CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE REPORT ON CALIFORNIA DRIFT GILLNET FISHERY MANAGEMENT AND MONITORING PLAN

The California Department of Fish and Wildlife (CDFW) appreciates all the hard work and input by the Council, state and federal agencies, advisory bodies, and the public on addressing management of the drift gillnet fishery (DGN) in California. CDFW feels strongly that minimization of bycatch of finfish and sea turtles and incidental catches of marine mammals can and should improve and that management measures are implemented in a timely manner. Yet, we recognize that there may not be sufficient information available at this time to fully flesh out all the necessary details; therefore CDFW would be supportive of delaying final action until the June meeting to allow for further detailed analyses to support decision making.

CDFW also offers the following comments on management of the DGN fishery including CDFW preferred alternatives. Our intent is to have CDFW preferred alternatives added to the range of alternatives for consideration. They are not meant to replace the alternatives outlined in the Highly Migratory Species Management Team (HMSMT) report.

Overarching Comments:

As stated above, CDFW feels strongly that minimization of bycatch of finfish and sea turtles and incidental catch of marine mammals in the DGN fishery needs to improve. While this fishery is currently operating within all applicable laws (Endangered Species Act and Marine Mammal Protection Act), there is always room for improvement and we feel a need to manage to better address National Standard 9. We believe this can be achieved by exercising the Council’s authority under Magnuson-Stevens Act (MSA) to minimize bycatch and bycatch mortality of and to conserve non-target species affected by, the swordfish fishery.

Further reductions in the incidental catch of protected species and other species (i.e., unmarketable species, sea turtles, marine mammals) can be achieved through changes in fishing behavior and/or gear. Changes to fishing behavior such as shorter set times or active gear tending can help decrease bycatch and minimize bycatch mortality, and incidental catches and mortality of marine mammals. Modifications to current gears or allowing for the use of lower bycatch gears can also reduce and/or minimize bycatch mortality, and incidental mortality of marine mammals.

The future success of this fishery depends on the recognition that this fishery needs to change. Fishermen need to change how they fish or the gears they use and measures need to be implemented to allow for timely monitoring and management. CDFW supports management approaches which provide incentives to achieve these goals – such as annual hard caps.

At this meeting, the Council will make a decision on whether to approve exempted fishing permits - some of which allow for testing new gears. If new gears are ultimately successful it would be beneficial to revisit discussions of hard cap management prior to authorization of new gears.

While changes to the DGN fishery seem somewhat daunting and impossible to some, one only needs to look to groundfish fishery to see how these challenges can be overcome. The groundfish fishery faced similar challenges to the DGN fishery such as annual catch/bycatch limits and large area closures. Tough decisions had to be made, particularly in the trawl sector, in order to maintain
some fishing opportunity. The trawl sector went through a federal buyout and a catch share program was implemented. While the changes in the trawl sector were challenging, groundfish trawling is still authorized on the west coast today.

The trawl sector and trawl gear used to be thought of as “dirty” because the fishery was non-discriminant and had high levels of bycatch. Through changes to gear configurations and fishing behavior, bycatch has decreased and product value has increased. This past year the Monterey Bay Aquarium’s Seafood watch program changed its categorization of many trawl caught rockfish species from “avoid” to “best choice” or “good choice”. This fishery is no longer characterized as the pariah it once was.

DGN fishery participants may have similar successes, but it will not be without some challenges, a fundamental change in behavior, and a commitment by all.

Protected Species Hard Caps

CDFW recommends implementing annual hard caps for high priority species or species of concern based on entanglement, not mortality-serious injury. While we envision the definition of take or interaction to mean entanglement with gear, we understand that further discussions with the observer program may be warranted to align Council intent with current observer definitions.

A CDFW preferred alternative (PPA) (Table 1) is similar to the Council PPA (Table 6 in HMSMT report) and includes annual entanglement caps and estimated annual take caps. The estimated annual entanglement caps are set at a value that is equal to or lower than those levels in the applicable incidental take statement (ITS) issued under the Endangered Species Act and the Potential Biological Removal (PBR) levels calculated under the Marine Mammal Protection Act. While ITS and PBR can be informative, establishing hard caps are ultimately a Council policy decision. The hard caps in the CDFW PPA are informed by ITS and PBR but are not directly tied to them; therefore future changes to ITS and/or PBR do not automatically require modifications to hard caps.

Under the CDFW PPA, application of hard caps would be aligned with the fishing season (May 1-January 31) and the fishery would close immediately when estimated entanglements equal the cap for any capped species. CDFW also supports establishing a mechanism within the Highly Migratory Species Fishery Management Plan to allow for timely closure of the fishery once species identification has been confirmed. Similar mechanisms are available in both the salmon and groundfish FMPs, so the intent would be to have a similar process available in this fishery if it isn’t already available.

In their report, the Highly Migratory Species Management Team highlighted challenges assessing fishery interactions without 100% observer coverage (Agenda Item H.4.b, HMSMT Report). The annual caps under the CDFW PPA were developed assuming 30% observer coverage, which is the National Observer Program objective based on available funding for 2015, and would be applied to any encounter or interaction regardless of the time of year. For example, one fin whale entangled within the first month of fishing would be extrapolated based on a 30% coverage rate and would shut down the fishery because the estimated annual take cap would be exceeded. If that same encounter occurs during the last month of fishing, the end result would be the same. The

1 whale entanglement x 3 (30% observer coverage rate) = 3
result of this assumption is that for most of the high priority species or species of concern, one entanglement during a year would close the fishery.

Assuming a fixed observer coverage level at the beginning of the season is a simple and more straightforward approach than trying to determine coverage levels at the moment an encounter occurs and would facilitate a more timely management response.

Table 1. CDFW Preferred Alternative - annual hard caps ("Entanglement Caps") for high priority species or species of concern. Values in parentheses reflect rounded values.

<table>
<thead>
<tr>
<th>Species</th>
<th>Observed Entanglement Cap*</th>
<th>Estimated Annual Take**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fin whale</td>
<td>0.6 (1)</td>
<td>2</td>
</tr>
<tr>
<td>Humpback whale</td>
<td>0.6 (1)</td>
<td>2</td>
</tr>
<tr>
<td>Sperm whale</td>
<td>0.6 (1)</td>
<td>2</td>
</tr>
<tr>
<td>Leatherback sea turtle</td>
<td>0.9 (1)</td>
<td>3</td>
</tr>
<tr>
<td>Loggerhead sea turtle</td>
<td>0.9 (1)</td>
<td>3</td>
</tr>
<tr>
<td>Olive ridley sea turtle</td>
<td>0.6 (1)</td>
<td>2</td>
</tr>
<tr>
<td>Green sea turtle</td>
<td>0.6 (1)</td>
<td>2</td>
</tr>
<tr>
<td>Short-fin pilot whale C/O/W</td>
<td>1.5 (2)</td>
<td>5</td>
</tr>
<tr>
<td>Common bottlenose dolphin C/O/W</td>
<td>1.8 (2)</td>
<td>6</td>
</tr>
</tbody>
</table>

*the observed entanglement cap is calculated as the product of estimated annual take multiplied by 0.3 (30 % coverage rate)

**the estimated annual take of all species in the incidental take statement of the latest biological opinion for the fishery, except for short-fin pilot whale (C/O/W) and common bottlenose dolphin (C/O/W) which are informed by the latest potential biological removal levels estimated under the Marine Mammal Protection Act.

CDFW notes that the HMSMT report (Agenda Item H.4.b) does not provide an analysis of fishery performance under the various alternatives to assess the number of times the fishery would have closed between 2004 and 2014. Such an analysis would be helpful in assessing potential fishery performance and impacts to fishermen under the proposed range of alternatives. CDFW recommends the HMSMT include this analysis and include the CDFW PPA for Council consideration.

Performance Objectives for Bycatch Reduction

Non-ESA-listed marine mammals

In addition to the Council PPA which establishes annual performance objectives for non-ESA listed marine mammals based on the highest level observed during any one year during a ten year period (2004-2014), CDFW recommends including an analysis using the most recent five year period (2009-2014). This recent time period would be more reflective of recent fishing behavior.

Finfish

The CDFW preferred alternative does not specify performance objectives for finfish. While we feel that performance objectives for finfish are important, we do not feel that there is enough information at this time to inform what the appropriate levels should be. We would support continued work on this performance standard, with the possible inclusion of results from EFPS CDFW recommends the Council affirm its commitment to continue to make progress on this topic with the intent of revisiting it at a future date.
**Fishery Monitoring**

For fishery monitoring, the CDFW preferred alternative is identical to the Council PPA for fishery monitoring (i.e., Alternative 3) and would maintain the 30% target observer coverage level and/or require electronic monitoring (for the purpose of catch and bycatch accounting), remove the unobservable vessel exemption, and achieve 100% observer coverage/electronic monitoring by 2018.

**Further Guidance**

While the discussion and action has been focused solely on DGN, we recognize the importance of continuing this discussion in a broader context of swordfish management in general (i.e., harvesting swordfish using other gears). Therefore, we request the HMSMT continue developing a broader "Swordfish Management and Monitoring Plan."

**CDFW Recommendations:**

1. Defer final Council action today.
2. Include the CDFW PPA for hard caps for high priority species or species of concern based on entanglements, rather than serious injury or mortality within the range of alternatives for analysis.
3. Ask HMSMT for further development:
   a. Provide an analysis of historical fishery performance under the range of alternatives, including CDFW PPA, for hard caps or high priority species or species of concern.
   b. Add an alternative for analysis: performance objectives for non-ESA listed marine mammals based on the highest level observed during any one year during a five year period (2010-2014).
4. Align Council language with current observer definitions to meet the council’s intent of using “entanglement”.
5. Affirm the Council’s commitment to continue to make progress on finfish performance standards and revisit at a future date.
6. Task the HMSMT to continue developing a broader “Swordfish Management and Monitoring Plan.”