

11 November 2015

Ms. Dorothy Lowman, Chair  
Pacific Fishery Management Council  
1100 NE Ambassador Place, Suite 101  
Portland, OR 97220

**Re: Agenda Items B1 Open comment and H3 Anchovy Status**

Dear Chair Lowman and Council Members:

I write in urgent support for not only a status review of anchovy populations off California but an emergency closure of fishing for anchovy especially for central California including Monterey Bay.

I have studied marine mammals for 40 years and conducted research on large whales especially humpback whales off California for 30 years. Most of the information on abundance and trends and population structure of humpback whales comes from work I have directed. It is clear that humpback whales are highly dependent on anchovies especially in areas like Monterey Bay during periods of low krill abundance like we are in. We recently obtained dramatic footage from video tags we deployed on humpback whales in Monterey Bay that showed not only their feeding on anchovies but the wide mix of species including birds and sea lions engaged in feeding. We have a publication in press to the journal *Global Change Biology* describing the role of anchovies and other fish as prey for humpback whales in years of low krill abundance (like this year).

Overall the evidence is compelling that an emergency closure is needed given:

1. The key role anchovy play as prey for humpback whales especially in areas like Monterey Bay.
2. Anchovy importance to a wide range of other marine mammals and birds,
3. Evidence for the decline or even collapse of anchovy populations off California
4. Anchovy concentration in coastal areas like Monterey Bay especially in years of low abundance
5. The lack of current stock abundance estimates
6. Evidence that current fishing levels may be way above sustainable levels given this decline and are continuing today.

Given the above factors and the potential disastrous consequences of a collapse being further exacerbated by continued fishing, involving impacts on marine mammals and important economic activities like whale watching, it is critical the council act immediately to implement an emergency closure.

I would be happy to provide any additional information you need for your deliberations. Please let me know if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "John Calambokidis". The signature is fluid and cursive, with a long horizontal stroke at the end.

John Calambokidis  
Founder and Senior Research Biologist at Cascadia Research  
Adjunct Faculty at Evergreen State College