

US Senate Committee on Environment and Public Works

Washington, DC

June 9, 2010 testimony (prepared June 6, 2010)

My name is RJ Kopchak, and for over 35 years I have commercially fished for Crab, Halibut, Salmon and Herring in Prince William Sound, the Copper River Delta and Northern Gulf of Alaska.

In 1989 when the Exxon Valdez ran aground I was Vice Mayor of Cordova. I organized the Cordova Oil Spill Response Center to coordinate immediate community based response, and incorporated the Prince William Sound Science Center, where I served as President. The center is home to the Oil Spill Recovery Institute, created in OPA 90 to complement state and federal efforts over the long timeline of spill recovery. I have served on the Public Advisory Committee for the Oil Spill Trustees, and organized and chaired the Herring Recovery Planning Team in an effort to better understand why Pacific Herring have yet to recover from the spill.

I am a board member of and active in our local fishermen's organization, Cordova District Fishermen United, and recently rejoined the Science Center as Development Director. My background provides me with a unique perspective on Oil Spill Liability, and I am speaking here today on my own behalf from my own perspective.

I share with you a real life example of the potential impacts to gulf fisheries from long term oil damage, and what level of liability might arise from the loss of just one fishery to one fishing community if in fact we were to make fishermen "whole".

Like the timing in the Gulf of Mexico, the Exxon Valdez spill coincided with the spring reproductive season. Like the shrimp in the Gulf, our Herring were about to spawn. Herring eggs were laid on oiled beaches, and emerging herring larva drifted with the chemical soup that was the result the spill, the dispersants, and the recovery operations. Studies following the oil spill revealed that fish eggs and developing embryos could be damaged at exposures to oil as small as parts per billion, not parts per million as was previously thought. Herring mortality skyrocketed over the next four years, resulting in the collapse of herring populations. Twenty-one years later herring are still listed as damaged and not recovering from the spill.

Once, over 1,100 people directly participated in the Herring fishery. Small and mid sized family fishing vessels, with between two and five crewmen harvested herring and herring egg covered kelp for special markets in Japan. In addition to 500 herring harvest permit owners operating over 300 vessels, about 40 spotter pilots, and 300 hand harvesters participated in the fishery. Fish processors employed another 200 or more. Other shore side jobs were as dependent on the herring fishery as the fishermen.

The value of Herring fishing permits in 1989 exceeded \$ 34 million. Today they are worth zero. Since 1994, the year litigation ended and the appeals began herring fishermen have lost over \$166 million. No compensation for these losses. In addition to what fishermen were not paid, impact to the regional seasonal economy is estimated at \$650 million - wholesalers, retailers, packaging, shipping, local grocery stores, marine repair, restaurants and hotels; fuel distributors and longshoremen to name a few. Lost fish tax revenue adds another \$6 million in losses, directly to the community.

My family is representative of those still being impacted. Our two herring permits have gone from a value of \$145,000 to zero. Herring equipment, once worth over \$50,000, is today of no value. As “average” fishermen our continuing losses accrue at about \$28,700 a year; over \$460,000 for 16 lost seasons and counting. To date, over \$650,000 in income, equipment and permit value forever lost.

In addition to Herring we lost our fishermen owned processing cooperative. The Copper River Fishermen’s Co-Op had 135 fishermen owners, and depended on the banks for “pack financing”, the money needed each year to buy, process, market and distribute products. With interruptions in product availability the banks withdrew financing after the spill, and lost equity exceeded \$3 million. Cordova used to “wake-up” from the winter in mid March each year, when the herring fishermen began to arrive to prepare for the season. Now it is early May. A six month economic “window” is now only 4 ½ months long, and one of the main economic drivers is absent.

A \$17 million limit in liability is a disservice to the working class men and women most impacted by the careless and perhaps criminal actions of one of the world’s most profitable businesses

Limiting liability could affect restoration, recovery monitoring, and punitive damages. Courts could limit these awards to a percentage of “liability”, severely restricting the funds available for recovery and recovery monitoring. What about the long term liability? The Prince William Sound Herring Fishery has experienced 16 years of collapse, and no compensation for these losses has been made.

Limiting liability in oil spills transfers economic impacts from those responsible and most able to pay for the tragedy to those who are victimized; who have lost their way of life, and perhaps their ability to make a living.

Robert (RJ) Kopchak

PO Box 1126
Cordova, Alaska 99574
503-961-3578
rijkopchak@pwssc.org

The Facts about the Collapse of the Prince William Sound Herring Population

*by Richard E. Thorne (rthorne@pwssc.org) Senior Scientist
Prince William Sound Science Center – www.pwssc.org
Cordova, Alaska*

The 20th anniversary of the Exxon Valdez Oil Spill (EVOS) has again focused attention on the Prince William Sound (PWS) ecosystem and the legacy of the spill. There is increasing interest in the story behind the PWS herring population, since it is one of only two species listed as non-recovering. The official EVOS Trustee Council position is that the cause of the herring collapse is largely unknown. However, I strongly believe the facts show otherwise. After several scientific papers and numerous interviews, I think it is timely to spell out the facts on this subject so the public can be well informed about the link between the oil spill and the subsequent collapse of the PWS herring population.

It is well documented and widely accepted that the herring population was at a relatively high level in 1988, about 100,000 metric tons. During 1990-92, about 40,000 tons of herring were harvested. The population level for 1993 was forecast at 133,000 tons by the age-structured assessment (ASA) model used by management agencies. However, commercial fishers were unable to locate fishable concentrations of herring during spring 1993. Subsequent research, including surveys by the Prince William Sound Science Center during fall 1993, documented that the population had collapsed to around 20,000 tons. Indications of disease were found in the population. Lacking any other information, agencies concluded that the population had catastrophically collapsed between 1992 and 1993 as a result of a disease outbreak. The four-year interval from the EVOS appeared to remove the oil spill as a factor in this one-year collapse.

Nearly a decade later in 2002, my PWSSC colleague Gary Thomas and I began to write a paper documenting the assessment technology that we had initiated in fall 1993 and had applied annually since that time to monitor the herring population. As we developed the paper, including comparisons with other indications of herring abundance, we noted that one relatively obscure index of herring abundance showed excellent agreement with our 10-year data set. The index was an aerial survey of the extent of herring spawn (specifically milt) along beaches that had been conducted by the Alaska Department of Fish and Game every year since 1973. When we looked closer at the index, we noted that it began to decline in 1989 and declined consistently from 1989 to 1994, in contrast to the official description of the collapse, a one-year event between 1992 and 1993. Further, we noted that the aerial survey index and the estimates from the ASA model differed substantially only during 4 years over a nearly 30 year span. Those years were 1989, 1990, 1991 and 1992. The most likely explanation for a divergence is an undetected increase in the mortality of adult herring, which would cause the ASA model to overestimate the herring abundance.

We had not previously challenged the timing of the collapse, although we, like many others, found the coincidence of an oil spill and a subsequent herring collapse to be suspicious. Further, we were aware of a potential mechanism for damage to herring. In

1990, Gary Thomas and I had published a paper that described surfacing behavior by herring. At the time, the paper did not seem to apply to oil spill consequences in PWS, since the herring population collapse had not been detected. After the discovery of data indicating a 1989 initiation of the decline, we went back and examined this surfacing behavior in more detail. We discovered that several other scientists had subsequently described the behavior in more detail. It had become well documented that herring needed to come to the surface to replace air lost from their swim bladders, probably on a daily basis. One especially elegant experiment had blocked herring access to the surface, with the result that herring progressively lost air and subsequently sank to the bottom and died. We were aware from other data that the oil spill covered the surface of most of the typical adult herring distribution in PWS during March. Consequently, there were only two possibilities: either herring came to the surface and directly encountered toxic oil concentrations, or they were blocked from the surface by the oil, lost gas from their swim bladders, and eventually sank to the bottom and died. Even without the evidence that the herring population decline began in 1989, it is inconceivable that herring could have avoided serious damage from the oil spill under these circumstances.

In subsequent journal-published research we described other arguments that supported the linkage and timing with respect to the oil spill. These include the simultaneous decline in the numbers of Steller sea lions, a major predator on herring, in PWS during the winters of 1989-93 and the unlikely circumstance that 1.5 billion herring could have died from disease in one year without any observed corpses. The bottom line, in my opinion, is that the evidence is overwhelming that the Exxon Valdez Oil spill damaged the PWS herring and initiated a substantial decline in the population. Reasons for the lack of subsequent recovery are less apparent. It is very possible that the population, once damaged and reduced to less than 20% of their previous abundance, have been unable to escape the consequences of a still intensive predation by marine mammals, seabirds and other fishes.