

TESTIMONY OF KARL HAFLINGER, SEA STATE, INC.
BEFORE THE SENATE COMMERCE COMMITTEE'S
SUBCOMMITTEE ON OCEANS, ATMOSPHERE, FISHERIES AND COAST GUARD
HEARING ON REAUTHORIZATION OF THE MAGNUSON-STEVENSON FISHERY CONSERVATION AND
MANAGEMENT ACT: FISHERIES SCIENCE

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Introduction

Good afternoon, Chairman Sullivan, Ranking Member Peters, and members of the Subcommittee. Thank you for the opportunity to testify today. My name is Karl Haflinger and my company, Sea State, maintains a private fisheries information network for approximately 150 trawl and longline vessels that fish off the coasts of Alaska, Washington and Oregon.

I will be speaking today about the close partnership that Sea State has built with members of the fishing industry in the North Pacific and Pacific Northwest to dramatically improve business and conservation outcomes. Our work is, we believe, an illustration of "state of the art" cooperative management under the Magnuson-Stevens Act (MSA). It demonstrates how fishing industry participants are themselves investing in world-class science and data in ways that deliver healthier fisheries and more profitable fishing enterprises. First, I hope my testimony helps members of the Subcommittee understand the kind of management innovation that is possible under the existing law, and the importance of proceeding cautiously in any reauthorization process to ensure we retain what is working. Second, I want to address areas where continuing innovations by the National Marine Fisheries Service (NMFS) could be helpful in catalyzing further improvements in how fisheries data is collected and utilized.

Meeting Business and Conservation Challenges

Data collection and analysis is an critical component of success for fishing businesses in the twenty-first century, and where Sea State focuses its work. Currently, approximately 150 commercial fishing vessels use our services, which could be loosely described as fisheries data analysis, in support of fishing activities governed under regulations developed by two of the eight regional fishery management councils established under the MSA, the North Pacific Fishery Management Council and the Pacific Fishery Management Council. All of these vessels are members of fishing cooperatives, whether these cooperatives are recognized in statute (as inshore cooperatives defined under the American Fisheries Act), or simply composed of all members of a closed class of vessels that receive a fixed percentage share of the annual harvest quota. Fish harvesting cooperatives are a form of catch share-style program.

With modern fishing gear, sophisticated electronics that identify fish schools, and fishing experience acquired over 40-plus years on the offshore grounds since the MSA extended U.S. jurisdiction out to 200 miles, locating target species is generally not a persistent problem for the fleets with whom we work. Reducing incidental catch of non-target species (bycatch), with an emphasis on certain species, is more often the focus of fishermen and fishery managers because fishery management regulations exist that can close fisheries before the target species quota is taken if fishermen reach an incidental catch allowance for certain non-target species.

In 1996, the MSA was amended to define bycatch as discarded fish. Fish can be discarded for economic reasons (i.e., the fish are unmarketable), but there are also discards required by regulations, most often because fish incidentally caught by one fisherman are target species for another. Requiring such fish to be discarded is intended to eliminate any incentive to catch the non-target fish in the first place. The 1996 MSA amendments contained other provisions to reduce incidental catch of non-target species, including adding National Standard #9 to the Act, which requires federal fishery managers to minimize bycatch.

Regulatory actions by the North Pacific Council on bycatch reduction predated MSA National Standard 9, due to the fact that major bycatch species like salmon, crab and halibut are at the center of subsistence and commercial livelihoods for many coastal residents throughout Alaska and the Pacific Northwest. The Council responded to concerns about bycatch (first raised in conjunction with foreign fishing) with a series of both input and output controls, such as time-and-area closures and outright limits on total allowed bycatch in the early 1990s. In the latter instance, target groundfish fisheries closed before the allowable catch was reached if the fleet reached caps on the incidental catch of certain non-target species, particularly halibut and crab.

In 1976 when the U.S. established its 200-mile Exclusive Economic Zone (EEZ), a number of foreign nations entered into fishing agreements to allow continued access to U.S. waters to harvest groundfish species. One condition of fishing was that NMFS's observers were placed on foreign vessels to ensure adherence to fishing quotas. Regulations requiring onboard observer coverage carried over to the domestic fleet in Alaska as U.S. fishing and fish processing developed through the 1980s.

The U.S. industry in the Northwest and Alaska is currently spending \$15-20 million annually to cover federal fishery observer costs. Observers are trained and managed by NMFS and the data they collect is protected under confidentiality rules covered in MSA. Confidentiality protections, while important to preserve in the Act, initially presented an obstacle to using this data to support industry bycatch reduction initiatives. The trawl industry realized that the solution was to authorize a 3rd party to receive and review observer data for all vessels in a fleet, and quickly create maps of bycatch trends that were returned in real-time to vessels. That is when Sea State began, and we have continued to create information products that captains themselves help design, that assist in bringing down bycatch rates. Original efforts were only marginally successful since bycatch avoidance is not a win-win solution – it almost

always results in slower fishing rates as vessels must take time to relocate. However, once the fisheries I work with transitioned to catch share fisheries of some form fishermen could accept the cost of increased time that bycatch reduction almost always entails, because individual vessel allocations ensured no lost fishing opportunities from picking up gear and moving to areas with lower bycatch.

All of the major groundfish fisheries in the Bering Sea and the Pacific whiting, or hake, fishery off Washington and Oregon are now prosecuted under strong cooperative agreements. Input controls, like rigid time-and-area closures that often proved to be at odds with actual trends on the grounds, have largely been abandoned by the Councils. The ocean environment is dynamic, and the distribution of fish stocks is in constant flux. Static lines on a map that require promulgation of a rule to change do not provide for the type of adaptive, real-time management that sound catch accounting methods and electronic reporting of catch can provide. Instead, the Councils have tasked the fleets with finding ways to reduce bycatch, at times adding performance standards for industry to meet. And industry is required to regularly demonstrate to the councils that their approaches are working.

To respond to these challenges placed on fleets by the Councils, we have had to step up our efforts to gather data from multiple sources and at times even automate our analysis and response to the fleets so that it is a round-the-clock process. Data-sharing among vessels in cooperatives is made mandatory by fishing cooperative contracts, and informal, cross-sector (that is, among target fisheries) sharing is common as well. Cooperative contracts are legally binding private sector agreements. Such agreements obligate cooperative members to fish according to whatever rules the coop in particular feels are necessary to put in an orderly harvest in accordance with Council guidelines. Sea State generates notices of high bycatch based on both observer data and landings information (whichever arrives first) and sends alerts to vessels on the grounds as text-based emails with links to live web maps.

Additionally, according to rules of some cooperatives, we evaluate actively fished areas on a weekly basis and close them to vessels exhibiting high bycatch rates, thus providing an incentive for individual vessels to figure out how to fish with less bycatch. All of these measures are prescribed in the cooperative contracts that all members sign, so that no behavior is simply voluntary. Substantial fines are levied for not following the rules (for example, fishing in a closed area, which is monitored via satellite), and in some cases Sea State's management actions are subject to 3rd party audits to be sure that we are performing according to contract in our oversight role.

Catalyzing Continued Innovation

We have been fortunate to work cooperatively with NMFS over the last 20 years to develop the most advanced private fishery information system on the planet. NMFS's Northwest Groundfish Observer Program office has been extremely cooperative from day 1, from a time when faxes

and online bulletins boards were state-of-the-art tools. We have now progressed to the point where all vessels have at least text messaging systems, satellite monitoring of positions (VMS) and often full email and internet access. The e-Landing system in Alaska, which was created through a partnership with NOAA Fisheries, the State of Alaska and the International Pacific Halibut Commission followed in the early 2000s, allows us access to shoreside landings information for clients who authorize our access to their records.

Nonetheless, there is clearly more we can do to modernize data infrastructure, give additional tools to fishing businesses, and ensure the long-term sustainability of all U.S. fisheries. I was recently part of an expert panel that explored what more we could do to accelerate progress. Our 'Fishing Data Innovation Taskforce' included a broad cross-section of fisheries stakeholders with an interest in harnessing technology to meet business and conservation goals. Our [Improving Net Gains](#) report reviews both areas of progress and remaining challenges and makes specific recommendations for reform, which I recommend to the Subcommittee.

I am encouraged by the reception our Taskforce report has received to date. The new Assistant Administrator for Fisheries, Chris Oliver, has confronted these issues before in his previous role as Executive Director of the North Pacific Fishery Management Council. Others in positions of leadership at the National Marine Fisheries Service are showing a willingness to explore new approaches where needed, which I applaud. We have been gratified by the interest of a number of congressional leaders. Chairman Sullivan, we're especially grateful for the spotlight you're shining on this issue. Progress in this area can be difficult. As in many fields today, fishery data systems that were developed ad hoc must be re-written to take advantage of newer information technologies, and doing so without losing critical "legacy" data requires almost inspired planning. However, it is critical that fisheries managers and fishermen find ways to navigate these challenges to secure the benefits that improved data systems can deliver. Modernizing our data infrastructure could provide economic benefits to the fleet, make it easier for more vessels to stay on top of catch and bycatch, and allow both safety and efficiency gains.

Maintaining what we have

One issue I haven't yet mentioned is the importance of maintaining NOAA Fisheries stock surveys and yearly stock assessments for both major and other constraining stocks (that is, minor or weaker stocks taken as bycatch in a mixed-stock fishery). Maintenance of the surveys provides fishery independent data that is essential to the fisheries that span the West Coast and make up a substantial proportion of the nation's groundfish landings. The industry "pitches in" on management costs paying for 100% observer coverage for catch share fisheries in the Bering Sea, often with 2 observers on larger vessels. Industry has also been involved in cooperative programs with NMFS, such as providing platforms for echo-sounding surveys while fishing, funding gear research, and genetic stock research for Alaskan salmon. However, the fisheries independent surveys and stock assessments are the basis for the most critical

management decisions, and need to be carried forward to ensure that the large groundfish stocks off our coasts are fished sustainably.

Thank you again for the opportunity to testify, and I look forward to continuing to work with the Subcommittee to modernize fishery information systems and improve the performance of our fisheries.