ADAPTING TO CHANGE

Fishing Families, Businesses, Communities, and Regions

Survey of Oregon Troll Permit Owners: Summary of Results

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I. Background

What do past and present Oregon troll permit owners think about their fishery and the adequacy of disaster relief programs? How are trollers adapting to changes in the salmon industry? This report presents the results of a survey and a series of interviews exploring these questions.

The number of salmon in the Pacific Northwest fluctuates, but generally has been in decline. During the past two decades, salmon fishers have been challenged by increasingly numerous, complex, and restrictive fishing regulations. Fewer troll-caught salmon are available, and competition from farmed and imported salmon is growing.

Important environmental changes, including a long drought in the late 1980s and early 1990s, growing populations of marine mammals, and warmer ocean conditions since the mid-1970s, also have affected the salmon industry. There have been changes in society's attitudes toward natural resources, including growing concerns about loss of habitat and biodiversity, increased emphasis on wild salmon over hatchery fish, and fears that efforts to produce more salmon have led to declines of some wild stocks. Combined, these factors have forced most trollers to make significant economic and lifestyle changes.

Disaster Relief Programs

The federal government recognized the Pacific Northwest salmon disaster in 1994 and allotted more than $24 million for disaster relief programs in Oregon, Washington, and California. Twelve million dollars of these funds were administered by the National Oceanic and Atmospheric Administration (NOAA) for three programs:[1]

- A $4 million Washington state vessel-license buyout, administered by the Washington Department of Fish and Wildlife (WDFW). This program retired 302 of 1,378 Washington salmon troll, Columbia River gillnet, and Washington charter licenses.
- A $6 million habitat-restoration program, administered by the U.S. Department of Agriculture in cooperation with local soil and water conservation districts. Oregon received $2.2 million to hire displaced fishermen for restoration jobs. In 1995, about 100 jobs were available through this program.
- A $2.2 million data-collection jobs program ("at-sea research" or "test fishing") adminis-

[1]These programs continued in 1995. In 1996, the National Marine Fisheries Service allocated $4.7 million for habitat restoration jobs, $2.8 million for data collection, and $5.2 million for license buyout programs (total $12.7 million). Conditions for eligibility were altered to allow more people to receive assistance.

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tered by the Pacific States Marine Fisheries Commission. This program hired fishermen to collect data for biological research aimed at improving fishery management. The 11 Oregon projects included studies of commercial and sport-fishing by-catch mortality, sturgeon tagging, and other salmon-related research.

In addition, the Federal Emergency Management Agency (FEMA) authorized $9 million for disaster unemployment for 1994: $2 million for Oregon, $5.8 million for Washington, and $1.3 million for California. The Small Business Administration (SBA) also authorized $3 million for disaster relief loans.[2]

The disaster-relief unemployment insurance (DUI) program, which was available only for 1994, was based on the assumption that the salmon decline could be attributed to ecological factors. Because fishing is highly variable from year to year and because drought and unfavorable oceanic conditions had occurred over several years, applicants were allowed to base their unemployment claims on their fishing records dating back to 1988. Claims, however, were limited by current household income. In Oregon, Washington, and California combined, 83 percent of applicants for DUI received benefits, averaging $3,293 each. In Oregon, 68 percent received benefits, while in Washington, 97 percent received benefits, and in California, 70 percent.[3]

To learn whether these programs met the needs of trollers, we spent part of the summers of 1995 and 1996 interviewing them and others affiliated with the fishery, and conducted a survey from March through May 1996. The survey asked active and inactive trollers about the effectiveness of disaster-relief programs, their own lifestyle changes, their views on what would help the salmon resource, and general background information.

II. Sample Selection

The survey sample was drawn from a merged list of 1988 (n = 2,637) and 1994 (n = 1,821) Oregon troll permits,[4] from which we randomly selected 20 percent of the permit owners. We removed duplicates (some individuals owned as many as five permits), and sent pre-survey postcards to a sample of 775 permit holders. Of these, 95 were returned with no forwarding address and 20 were reported deceased, leaving us with a survey population of 660. Surveys were sent in three waves, and after contacting a sample of 17 percent of the nonrespondents, we received a total of 357 responses (54 percent). The survey was supplemented by 30 interviews. Interviewees were contacted with the help of Extension Sea Grant agents.

Representativeness

Our sampling objective was to reach nearly equal numbers of those who had left the fishery and those who were still fishing.[5] Forty-six percent of owners on the combined list held permits for 1988 and not 1994; 25 percent held them for 1994 and not 1988; and 28 percent held permits in both 1988 and 1994. The response rate was 48 percent for 1988 permit holders. The highest response rate (64 percent) was received from people who owned both 1988 and 1994 permits, while 47 percent of people who owned permits for 1994 (and not 1988) responded.

Approximately 75 percent of the trollers on the combined list were Oregon residents, with 13 percent from Washington, 9 percent from California, and the rest ranging from Alaska to North

[2]This information was compiled from a variety of sources, including the Department of Commerce World Wide Web site (www.doc.gov/), the National Oceanic & Atmospheric Administration site (www.noaa.gov/public-affairs/), the Federal Register, and personal communication with the Washington and Oregon departments of fisheries and wildlife.

[3]Gilden, J., and C. Smith, 1996. "Survey of Gillnetters in Oregon and Washington: Summary of Results." Oregon Sea Grant publication ORESU-T-96-001, page 2.

[4]Permit holders may renew their permits any time during the year. The 1994 list includes those who renewed in 1994 and those who were eligible to renew but had not.

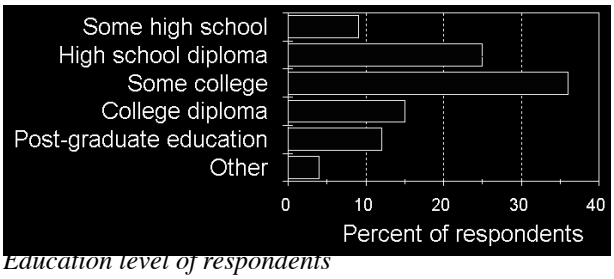
[5]The confidence interval for the sample is 5 percent.

Carolina and Ohio. We compared the sample with the larger population by looking at boat size among the three groups and the entire 1988 and 1994 troll-permit population. Our sample average and the overall average did not differ significantly. However, because a larger percentage of our responses came from owners of permits for both years, who also owned larger boats, our results are weighted toward owners of slightly larger boats and those more actively involved in salmon fishing.

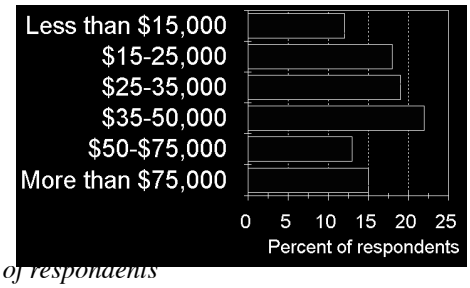
General Demographics and Population Characteristics

Several themes emerged from the quantitative survey data and the qualitative written survey responses and interviews. First, although the population of trollers is quite homogeneous (most are men around 55 years of age), trollers have very diverse views regarding fishery management. The response group includes people who have left the fishery and those who have remained throughout the salmon crisis and who plan to continue fishing. It also includes owners of small and large boats; those who have and have not received disaster relief; and those who do and do not consider themselves commercial fishers.[6] Respondents were given multiple spaces in which to list their occupations, and some listed as many as five. Forty-one percent of the respondents identified their primary occupation as commercial fishing. Twenty-four percent said they were retired (as any one of their multiple occupations), and 30 percent were self-employed.

To describe the different populations of trollers, a historical perspective is useful. Trolling became one of Oregon's economically important industries after World War II. The season extended from early spring to late fall, and trollers were able to earn a good family income. Because trolling was inexpensive, it became the entry fishery for many who later became trawlers. Trollers who wanted to move on would fish for crab in the winter and albacore in the late summer, earning enough to buy a bigger boat and move into trawling. The salmon, crab, and albacore combination also served to buffer declines or bad seasons in any one of the fisheries.



Education level of respondents



Income level of respondents

In addition to full-time trollers, the summer season attracted many who fished part-time. The ocean is more forgiving in the summer, and the weather is better. Many of these part-time trollers had flexible jobs such as teaching or service industry work. Many retirees also relied on trolling, seeing it as a way to augment their retirement income, to keep busy, and to pursue a pleasurable activity. For some, trolling is almost an addiction. Their deep love of fishing persists even when economic returns are small.

> *Trolling was more than an occupation. It was a lifestyle. No other occupation offered the freedom that trolling did. It took the princes and the dregs of society and made them equals.*

> *I want a future in salmon fishing. Am proud to pay for it, as it returns to me a very rich, exciting lifestyle.*

> *As one who "loves their job," I have to a large extent adjusted my life to fit fluctuating income and season changes. I've traded the*

[6]Seven percent of the troll permits were solely or jointly owned by women. However, we alternate between the terms "fishermen" and "fishers" in this report because many women who fish prefer to be called "fishermen."

security of job/money for adventure/satisfaction.

With the Magnuson Fishery Conservation and Management Act, trolling came under greater regulation so that other salmon fishers received an equitable share. The result was shorter seasons. Declines in the salmon stocks also have led to increasing regulation of the fishery.

The population of troll fishers has steadily decreased. Since 1988, the number of permit holders has declined by 40 percent, while the number of boats landing salmon has declined by 82 percent. Seventy percent of respondents reported they had fished in 1988, while 47 percent said they fished in 1992, and only 27 percent fished in 1995. Nevertheless, 47 percent said they planned to fish in 1996.

III. Who Stayed in and Who Left the Fishery?

Groups within the population

Two-thirds of respondents reported that they had not fished for salmon in 1994; however, nearly half said they planned to fish in 1996. Salmon trolling is a lifestyle that people love, and many will return to it if the opportunity presents itself. In 1995, good salmon fishing on Sacramento and Rogue river stocks raised hopes of improvement in the fishery.

I was a small boat troller that was dependent on coho fishery. Enjoyed fishing tremendously and would like to fish again. Still have boat, but I gave up the permit.

Just waiting, hope that it will come back.

Of the 67 percent who reported leaving, 65 percent said they left for one or more of the following reasons: they couldn't make a living, the season was too short, or the permit was too expensive. Respondents who did not identify themselves as "commercial" fishermen, those who did not fish in 1995, and those who owned permits for 1988 only had comparable reasons for quitting the fishery.

	Other trollers, not "commercial"	Did not fish in 1995	Owned 1988 permit only
Could not make a living	44%	47%	48%
Season is too short	40%	41%	38%
Permit is too expensive	21%	21%	19%
Quit to retire	8%	9%	10%
Lost interest	6%	5%	5%

Commercial trollers

There were significant differences[7] between those who described themselves as commercial fishers, and those who did not.[8] Commercial fishers were less likely to rely on a nonfishing job, and less likely to have left the fishery or sold their boat and gear, than those who did not describe themselves as commercial trollers. Only 1 percent of the commercial fishers reported that they left the fishery to retire.

Commercial fishers started fishing at an earlier age than other groups (25 for those who described themselves as commercial fishermen, 42 for retirees, and 33 for others). They came from families in which more generations had fished, and they fished for a longer period than retirees or those with other occupations.

Commercial fishers earned a higher percentage of their income from fishing than either the other trollers or retirees, and they fished in 1995 and planned to fish in 1996 at higher rates than other groups. To make up for lost income from salmon, they relied on other fisheries—primarily crab, albacore, and longlining. The pattern of fishing for

[7]All differences listed as significant throughout this report have a significance level of $p<0.001$.

[8]We label those who gave their primary occupation as "commercial fishing," commercial fishermen or commercial trollers. Those who listed another job ahead of commercial fishing we call "other trollers." Commercial fishers relied more heavily on salmon fishing as their economic base, while other trollers fished part-time or relied on nonfishing jobs.

	Average age	Average starting age	Average years fished	Average generations
Commercial fishermen	53	25	28	1.8
Other trollers	52	33	19	1.3
Retirees	67	42	25	1.4

salmon, crab, and albacore has a long history. In the early 1970s, revenue from albacore equaled that of salmon. From 1970 through 1976, 80 percent of the income from commercial fishing in Oregon came from these three fisheries. Since 1989, however, the salmon, crab, and albacore fisheries have not topped 40 percent of commercial fishing income. In addition to moving to other fisheries, commercial fishers moved to other geographic areas (especially California and Alaska) at a higher rate than those who did not consider themselves commercial fishers (22 percent compared to 3 percent).

Commercial fishermen were more likely to apply for disaster relief assistance than other groups (52 percent applied for unemployment insurance, compared to 14 percent of retirees and 14 percent of those with other occupations). Their awareness of the programs was higher, although they received most of their information through word-of-mouth. The most common programs for which they applied were disaster-unemployment insurance, the WDFW buyout, and test fishing. They also expressed a higher level of satisfaction with the programs than did other groups. Of those who said they "got what they needed" from the programs, 78 percent were commercial fishermen (however, only one-third of commercial fishermen said they got what they needed from the programs). Commercial fishermen reported "tightening their belts" at a higher rate than other groups (51 percent compared to 20 percent of retirees and 24 percent of others). They spent the disaster relief money on living expenses, Coast Guard-required safety equipment, and, to a lesser extent, salmon trolling equipment.

Because of the decline in salmon fishing opportunities, it is almost impossible to be a full-time salmon fisherman in Oregon, Washington, and northern California. In 1995, commercial fishermen earned an average of 12 percent of their household income from salmon trolling, and 8 percent earned half or more of their income from salmon.

With cutbacks in salmon, I had to get other work. [I] tried to hold on, but with small boat and only crabbing for other fishery, could not make enough money to support [my] family.

Worked much harder in other areas of fishing.

Due to low price, I could make more money urchin diving.

Commercial and noncommercial trollers' views regarding hatcheries and natural predators were also significantly different. Although both groups favored hatcheries and the removal of seals and sea lions, commercial fishers strongly favored hatcheries at 85 percent compared to 74 percent for other trollers. Seventy-seven percent noted that reducing the number of predators was a priority, compared to 63 percent of the other trollers.

Commercial fishermen did not differ from other occupations in level of education, income, age, or perception of well-being.

Part-time trollers and retirees

Trollers' backgrounds influence their relationship with the disaster relief programs. Some took up fishing after escaping declines in other extractive industries such as logging and are finding similar problems in their new occupations. Others who are retirees or near retirement expect to supplement their incomes by fishing but find that the costs of fishing for salmon are much higher than the revenues.

My plan was to learn enough about commercial salmon fishing, retire at 55 years of age, and supplement my retirement by fishing.

Those who did not describe themselves as commercial fishers relied more on nonfishing jobs (49 percent compared to 13 percent for commercials). They sold their boats and gear at a higher rate than commercial fishers (39 percent of retirees, 31 percent of others, and 7 percent of commercials), and their income from salmon fishing was substantially less than that of commercial fishers (see the following chart).

	Percent earning 1% or less of their income from salmon trolling	Percent earning 50% or more of their income from salmon trolling
Retirees:		
In an average year	82%	3%
In 1995	94%	1%
Commercial fishers:		
In an average year	74%	16%
In 1995	83%	8%
Others:		
In an average year	83%	6%
In 1995	97%	0%

Retirees and those with other occupations were less aware of the disaster relief programs than commercial fishers, and they expressed less satisfaction with the programs. Fewer of them fished in 1995 or planned to fish in 1996.

Although retirees were similar to the other groups in their attitudes toward most management measures, they supported both hatchery production and protection of endangered fish runs at slightly higher rates than nonretirees (87 percent saying hatcheries were "most important" compared to 76 percent of nonretirees; 36 percent supporting endangered runs compared to 28 percent).

As would be expected, retirees were older than the other two groups and had fewer dependents. They also started fishing at a later age, although they fished for a longer time period than those with nonfishing occupations.

Year of permit ownership

Respondents also were separated into three groups: those who owned 1988 permits and not 1994 permits, those who owned 1994 permits and not 1988 permits, and those who owned permits in both years. Although there was no connection between level of education, household income, or overall well-being and the years of permit ownership, these three groups differed in several ways. People with permits for both years were more likely to respond to the survey, to have received disaster relief, and to identify themselves as commercial fishers. People with 1994 permits (who were not on the 1988 list) were more likely to have fished in 1995 and to plan to fish in 1996. They were also younger and earned a higher percent of their income from salmon than the other two groups. Those who had 1988 permits (and were not on the 1994 list) were older, less likely to have received disaster relief, less likely to have fished in 1995, and earned a lower percentage of their income from salmon fishing.

Those who plan to fish in 1996 reflect the trollers' continuing desire to fish for salmon when possible. Those without permits who continue to fish for salmon may fish with another permit holder, or may have given up their permit after the poor year in 1994.

	1988 list	Both lists	1994 list
Percent who fished in 1995*	15%	38%	51%
Percent who plan to fish in 1996*	16%	60%	71%
Percent who identify as comm. fishermen*	19%	55%	46%
Average age in years*	58	55	49
Percent of average 1995 income from salmon*	6%	14%	18%
Percent who received disaster relief*	15%	44%	40%

**Percent of people responding to question. Differences between groups are significant ($p<0.001$).*

Boat Size

In general, trollers with larger boats (over 39 feet) were more likely to fish for crab and albacore (crab requires more deck space, while albacore are caught farther out to sea); and a higher percentage of their income came from salmon trolling. Trollers on larger boats were also more likely to apply for disaster-unemployment insurance than those on smaller boats (under 25 feet), who were less aware of the disaster relief programs and often thought they were ineligible for them. Trollers on smaller boats started fishing later and were less likely to see themselves as commercial fishermen.

Many respondents felt that management of the fishery was putting too much pressure on small boats. In fact, the percentage of fish caught by small boats has been steadily decreasing, with fewer permit holders landing larger portions of the catch. In 1988, 2,061 permit owners reported fish landings while in 1995 only 376 permit holders landed fish. While 27 percent of the permit holders landed more than 5,000 pounds of fish in 1988, this dropped to 1 percent in 1995. Likewise, 31 percent of permit holders landed less than 1,000 pounds of fish in 1988. In 1995, this number rose to 75 percent.[9]

Knowing that 90 percent of the fish are caught by 10 percent of the fishermen, it is hard for me to understand the pressure that's been brought to bear to get rid of the smaller boats.

IV. Disaster Relief Programs

The disaster relief programs served mainly to keep people in the fishery. Most of the money paid to trollers was used for meeting family living expenses, while the second and third most-common uses were to purchase Coast Guard-required equipment and salmon fishing gear. Few used the money to move into other occupations.

As noted above, trolling is sometimes considered an "entry" fishery. Many trollers begin with small boats, fishing near shore, focusing on coho, and hoping to move on to other fisheries. When there are short seasons and a low price for salmon, there is no money for equipment upgrades that would allow people to move on. Trollers also need funds to buy permits for limited-entry fisheries (such as for shrimp and crab) or to purchase larger boats to fish in deeper waters; and the Coast Guard requires that boats carry expensive safety equipment such as life rafts, which cost several thousand dollars, and EPIRBs (emergency positioning indicating radio beacons), which can cost between $400 and $2,000. Despite the financial, emotional, and physical hardships involved with salmon fishing, however, many fishermen are strongly attached to the independent lifestyle, and make every effort to continue fishing.

The disaster relief programs were designed to help people through this difficult period by supplying loans, unemployment assistance, other job opportunities, and additional assistance. In general, however, the programs were not well-known or understood by the majority of troll permit holders. One-third of the respondents said they applied for one or more disaster relief programs; two-thirds showed little interest in the programs. This is partly explained by the sampling, which targeted equal numbers of those who had left the fishery and those still active.

Of those who applied for disaster relief, 39 percent said they received the help they needed. One person applied for five programs, and one-quarter of the respondents applied for two. The program that served the most people was disaster-unemployment insurance (DUI). Two-thirds of those who applied for disaster relief chose DUI. Of these, 46 percent said they got what they needed, while 54 percent did not. Numbers for other programs were less positive. Only 28 percent of disaster relief loan applicants said they got what they needed from the programs. The majority of people who expressed satisfaction with the programs described themselves as commercial fishermen. People who fished in 1995 were also more likely to be satisfied with the assistance. People who received the help they needed from

[9]Source: Oregon Department of Fish and Wildlife

the programs were more likely to plan on fishing in 1996.

One-third of the respondents said they applied for one or more disaster relief programs. Of those who did not say they applied, one-third thought they were ineligible; a quarter said they did not know about the programs, despite direct mailings by the Oregon Coastal Zone Management Association, Washington Department of Fish and Wildlife, and others; and another quarter said they did not need the help. A few disagreed with the concept. For those only on the 1988 list, 88 percent did not apply for disaster relief. This compares with 54 percent of the people on the 1994 list. Those saying they were commercial fishermen had the highest percentage of applications (59 percent), and those giving their occupation as self-employed or farming/ranching had the lowest (12 percent). Of those receiving help who were satisfied with the programs, half were between 41 and 54 years old. Neither education, income, nor perception of future occupational options showed any correlation with applying for assistance. Disaster relief was less helpful to people who lacked strong social networks, who were not members of professional associations, or who did not own a permit but fished for someone who did.

In interviews, trollers said they felt that much of the help went to people who did not need or deserve it, that the programs created expectations that were not fulfilled, and that those who were already better off got the most help. The eligibility requirements for disaster relief also created difficulty for people who had lost their records, who were sick or injured in 1988 or 1989, or who had major boat repairs during these years. Further, the fact that each program had different rules caused confusion among applicants.

> *The fishing industry has cost me everything I had, including my family—so feel I have really paid my dues, and I don't qualify for any help at all!*

We estimate that approximately 15 percent of active trollers are looking for a career change, and over half strongly support a license buyout. A primary reason for supporting a buyout is to recover the value of capital expenditures in boats, gear, and equipment.

For men in their 50s with limited preparation for jobs outside extractive industries, the habitat-restoration programs offer a good alternative to the fishery. Interviews with administrators of habitat jobs programs indicate that there are not enough eligible workers to fill all available positions, while in survey responses, fishermen say there are not enough jobs to go around. This discrepancy may be a result of differences in management by state (Oregon has focused on habitat jobs to a greater extent than Washington), location of projects in relation to population centers, and differing eligibility requirements depending on a particular project's funding sources.

Many people troll because the fishing lifestyle offers independence. They value self-employment, the opportunity to be out on the ocean, and the freedom from society. Many dislike government programs and other external interference. The number of people with this hands-off view is difficult to estimate, but is at least 15 percent of our survey population.

> *I never have had any help and don't want any.*
>
> *The idea of accepting welfare is appalling to me.*
>
> *Like a good fisherman, I am independent.*
>
> *I chose troll fishing as my occupation, not handouts.*

Options for Trollers

We asked respondents what occupations they saw as alternatives to fishing, and whether they felt these options were available to them. More than two-thirds of those responding did see other possible occupations. Some listed as many four, although the majority listed only one. Although age and number of dependents influenced the results, we could not distinguish what characterized those who had options from those who did not.

For those who saw options, 13 percent said that commercial fishing continued to be a possibility.

Of those people, 39 percent were already commercial fishermen. Among the other options listed were retirement (27 percent), self-employment (24 percent), and building trades (20 percent). Interviews found people moving into law enforcement; 7 percent listed this as an option. Forest industry jobs, at 5 percent, were not regarded by many as an alternative to fishing; and only 2 percent saw habitat restoration as an option.

Despite the salmon fishery's problems, 61 percent of the people who chose commercial fishing saw it as an available option. Building trades were most widely noted as being available (at 83 percent), and 79 percent of those who said self-employment was an option felt that it was available.

V. Troller Recommendations

Because adapting to changes in the fishery has been a difficult process, respondents frequently expressed bitterness, anger, disappointment, and frustration, as well as humor, ingenuity, independence, and a desire to volunteer their time and money for the benefit of the fishery's future. They offered the following eight comments and suggestions regarding the disaster relief programs. It is important to note that trollers are a diverse population. The frequent repetition of these themes, however, suggests that most would support these recommendations.

1. Distribute benefits fairly and equally.

Most of the negative comments regarding disaster relief were from people who felt that dissemination of funds, particularly disaster unemployment insurance payments, was unfair.

The dissemination of disaster unemployment funds was terrible. The system used was unfair and irrelevant. Some people were paid that shouldn't have been, and others weren't paid fairly.

If you feel the money set aside for these projects ever gets to the people in need of help, you need to take another look at where it winds up.

The amount given was very small. The salmon industry would have been better served if all that money would have [been] spent on hatcheries and restoration.

Trollers don't necessarily need welfare, we need equity and fairness.

2. Tailor disaster relief programs to account for people with small fishing operations.

Small boats have special limitations, and sometimes are unable to adapt to changing seasons and regulations. Many small boats fish mainly for coho. With the closure of this fishery in 1995 and 1996, fishers feel they have no other options. Their boats are too small to move to another fishery or to fish the deeper-running chinook. Respondents felt that decision makers should consider these factors when planning for disaster relief and fishery management.

My dad and I are partners and we have a $4,000–6,000 loss every year we fish. The boat and permits are for sale. They close the fishing when it is the best, and this year the fish were out too far for our 25' boat.

Most small boats have been inactive for so long they're not safe.

Most of the fishermen with boats my size (28') have left them rotting at dock, burned them, or have them rotting in the front yard at home.

3. Publicize existing disaster relief programs more effectively.

The majority of respondents (71 percent) heard about the disaster relief programs through word-of-mouth, and one-quarter were unaware of their existence. (Note that in 1994, when the programs were implemented, 46 percent of the sample did not have permits.) The most commonly cited sources of printed information on the subject were the *Washington Trollers' Association Newsletter*, the *Washington Department of Fisheries Newsletter*, *Fisherman's News*, the *Coos Bay World*, and *Tagline*.

Disaster unemployment insurance was available for only the 1994 season. This program paid the most money to the most fishermen and for many

was needed as much or more in 1995. Fishermen wondered why the program was not renewed.

4. Make it easier to get SBA loans.

5. Institute timely dissemination of disaster relief funds.

People who did not receive disaster relief often expressed bitterness toward the process and anger at the programs' management. In particular, respondents said that the process of applying for disaster relief loans was unnecessarily difficult. They felt this process should be simplified and requirements eased to allow people to move into new lines of business.

Disaster loan was so complicated I had to hire someone to apply for me ($500). Got nothing. Government red tape—stinks.

Why aren't we receiving DUA [disaster-unemployment assistance] now—it's worse than 1994!

Still, not all comments regarding disaster relief were negative:

I qualified for $100,000 [in the Washington buyout program] but realized funding was limited, so chose a lesser amount. We are living on this now, and I am thankful to have it. Have upgraded to a freezer troller—and are now freezing salmon in Alaska, and will be in California.

DUA unemployment benefits opened a door for displaced worker retraining. I jumped on it. WDFW buyback was a bad joke in terms of getting something meaningful out of business, but I'm not looking back.

The funds helped a lot but I got so far behind with the bad seasons and short time periods that I couldn't quite get solvent. But the funds that I got did help a lot.

6. Ease the burden of Coast Guard safety requirements.

Frequently, anger was directed at the U.S. Coast Guard, which has implemented expensive safety-equipment requirements. Some trollers felt that low-interest loans should be available for purchasing this equipment, or that the cost should be reduced. They also accused the Coast Guard of needlessly harassing them, either during equipment checks or in drug searches.

Coast Guard "safety regulations" (rafts, EPIRBs, etc.) are making the manufacturers rich and fishermen bankrupt. The problem is costly built-in obsolescence. (Rafts need to be checked each year . . . at great cost to fishermen.) It seems that the government wants to get rid of small fishermen who really built the fishing industry.

Too many requirements—EPIRBs, rafts, etc. Coast Guard is no longer a friend.

Couldn't go fishing. Could not afford $3,240 life raft.

Stop Coast Guard harassment of trollers at sea.

7. Implement a voluntary buyout or leaseback program for troller permits and gear.

Many trollers have sold their boats, often at a loss. Many others are still trying to sell them. The situation is particularly troubling to Oregon trollers, who have witnessed buyout programs in Washington State and on the East Coast, and are waiting for Oregon to institute a similar system. Oregon policymakers favor habitat restoration over buyout. Some argue that buyouts are not very effective because some trollers own permits and licenses in more than one state or own more than one permit and license. A buyout may retire a permit without retiring the fishing unit.

Boat is sitting on blocks waiting for Oregon to buy back troll permits.

Needed government buy back of permits and boats like on East Coast. I don't understand why government can help one group and not others.

An Oregon salmon permit buyout is needed. The remaining ocean resource is too valuable to continue troll commercial fishing at the level it was in the '70s. . . . Very few trollers can currently make a living within the season restrictions. Buy up the permits and reduce the fleet! I've had a permit for at least 25 years, and will continue to fish unless there is a buyout program.

8. Reduce or eliminate the permit fee for those who do not fish during a given year.

The fact that trollers are required to pay to retain their permits even when they do not fish was a common source of frustration.

This whole experience has made me see how trollers are regarded. Unimportant in the whole range of fishers, but required to provide the highest quality product. Pushed out of harbor spaces in lieu of sports boats. Shafted by [the] Department of Commerce. Treated poorly by ODFW, but required to pay for permits and boat license every year, even if not permitted to fish.

The federal government spends millions buying boats on the East Coast; I don't get one dime. The state keeps a one or two-week season so they can charge $75 plus $170 for you to keep your permit, knowing full well most of us can't afford to prepare for that short season, instead of reducing the fee for those who don't or can't fish. So unless it can be made fair for everyone, don't take my tax dollars to subsidize someone else.

VI. What Needs to be Done?

Trollers had many ideas and suggestions for the management of the fishery. Their comments emphasized the philosophy that nature can and should be made more productive through human intervention. They also expressed a desire for less regulation and interference by natural resource managers. The trollers' responses highlighted three primary issues: habitat restoration, hatchery production, and a reduction in the number of predators. They also were concerned with the management of other fisheries and the sharing of resources among different user groups. In general, trollers are a very independent population, and the high value they place on independence influences their opinions on fishery management and regulation.

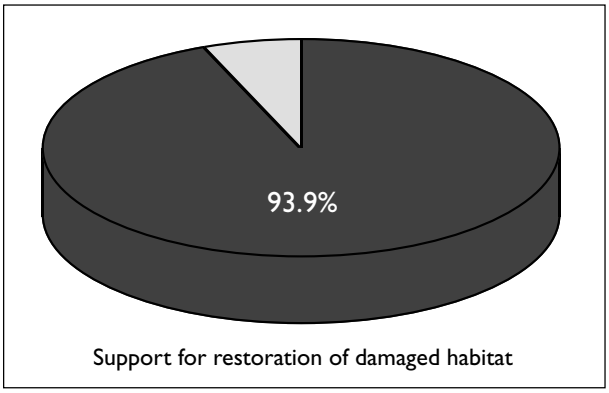
1. Restore habitat. Extend or expand habitat-restoration programs for displaced fishermen.

Trollers voiced their strongest support for habitat restoration, frequently expressing concerns about destructive logging and agricultural practices. Eighty-four percent were in support of modifying dams, but there was less support for removing dams, which many felt was impractical. STEP (salmon/trout enhancement) programs and the California Salmon Stamp program were both popular, and many trollers expressed their approval for Alaska's fishery management, including its enhancement tax. Many trollers suggested that they would be willing to contribute time and effort to habitat restoration or hatch-box programs. Some respondents supported the habitat-restoration programs even when they disagreed with other disaster relief programs. Others felt that there were not enough federally funded habitat-restoration jobs available and that jobs should be available for longer periods and with more extensive benefits.

Habitat restoration is the most important thing to me. I like [the] California Salmon Stamp program and Alaska's enhancement tax. . . . We are interested in healthy fish stocks, not overharvesting.

[Use] every dollar collected from commercial trollers for the enhancement of that fishery.

STEP helped us on the south coast cheaply, and we saw a difference in our returns.



Support for restoration of damaged habitat

2. Increase hatchery production. Expand the hatch-box program. Stop managing for wild salmon.

The practice of managing the fishery to protect wild salmon runs was highly controversial. While some supported it, others saw it as a conspiracy by

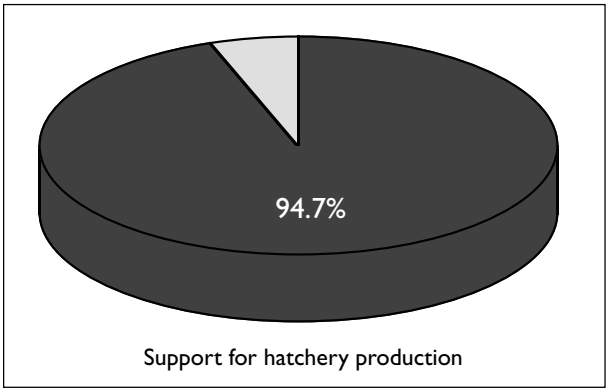
liberal environmentalists, and still others doubted the existence of wild salmon. These views often were allied with strong support for hatchery production.

Oregon has been a hatchery state since the 1900s. With the straying tendencies of salmon, many of us don't believe there are any wild fish left. If the salmon were to be eliminated, it would have happened in the 1930s (dams and bad logging practices), but our top years were in the late 1970s assisted by hatchery production.

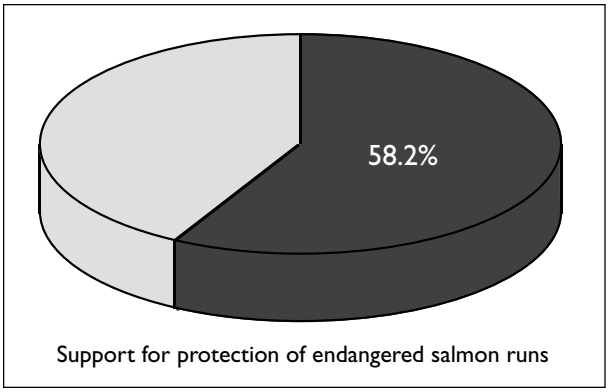
Get those damn environmentalists out of the state house and get the hatchery production going again. There is no such thing as a "wild" coho. God, get real!

Throw out the wild fish policy. Concentrate on hatchery production. It has worked in the past and it will work in the future.

We need to realize that we cannot manage fisheries by counting wild salmon. We need to put more fish into the ocean through hatcheries.



Support for hatchery production



Support for protection of endangered salmon runs

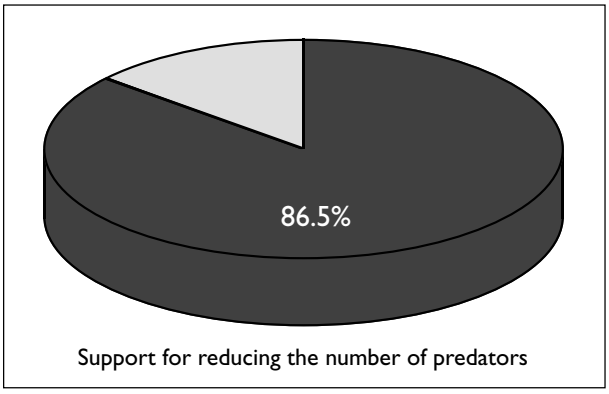
3. Reduce the number of predators.

The need to reduce the number of predators was very strongly felt. Seals and sea lions were the most common object of criticism, although cormorants also were mentioned.

In the years I have fished, 1968 until now, I have seen many changes in the fishing and I think the protection of seals [is] the most destructive to the salmon than any other one thing.

Sea lions are overprotected. These smart predators are a clear threat to salmon. Those individuals that extend their range up rivers should be eliminated.

Economics dictates whether or not a person will continue to fish salmon. Right now it's hard to watch 50 percent of our catch being eaten by sea lions. California sea lions should be at the top of the list as far as problems are concerned. Not only are they eating our salmon, they are eating our valuable fishery resources. If something isn't done and soon, all our fisheries will be down the tubes.



Support for reducing the number of predators

4. All user groups should share in the responsibility to improve the runs.

5. Limit destructiveness and by-catch by all fishing fleets. Limit the influence of factory trawlers/cannery ships. Reduce the number of trollers.

Many respondents felt that all user groups—including commercial and sportfishers, agricultural and logging interests, and other users—should be held accountable for their actions. The

trawl, hake, shrimp, and foreign fleets were accused of causing habitat damage and disrupting the food chain for salmon, as well as of having an excessive rate of by-catch. Factory ships and national seafood companies also were accused of swaying regulations in their favor, to the detriment of smaller fishing operations. In interviews, trollers were also critical of ocean driftnetting, although driftnetting that affects salmon stocks was stopped in 1992. Meanwhile, some respondents felt that the troll fishery itself should be halted until salmon stocks can recover.

The trawl fleet is wiping out the inshore bottom fishing. Their by-catch is terribly wasteful and destructive. They have to be moved offshore if our conservation is to work.

Sport fishermen need to share more of the responsibility and brunt of what has taken place. If fish were left alone to spawn once they enter the river system, we would have an abundance of fish.

The farmers are turning free-flowing streams into warm water, stagnant ponds.

I think that with population growth putting increased pressure on the entire environment, both commercial trollers and sport anglers will have to scale down their expectations and their efforts for the foreseeable future. Without a major change (catastrophic?) in our growth, it will be impossible to do enough habitat restoration.

Close ocean seasons completely for at least one generation to build a base, but allow restricted river fishing for hatchery fish. Review situation after four or five years.

6. Reduce by-catch in the troll fleet. Mark all hatchery fish.

Respondents were troubled by by-catch in the troll fleet, as well:

If worried so much about the genetic strains, mark hatchery fish and make fishermen throw back native fish. Get the hatcheries rolling full blast with production and marking fish.

Had to catch one chinook for every two silvers; released too many dead silvers.

I hate to fish for chinook when I have to throw back silvers and watch them float away belly-up. Why aren't we smart enough to figure a way to keep what we catch?

7. Improve fishery management.

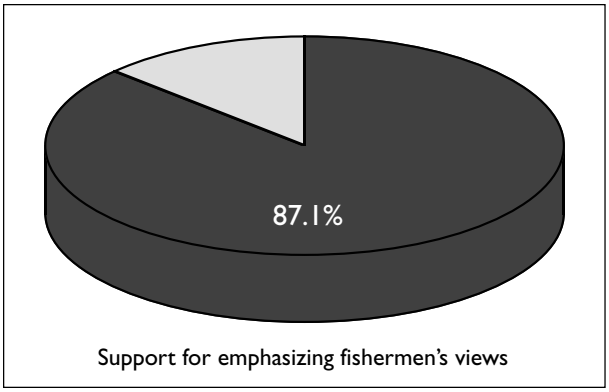
Anger about the management of the fishery was extremely common. Many trollers felt that resource managers were ignorant of the true nature of the fishery and were more concerned with keeping their jobs than with restoring salmon runs. Others felt that fishermen had useful knowledge which was being neglected by managers. Still others suspected conspiracies. Their suggestions raise three themes: reduce the influence of politics on fisheries decisions, hire knowledgeable managers who are in touch with the fishermen, and improve the quality of the data upon which management decisions are based.

The troll salmon reductions are wrong and are based on erroneous data and inequitable political favoritism.

The troll fishery was merely a pawn in the interest of international treaties and agreements pertaining to the hake fishery. On an international scale, the troll fleet was considered "small change" and was considered expendable.

Fishermen don't mind that regulators don't understand much about fish—the problems are complex. It is an outrage when they act as if they do. I've never had anyone from [the] State or Fed. ask me about salmon habits. The old salts who have made a good living for many years have lots of untapped knowledge.

Get rid of liberal fish biologists who proceed with their own agenda under the disguise of a wild fish policy.



Support for emphasizing fishermen's views

8. Give advance warnings of season openings/ closures to allow fishermen to plan for the future.

9. Manage the seasons so that fishermen are not forced to go out for short seasons in dangerous weather.

Changing seasons and fluctuating market prices have led to a frustrating uncertainty about the future. In addition, short seasons often require trollers to fish in bad weather—a necessity that weighs more heavily on smaller boats.

I could not plan a budget for raising a family based on the closures and restrictions associated with the fishery.

Often, seasons are open when ocean is too dangerous to fish. Lengthen season when this occurs.

10. Reduce the volume of farmed salmon on the market. Stop selling eggs and buying fish from foreign countries.

11. Improve the market by educating the public regarding the benefits of troll-caught salmon.

Marketing issues were very important to respondents. The availability of inexpensive farmed salmon is as detrimental to the trollers' livelihood as the lack of a salmon season. In addition, the infrastructure required for trollers to sell their salmon has disintegrated in many areas.

There are two problems now. One is availability, and the other is price. With few fish to catch and an extremely poor price, things are dismal at best.

Stop selling fish eggs to foreign markets—let me raise fish to release.

[Improve] public awareness of content of pen-raised salmon, relative to food value and levels of antibiotics in flesh; establish troll-caught salmon as a "natural" product.

VII. Summary

The population of trollers comprises people with different levels of experience, investment, and personal connection to the fishing lifestyle. Those who consider themselves commercial fishermen have adapted to changes in the fishery by targeting other species of fish, fishing in other geographic areas, applying for disaster assistance, or living on less money. Retirees and others have sold their boats and equipment and left the fishery at higher rates than commercial trollers.

Trollers are extremely angry about the management of the fishery. Because of the independent nature of fishing, many trollers generally oppose authority; but current management decisions are aggravating their feelings of hostility. Respondents were particularly concerned with season timing, permit ownership requirements, the effects of other fisheries, by-catch, the "wild fish" policy, the differing needs of large and small boats, and Coast Guard safety regulations. They generally agreed that habitat restoration, hatchery production, and control of predators would be beneficial to the fishery, and they were concerned with increasing the market share and price for troll-caught salmon.

Unmet expectations have contributed to trollers' frustrations with management. In the late 1970s, when many people began fishing, Pacific salmon stocks were more productive, and small boats became more efficient with the development of hydraulic technology. At the same time, larger boats moved into the albacore fishery, leaving the salmon to the smaller boats. Compared to the abundance of salmon in the 1970s, the current scarcity has been a disappointment that has aggravated trollers' perceptions of the salmon crisis. The failure of the disaster relief programs to meet their expectations added to their frustration.

Although there were many problems with the disaster relief programs, including lack of publicity, lack of sufficient benefits, and a perceived

unfairness in the distribution of funds, the programs helped many dedicated trollers remain in the fishery. Disaster relief has been much less successful in helping people move into new occupations outside of fishing, although many fishermen would like to work in habitat restoration. Disaster-unemployment insurance paid the most money and helped the most people; however, it was available for only the 1994 fishing season and was paid late in 1994 and early 1995.

Retirement, self-employment, and construction work are all seen as available alternatives. However, despite the problems associated with the fishery, many feel that it remains a viable option. Because of their attachment to the freedom and excitement of the lifestyle, many trollers are waiting and hoping for the salmon fishery to return.

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