October 16, 2015

Ms. Dorothy Lowman, Chair
Pacific Fishery Management Council
70 NE Ambassador Place, Suite 101
Portland, OR 97220

via email: pfmc.comments@noaa.gov

Re: Agenda Item G.2 – Highly Migratory Species Management

Dear Chair Lowman and Council Members:

Wild Oceans is the nation's oldest conservation organization dedicated to protecting marine fish. For more than forty years, we have worked nationally and internationally to develop innovative approaches and solutions to fisheries management that preserve healthy ocean ecosystems and fishing for the future. At our core, we value our responsibility in providing future generations with the same fishing opportunities that we have enjoyed.

In November, the Pacific Fishery Management Council (Council) has an opportunity to determine the future of the commercial Pacific Highly Migratory Species (HMS) fishery. Dominated by drift gillnets, the commercial sector is long overdue for a transition to sustainable fishing methods that avoid bycatch. To this end, the Council must examine and balance the economic and social values of commercial and recreational HMS fisheries with the ecological needs of the ecosystem, including populations of marine mammals, sea turtles and other vulnerable species taken as bycatch in drift gillnet gear.

In order to guide the Council's decisions about the future HMS fishery, the Council should focus on ecological objectives and the biological constraints by asking the following:

What are the target Highly Migratory Species and what are the biological constraints on these species?

Although the California drift gillnet fishery originally sought to catch thresher shark, the indiscriminate nature of the gear led to landings of swordfish, albacore, mako shark, bluefin tuna, opah, pomfret, skipjack tuna and others. We know very little about the basic biology of some, like opah, beyond the opah's value to commercial and recreational fishermen. It's time for the Council to designate target species in future HMS fisheries and determine what is necessary to safeguard the populations of these species, including applying sufficient precaution to catch limits for data poor species like opah until we have a robust understanding of their biology, role within the ecosystem, and potential to support sustainable commercial fishing.

What criteria will the Council use to evaluate gear and determine whether it achieves the Council's goal and mandate to reduce bycatch?

Since 1990, vessels and landings in the drift gillnet fishery have declined.[1] Left with a contracted fishery, we have an opportunity to shift gears and build a fishing community that utilizes selective gear. In order to accomplish this, the Council should specify criteria for evaluating authorized gears based on their ability to meet the Council's goal of minimizing bycatch, using the following questions as guidance.

- What percentage of bycatch (dead or alive), by species, is acceptable?
- What is the ultimate fate of bycatch and discards from each gear (i.e., mortality)?
- What impact does the bycatch have on the open ocean ecosystem?

The nature of the gear used, the manner in which it is deployed, the time fished, the size and composition of the overall catch, and the handling of the catch all sharply influence the survival of discarded species. Knowledge of discard mortality rates helps assess the consequences of release strategies and whether or not options exist to improve survivability.

What management and regulatory costs are associated with proposed gears?

For instance, if catching a variety of marketable species because of the non-selective nature of a gear-type is considered a positive, then the difficulty and cost of managing the fishery to regulate and conserve a range of marketable species while minimizing interactions with non-marketable, vulnerable and

[1] West Coast Fisheries for Highly Migratory Species Through 2013; Stock Assessment and Fishery Evaluation, January 2015, at 30, *available at* http://www.pcouncil.org/wp-content/uploads/2014_HMS_SAFE_Report_archive_copy.pdf

endangered species should be considered a negative. The alternative would be small-scale, highly selective gear, such as buoy-gear and harpoons, that produce marketable catches with minimal regulatory cost and oversight.

For the Council's progression to ecosystem-based fishery management to succeed, it must step back and take in the big picture of the ecosystem as a whole, avoiding a narrow geographic or single-species view when developing management measures and making decisions about the future of the west coast's HMS fisheries. It's vital to recognize interdependencies in our ocean ecosystem, including the benefits that wild oceans provide to humans, and to plan for a sustainable future for the fishermen that depend on healthy and productive fishery resources. The Council should seize this opportunity to plant the seeds of tomorrow's HMS fishery today by firmly laying out a course to end indiscriminate drift gillnetting in the California Current ecosystem and transition to an innovative and selective fishery.

Sincerely,

Theresa Labriola
West Coast Fisheries Project Director

OCEAN DEFENDERS ALLIANCE
Working for a debris free sea

Protecting and Restoring the Underwater World Since 2002

October 19, 2015

Dorothy Lowman, Chair
Pacific Fishery Management Council
1100 NE Ambassador Place, #101
Portland, Oregon 97220

RE: Agenda Item G.2 - Swordfish Management Policy Connections
Dear Chair Lowman and Council members:

Ocean Defenders Alliance (ODA) is a marine conservation organization based in Orange County, California. Prior to the launch of ODA, I spent much of my time diving all over the world. Dive after dive, I found abandoned commercial fishing gear on the ocean floor or attached to boat wrecks- where it indiscriminately kills marine flora and fauna long after its service to the fishing industry is over. It became abundantly clear to me that overfishing and man-made pollution was threatening the survival of marine wildlife and the overall health of the life-giving seas of the earth- that's when I decided to do something about it and launched ODA. The mission of ODA is to clean and protect marine ecosystems through documentation, education, and meaningful action. Our members care deeply about the health of the Pacific Ocean and take pride in our coast. On behalf of ODA, I write today seeking your help to transition California's swordfish fishery from drift gillnets (DGN) to more sustainable alternatives.

Mile-long drift gillnets targeting swordfish and thresher shark are indiscriminate by their very design and catch more marine mammals than all other West Coast fisheries combined. Status quo – in a fishery where 64 percent of the catch is thrown overboard, including prized game fish, sea turtles and marine mammals – is simply unacceptable.

We commend the Council's action in September to set hard caps on how many marine mammals and turtles can be killed over a two-year period, agreeing to close the fishery if these limits are reached or exceeded. Additionally we welcome the Council's requirement of 100% monitoring of the fishery by 2018.

These important management measures notwithstanding, a renewed look at broader picture reveals that we have far to go. The hard caps adopted would continue to allow over 200 marine mammals to die annually in our West Coast swordfish fishery as well as countless other fish and sharks. The Council also made no progress toward implementing a transition plan to phase out DGN gear with some Members indicating that they would be willing to allow a DGN fishery to continue indefinitely and expand fishing effort into the Pacific Leatherback Conservation Area.

We are aware that the Council is considering approval of alternative gear types in the

West Coast swordfish fishery, including deep-set buoy gear. This gear type is actively tended and minimizes interactions with non-targeted species. Buoy gear is used successfully on the East Coast and in other parts of the world, and has been tested extensively in California over the past five years with positive results. Please establish a clear a timeline and schedule for authorizing deep-set buoy gear under the Highly Migratory Species Fishery Management Plan as soon as possible.

ODA volunteers routinely dive to reported abandoned fishing gear sites, cut the gear loose, and float it to the surface. Animals such as lobsters, crabs, and fish found trapped alive are carefully liberated by ODA, and thus given a new chance to thrive, grow, and breed. The marine mammals and countless other species caught in drift gillnets don't share the same fate. We hope you recognize the connections that so many Californians have to the multitude of amazing species – whales, dolphins, sharks, sea turtles and prized finfish – that are caught up in management decisions.
Sincerely,

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Cc:
Jerry Brown, Governor of California
Chuck Bonham, Director, California Department of Fish and Game

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October 16, 2015

Dorothy Lowman, Chair
Pacific Fishery Management Council
1100 NE Ambassador Place, #101
Portland, Oregon 97220

RE: Agenda Item G.2 - Swordfish Management Policy Connections

Dear Chair Lowman and Council members:

The Society for Conservation Biology (SCB) is an international professional organization dedicated to promoting the scientific study of the phenomena that affect the maintenance, loss, and restoration of biological diversity. As the Orange County chapter of the larger organization, we share the vision and value of SCB, and try to focus on how to apply them locally. Orange County offers breathtaking views of the Pacific Ocean, so it's only natural that our members care deeply about the health of the marine ecosystem- where families and entire communities depend on a healthy ocean, including well-managed fisheries. On behalf of OCSCB, I write today to encourage you to transition California's swordfish fishery from drift gillnets (DGN) to more sustainable, actively-tended gear types.

Mile-long drift gillnets targeting swordfish and thresher shark are indiscriminate by their very design and catch more marine mammals than all other West Coast fisheries combined. A fishery where 64 percent of the catch is thrown overboard- including endangered sea turtles and sperm whales – is simply unacceptable.

We appreciate and applaud the Council's action in September to set strict limits on how many marine mammals and turtles can be killed over a two-year period, agreeing to shut down the fishery if these limits are reached or exceeded. We also welcome the Council's requirement of 100% observer coverage of the fishery by 2018.

While we recognize these important management measures, we still have a long way to go. The hard caps adopted would continue to allow over 200 marine mammals to die annually in our West Coast swordfish fishery, along with countless other fish and sharks. Furthermore, some Council members indicated a willingness to allow a DGN fishery to continue indefinitely.

People throughout California and across the West Coast have been calling attention to the destructive nature of the drift gillnet fishing ever since the practice began over three decades ago. We believe it's time for clear, concerted action to transition this fishery.

We fully support the approval of alternative, sustainable gear types in the West Coast swordfish fishery- including deep-set buoy gear. Buoy gear has been tested extensively in California over the past five years with positive results, is actively tended, and minimizes interaction with non-targeted species. We ask that the Council establish a clear a timeline and schedule for authorizing deep-set buoy gear under the Highly Migratory Species Fishery Management Plan.

The November Pacific Fishery Management Council meeting in Garden Grove, CA provides the Council with the opportunity to review its efforts over the past year and a half, and determine a course of action

for the drift gillnet fishery. The current agenda item before the Council regarding swordfish management stresses connections. We hope you recognize the connections that so many Californians have to the multitude of amazing species that are not only caught up in drift gillnets, but in management decisions.
Sincerely,

Sincerely,

Jessica Pratt

Jessica Dawn Pratt, Ph.D.
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Cc:
Jerry Brown, Governor of California
Chuck Bonham, Director, California Department of Fish and Game

THE PEW CHARITABLE TRUSTS

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October 16, 2015

Dorothy Lowman, Chair
Pacific Fishery Management Council
1100 NE Ambassador Place, #101
Portland, Oregon 97220

RE: Agenda Item G.2 - Swordfish Fishery Management Policy Connections

Dear Chair Lowman and Council members:

We write in regards to the future management of the West Coast swordfish fishery. At its November meeting, the Pacific Fishery Management Council (Council) will discuss several issues under the Highly Migratory Species (HMS) Fishery Management Plan (FMP). This conversation offers the Council the opportunity to address overarching questions about how we want our swordfish fishery to operate and prioritize next steps. As part of this discussion, we ask the Council to once again consider transitioning away from drift gillnet (DGN) gear toward a more sustainable fishery.[1] To this end, we request the Council take the following actions:

1. develop a Swordfish Management and Monitoring Plan (Swordfish Plan) that includes a transition away from DGN gear to more selective and actively tended gears;
2. establish a timeline and schedule for authorizing deep-set buoy gear (DSBG) under the HMS FMP as soon as possible; and
3. forgo further consideration of a West Coast longline fishery outside or inside the Exclusive Economic Zone (EEZ).

By taking the above actions, the Council can move toward a healthy and sustainable swordfish fishery off the West Coast without the collateral damage caused by DGN or longline gear.

[1] March 2014 Council Meeting Decision Summary Document, p. 4 ("The Council took several actions toward a goal of developing a comprehensive plan to transition the current drift gillnet fishery to a fishery utilizing a suite of more environmentally and economically sustainable gear types that can effectively target the health West Coast swordfish stock operating under MSA authority.").

Draft a Swordfish Plan that includes a transition to alternative gears

In discussing how to move forward with a West Coast swordfish fishery, it is important that the Council keep in mind their overarching goal to reduce bycatch[2] and evaluate how transitioning away from DGN gear to more selective and actively tended fishing gears can help achieve that goal.

Criticism of the environmental damage caused by DGN gear is not new or unique to this region. The indiscriminate nature of this gear results in a significant amount of waste. Around the world, management bodies have taken action to curb or ban DGN gear due to concerns over high levels of bycatch and interactions with rare and vulnerable species. Restrictions placed on the DGN fishery since its introduction on the West Coast, including time and area closures, gear modifications, and a newly adopted hard cap regime, demonstrate the difficulty this gear has in meeting acceptable bycatch standards. For example, even under recently adopted hard caps and performance objectives, the DGN fishery will be allowed to kill over 200 marine mammals each year.[3]

At its November meeting, the Council has the opportunity to change management of our West Coast swordfish fishery and move toward more selective and actively tended fishing gears. The public's support for such a transition is abundantly clear. Over the past year alone, thousands of West Coast citizens, members of Congress and dozens of organizations and businesses have contacted the Council asking for a shift away from DGN gear. Given the public's distaste for wasteful fishing methods, it is difficult to envision a viable future for the DGN fishery.

We are sensitive to concerns surrounding imported swordfish, often referred to as the "transfer effect." However, the relative state of bycatch in foreign fisheries should not influence the Council's goal to reduce bycatch in the DGN fishery and should not be used as the rationale for the Council to avoid transitioning the fishery to more sustainable fishing gears. In short, the council should be a leader in promoting sustainable fishing practices. We encourage the Council to continue to engage on these issues and request the National Oceanic and Atmospheric Administration's Fisheries Service (NOAA Fisheries) implement and enforce regulations under the Marine Mammal Protection Act and the Magnuson-Stevens Fishery Conservation and Management Act to address bycatch problems in foreign fisheries.

We also recommend the Council not move forward with federalization of DGN permits unless it is part of a broader transition plan. Enduring a lengthy process to federalize DGN permits will

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[2] Swordfish Management and Monitoring Plan, pp.3-4 ("This Plan serves as a guide for the Council to manage the West Coast swordfish fishery to minimize bycatch and bycatch mortality of finfish and protected species (including sea turtles, marine mammals, and seabirds) . . . The Council intends to minimize protected species bycatch in the West Coast swordfish fishery as a whole.").

[3] September 2015 Final Preferred Alternatives for management of the California large mesh drift gillnet fishery.

exhaust both time and resources better served to focus on developing and authorizing new more sustainable gears.

Establish a timeline for authorizing deep-set buoy gear under the HMS FMP

As a first step toward a comprehensive approach to developing a swordfish management plan, we request that the Council adopt a process and schedule for authorizing DSBG under the HMS FMP. At the Swordfish Workshop hosted by NOAA Fisheries in May 2015, participants expressed broad support and consensus that DSBG should be made an allowable gear. The Pfleger Institute of Environmental Research (PIER) developed DSBG specifically for West Coast swordfish.[4] DSBG has been tested extensively over the past five years showing positive and consistent results with 94 percent marketable catch, primarily of swordfish.[5]

The efficacy of using buoy gear to catch swordfish is abundantly clear through the data collected since 2006 in the Atlantic fishery. The fishery has never had a documented protected species interaction.[6] The mean catch per unit of effort is 30-50 times higher than in the East Coast pelagic longline fisheries (*see* Figure 1) and the fishery consumes far less bait and fuel.[7] Moreover, ninety percent or more of the catch is swordfish with most of the non-retained catch (93%) released alive, resulting in an overall low ecosystem impact.[8] The introduction of buoy gear has not only been beneficial to the environment, but it also revitalized the small boat commercial fishing fleet in Florida by offering a simple and affordable way to catch swordfish.[9]

[4] PIER Presentation, West Coast Swordfish Workshop, May 2015.
[5] *Id.*
[6] Gjertson, et al., *Comparing bycatch and economic metrics in U.S. swordfish fisheries*, Presentation at Swordfish Workshop, May 11, 2015, Slide 9 ("The CA HPN and STL BG have no documented protected species takes.").
[7] Kerstetter et al., *Buoy Gear- a Potential for Bycatch Reduction in the Small-Scale Swordfish Fisheries: a Florida Experience and Indian Ocean Perspective*, 2013, p. 3.
[8] *Id.* at 4.
[9] *Id.* at 3 ("Buoy gear is very simple and cheap fishing gear, which does not need expensive machinery such as mainline spool or hauling machine. In addition, it revived the small-scale Florida fisheries by allowing the small vessels to efficiently target swordfish").

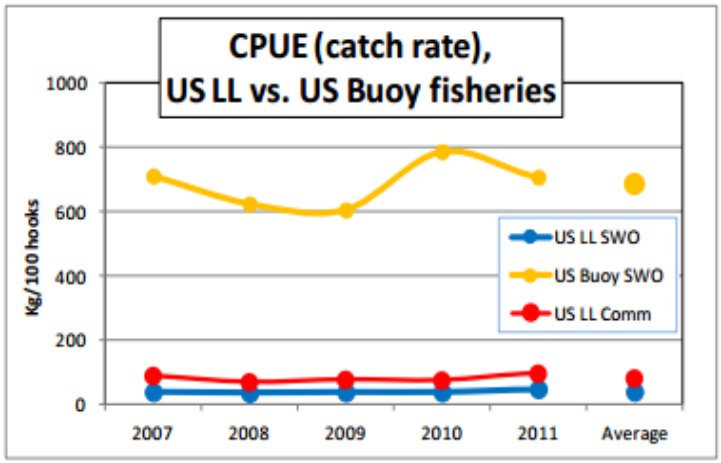

Figure 1. *Comparative nominal catch rates (kg/100 hooks) in Atlantic U.S. pelagic longline and Florida Straits swordfish buoy gear fisheries. Catch rates estimated from reported landing and discards and nominal fishing effort (Source: NOAA 2012).*

We propose the Council schedule scoping for authorization of DSBG in March 2016 to align with PIER's preliminary exempted fishing permit (EFP) report. We also recommend that the Council further discuss this under Agenda Item G.6 - Future Council Meeting Agenda and Workload Planning. The authorization of DSBG should be prioritized above other HMS workload considerations. Given available information, it is not necessary for the Council to wait for the conclusion of PIER's EFP to begin the FMP amendment process. It makes little sense to delay authorization when DSBG is demonstrably more selective and has broad support from fishermen, scientists, seafood suppliers, fishery managers, and the conservation community.

Forgo further consideration of a West Coast longline fishery inside or outside the EEZ

In determining next steps for the swordfish fishery, we request the Council forgo any further consideration of a West Coast longline fishery. The Swordfish Plan was conceived with the goal of reducing bycatch in the broader swordfish fishery, not adding additional impacts.[10] Longlines are simply another indiscriminate gear with high bycatch of protected and recreationally important species that should not be included in the suite of gears allowed under the HMS FMP. As the Council looks toward alternative gears, it is important to take into account their overall ecosystem impact and evaluate which gears are likely to meet the Council's twin goals of *reducing* bycatch and promoting a West Coast swordfish fishery.

It is difficult to see a way in which increased longline effort would not increase take of protected species and bycatch of finfish. The Hawaii shallow-set longline fishery caught 16

[10] Swordfish Management and Monitoring Plan, p. 4.

leatherback turtles last year alone.[11] This is far above the number of leatherback takes currently authorized in the West Coast swordfish fishery and it is unclear how the potential impacts of a West Coast based longline fishery would be counted in relation to hard caps in proposed EFPs and in the DGN fishery. Since 2004, the Hawaii shallow-set fleet has also caught over 8,000 billfish,[12] which are not permitted to be landed on the West Coast under the Billfish Conservation Act and would be required to be discarded as bycatch, many dead or dying.[13]

Further, with the designation of overfishing on the Eastern Pacific Ocean (EPO) stock of swordfish,[14] the council should consider how increasing longline effort could exacerbate fishing pressure on this stock. The Hawaii fishery is known to catch fish from the EPO stock and many assume that a West Coast fleet would fish primarily in the eastern portion of the Hawaii fishery's range, closer to the EPO stock boundary.[15] Climate change and stronger El Nino events may also effect the distribution of the EPO swordfish stock.[16] Many southerly species have been spotted off our coast and it's important that scientists assess what, if any, changes are occurring and how this could increase the amount of EPO fish caught in any potential longline fisheries particularly when the stock boundary line is admittedly arbitrary.[17]

Finally, we note that the overarching goal of the Swordfish Plan is to increase landings of swordfish. Therefore, the Council's discussion should include consideration of the ability of each gear to catch swordfish (*see* Figure 2) in addition to the ecological impacts associated with those gears. Given the ability of new gears to target swordfish at higher rates than longline gear and with significantly lower bycatch and ecological impact, we ask the Council reaffirm its 2009 decision not to move forward with a longline fishery outside or inside the EEZ. Longlines have been prohibited off our coast for over a decade[18] and in California waters for over 25 years.[19]

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[11] Scoping Information Document for Council Action to Authorize the Use of Shallow-Set Longline Gear outside the West Coast Exclusive Economic Zone under the Fishery Management Plan for West Coast Fisheries for Highly Migratory Species, p. 4.
[12] *Id.*
[13] Billfish Conservation Act of 2012, H.R. 2706.
[14] Determination of Overfishing or an Overfished Condition, Fed. Reg. Volume 80, Number 170, p.53115, Wednesday, September 2, 2015.
[15] Scoping Information Document for Council Action to Authorize the Use of Shallow-Set Longline Gear outside the West Coast Exclusive Economic Zone under the Fishery Management Plan for West Coast Fisheries for Highly Migratory Species, Figure 6, p. 9.
[16] Cheung et al., *Projecting future changes in distributions of pelagic fish species of Northeast Pacific shelf seas*, Progress in Oceanography, Vol. 130, January 2015, pp. 19-31 (predicting eastern Pacific species shifting poleward by 30 km per decade).
[17] Scoping Information Document for Council Action to Authorize the Use of Shallow-Set Longline Gear outside the West Coast Exclusive Economic Zone under the Fishery Management Plan for West Coast Fisheries for Highly Migratory Species, p. 17 ("This boundary is quasi-arbitrary so the actual catch of EPO swordfish by the Hawaii SSLL fishery could be more or less than the amount stated in the notification.").
[18] Final rule to prohibit shallow longline sets east of 150° W, 50 CFR Part 223, Fed. Reg. Vol. 69, No. 48, Thursday, March 11, 2004.

The reasons given for not authorizing this fishery in 2009 are still relevant[20] and some even more significant than they were at that time. Time and energy should be invested in new gears that have the ability to *reduce* bycatch in the swordfish fishery.

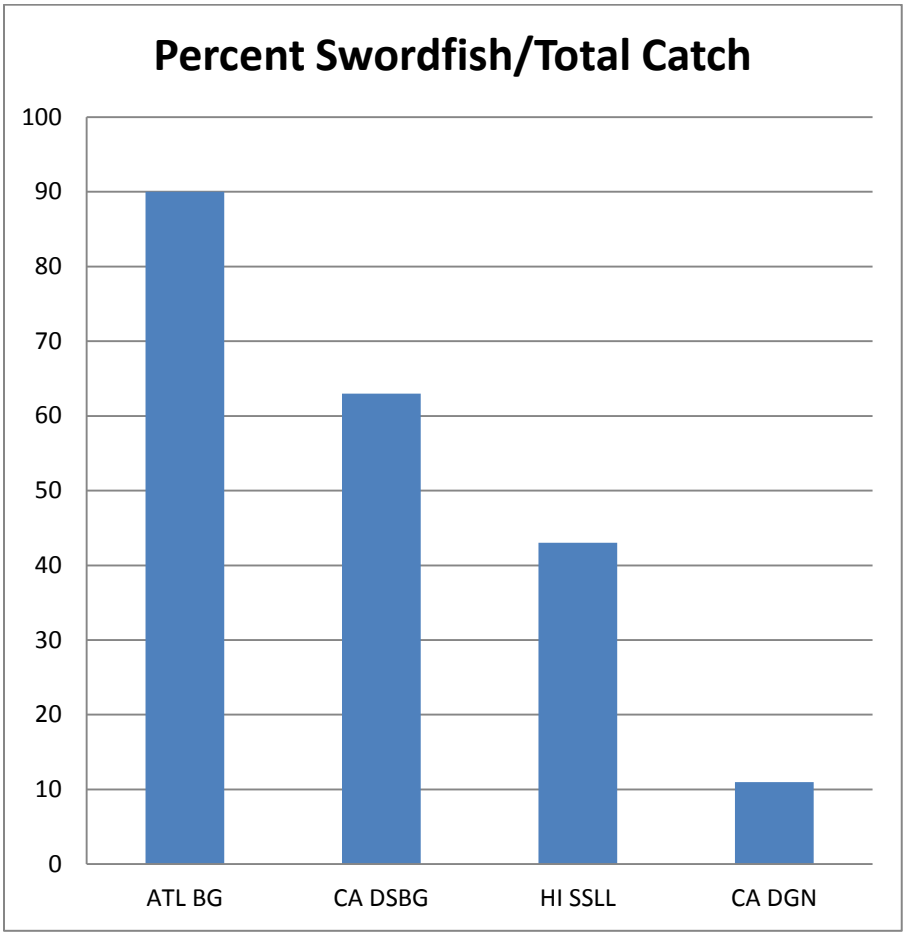

Figure 1. *Comparison of swordfish caught as a percentage of total catch in the Atlantic buoy gear fishery (90%), the California DSBG trials (63%), the Hawaii shallow-set longline fishery (43%) and the California DGN fishery (11%).*

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[19] In 1989 with the enactment of Section 9028 of the Fish and Game Code, the California Legislature prohibited pelagic longline fishing off the California coast by banning the use of hook and line fishing gear longer than 900 feet.

[20] The Council's reasons for not authorizing a longline fishery in 2009:

- The proposed action would not sufficiently limit fishing effort when considering both an authorized SSLL fishery and the current DGN fishery given the number of latent permits in the latter
- Cost of observer coverage and the impact on coverage levels in other fisheries
- The proposed fishery would not provide enough swordfish to make any appreciable difference in meeting U.S. demand, especially if foreign providers compensate with lower prices
- Concern about incidental catch/bycatch of vulnerable/overfished finfish
- In light of the current status of bigeye, yellowfin, and albacore tuna, the U.S. should not increase fishing effort on these stocks (we can now add the EPO stock of swordfish to this list)
- Concern that any increase in protected species takes in the proposed fishery would have to be compensated for by reductions of takes in other fisheries

Conclusion

We appreciate and support the Council's September decision to begin a broad decision making process for swordfish management. While the hard caps, performance standards, and increased monitoring adopted in September are an important step in ensuring accountability in the DGN fishery, these measures fall short of a comprehensive plan to manage this fishery. As long as DGN gear is deployed in our West Coast swordfish fishery, there will be unacceptable levels of bycatch and interactions with rare and vulnerable species. For this reason, we ask the Council to develop a plan for transitioning the DGN fishery to more selective and actively tended gear types and move toward a fishery that can be a model for bycatch minimization. By doing so, the Council can design a swordfish fishery that consumers will be proud to support because of its environmental sustainability. We look forward to working with the Council and other stakeholders to achieve this goal.

Sincerely,

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