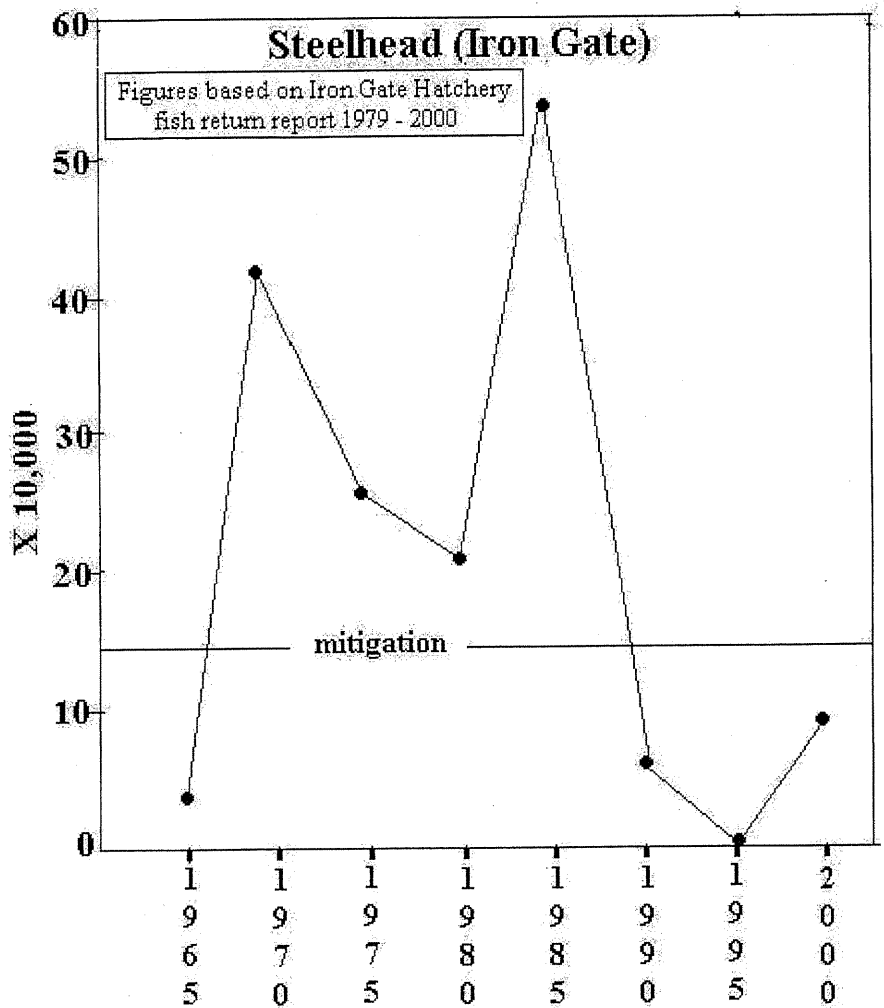


Figure 3

**Subject: Sustainable Fisheries 2**

**Date:** Wed, 09 Jan 2002 15:31:13 -0800

**From:** Richard Gierak <rgierak2@inreach.com>

**To:** john.coon@noaa.gov

John;

Forgot to attach the most important document and have included it here for the Sustainable Fisheries Proposal.

Richard

**IRON GATE HATCHERY REPORT 1965 - 2000**

SPECIES	EGG-COLLECTIONS	MITIGATION GOALS	
Chinook require 7,624 fish	12,000,000	6,000,000	
Coho require 400 fish	500,000	75,000	
Steelhead require 895 fish	1,000,000	150,000	

YEAR	RETURNS	HATCHERY PRODUCTION	POSSIBLE IF LADDER CLOSED ABOVE MITIGATION GOALS
<u>CHINOOK</u>			
1965	3,000	2,360,000	0
1970	11,000	6,000,000	2,668,000
1975	10,000	6,000,000	1,870,000
1980	2,600	2,046,000	0
1985	22,000	6,000,000	11,314,000
1990	12,000	6,000,000	3,444,000
1995	23,000	6,000,000	12,100,900
2000	72,000	6,000,000	50,664,000
<u>COHO</u>			
1965	5	375	0
1970	1,600	75,000	234,000
1975	600	75,000	37,400
1980	2,000	75,000	300,000
1985	1,000	75,000	11,220
1990	425	75,000	4,675
1995	1,600	75,000	224,000
1997	4,100	75,000	691,900
2000	1,300	75,000	168,300
<u>STEELHEAD</u>			
1965	225	37,800	0
1970	2,400	150,000	262,850
1975	1,500	150,000	101,640
1980	1,200	150,000	51,240
1985	3,200	150,000	387,240
1990	300	50,400	0
1995	12	2,016	0
2000	500	84,000	0

These figures were compiled by California Department of Fish and Game and Pacific Power and Light Company in the Appendix Tables 2 & 3 and distributed to the FERC Hatchery Evaluation Team at the Iron Gate Hatchery in September of 2001.





**Hoopa Valley Tribal Council**  
**Natural Resources Division**  
**Fisheries Department**  
Post Office Box 417 • Hoopa, California 95546  
(530) 625-4267 • FAX (530) 625-4995

11 March 2002

Dr. Donald O. McIsaac, Executive Director  
Pacific Fishery Management Council  
2130 SW Fifth Avenue, Suite 224  
Portland, OR 97201

Dear Dr. McIsaac:

**RE: Tribal Representation on PFMC Advisory Committees**

The Hoopa Valley Tribe (Tribe) is transmitting this letter in response to an inquiry initiated by Mr. LB Boydston of California Department of Fish and Game on 27 November 2001 regarding procedures for designating representatives from Yurok and Hoopa Valley tribes to the SAS and HSG (attached). The Tribe maintains that alternating these appointments between the two tribes provides the best opportunity for each to protect its interests in the PFMC process. This has been the protocol observed for several years with regard to the SAS. We support the observance of the same protocol for the HSG seat which represents Klamath Basin tribal interests.

As observed by Mr. Boydston, the motion, which set indefinite terms for appointees to these subcommittees (Motion 28 of September 2000), acknowledged the concept that Klamath Basin tribes alternate their representation. In 2000, the Tribe sought to affect this rotation by appointing me, the Tribe's Fisheries Director, as the California tribal representative on the SAS for a term of three years. This appointment was not acted on by the PFMC and instead, the Yurok Tribe retained its representative's position. Similar to the alternation of appointees to the SAS between these two Klamath Basin tribes, we would support the appointment of a Yurok Tribal representative to the HSG in my place where I currently represent Klamath Basin tribal concerns. After three years, the Tribe would provide you with its nominee for the HSG and in six years, we would again recommend our representative to the SAS. This would effectively alternate California tribal representation on both subcommittees on a tri-annual basis.

The Tribe's position on this issue has been consistent and in accordance with PFMC intent. The PFMC has received the Tribe's letter of nomination identifying me as nominee to SAS (letter addressed to you on 13 October 2000). It is important to the Hoopa Valley Tribe that the California Indian Tribal Representative be experienced in resources management and have a practical as well as technical appreciation for the complexities of salmon management. As described in the nomination, my skills and experience are demonstrated. I attained my B.S. in Fisheries at Humboldt State University in 1984 and have served as the Tribal Fisheries Program Director since 1988. During my tenure, I have regularly attended meetings of the PFMC as technical advisor to our Tribal Council.



PACIFIC LAMPREY



STEELHEAD



GREEN STURGEON

Dr. D. Mclsaac  
3-11-02  
Page 2 of 2

In conclusion, the Hoopa Valley Tribe has recommended me to fill this SAS appointment in recognition of my experience, stature in our government, and willingness to work cooperatively with diverse resource user groups. This letter is intended to resurface this issue and again request that PFMC act to appoint me as California Indian representative to the SAS. If appointed, I would be a strong asset to expressing California Indian concerns in salmon issues.

For the purpose of future correspondence, I may be reached at the letterhead address.

Sincerely,



Michael W. Orcutt  
Director

Cc:  
LB Boydston  
CDGF, 1416 Ninth Street  
Sacramento, CA 95814

Dave Hillemeier  
Yurok Tribe Fisheries Department  
15900 Hwy 101 N  
Klamath, CA 95548

Jim Harp  
Quinault Indian Nation  
PO Box 57  
Amanda Park, WA 98526-0057

PFMC members

Mr. Dave Hillemeier  
Fishery Biologist  
Yurok Tribe  
Fisheries Department  
15900 Hwy 101 N  
Klamath, CA 95548

Mr. Mike Orcutt  
Representative  
Hoopa Valley Tribe  
PO Box 417  
Hoopa, CA 95546-0417

Gentlemen:

The issue of which tribe should be seated on the PFMC's SAS and HSG panels has yet to be resolved. It is my understanding that the Yurok tribe wishes to retain the SAS seat and the Hoopa tribe wishes to rotate the seat, as we have done in the past.

I have reviewed the motion that fixes the terms of agency and tribal members to indefinite tenures (attached). The motion clearly indicates the Yurok and Hoopa tribes have an "arrangement" to rotate their people on the panels.

This indefinite tenure situation is reflected in the Council's Operating Procedures (also attached).

I am writing to request that the tribes settle this matter before the March Council meeting. Even if the Yurok Tribe is set on retaining the seat, my recommendation to the Hoopa Tribe is to bring this matter up at the March Council meeting during the public comment period. This would likely result in Council vote to decide the matter.

Here are some options for you both to consider:

1. Rotate the SAS and HSG seats, as in the past, every cycle (now every 3 years).
2. Same as 1. but do the rotation more often.
3. Let the Council decide it.
4. Let the KFMC decide it with the tribes abstaining (or some other agreed upon procedure).
5. Let another party or group decide it (a party or group the tribes can agree on).

If the tribes have already reached an agreement, I retract this letter. If not, please begin the negotiations. Let me know if I can help. I am available to fly up and meet with you both, or whomever is empowered to make this decision. I can also arrange a meeting place and invite agreed upon individuals or representatives.

Sincerely

LB Boydston  
Representative

cc: John Coon  
Pacific Fishery Management Council





**YUROK TRIBE***4 PM Public Comment  
Supplemental Yurok Letter**March 2002* Eureka

1034 Sixth Street • Eureka, CA 95501  
(707) 444-0433  
FAX (707) 444-0437

 Klamath

15900 Hwy. 101 N. • Klamath, CA 95548  
(707) 482-2921  
FAX (707) 482-9465

 Weitchpec

Hwy 96, Box 196 • Weitchpec Route  
Hoopa, CA 95546  
(707) 444-5606

March 13, 2002

Dr. Donald O. McIsaac, Executive Director  
Pacific Fishery Management Council  
2130 SW Fifth Avenue, Suite 224  
Portland, OR 97201

Re: Salmon Advisory Sub-Panel (SAS) Representation

Dear Dr. McIsaac:

On behalf of the Yurok Tribe, I would like to convey to the Pacific Fishery Management Council (PFMC) the importance of retaining the Yurok Tribal representation on the Salmon Advisory Sub-Panel. As I informed Mr. LB Boydston in a January 23, 2002 letter regarding this issue, given the importance and magnitude of the Yurok Tribe's fishery, I feel strongly that the Yurok Tribe should be represented on the SAS at all meetings, and not limited to a rotation that would equate to our participation at 50% of the SAS meetings.

Of all user groups along the Pacific Coast, the Yurok Tribe is the largest harvester of Klamath Basin Fall Chinook, which is often a stock that drives the establishment of ocean fishing seasons set by the Pacific Fisheries Management Council. Preseason, the Yurok Tribe targets 80% of the Tribal allocation, which equates to 40% of the overall harvest of Klamath Fall Chinook, substantially more than any other use group.

The Yurok Tribe is aware of no other group that harvests such a large portion of a key salmon stock managed by the PFMC that has been requested to limit their participation on the SAS to part time. If you have any questions or would like to discuss this matter, please contact me at the Eureka Tribal Office.

Sincerely,



Susan Masten, Chairperson  
Yurok Tribal Council

**VICE CHAIRMAN**

Cc: Jim Harp, PFMC Tribal Representative  
Mike Orcutt, Hoopa Valley Tribe Fisheries Department