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SCRIPPS INSTITUTION OF OCEANOGRAPHY

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December 29, 2016 LA JOLLA, CALIFORNIA 92093-0209

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Mr. Tom Luster
Senior Coastal Analyst
California Coastal Commission

Dear Mr. Luster,

We recently viewed the archived video of December 1, 2016 presentation at the Ocean Desalination in Ventura County forum ([video link](#)). At 1:08:43 into the video, you showed Figure 2 from our 2015 research article published in the journal *Marine Ecology Progress Series* (volume 538:221-227) entitled “*Dramatic declines in coastal and oceanic fish communities off California*”. While we appreciate your interest in our research, your comments accompanying the figure appear to misrepresent our results and conclusions.

In the video, you stated: “*Another key issue that argues against open intakes, this represents the decline of plankton off Southern California. It represents about 75% since early 70s. It’s hard to maintain and enhance marine life like the Coastal Act requires in a situation like this and so open intakes have a hurdle to overcome.*”

This statement represents an inaccurate understanding of our research. The figure that you presented from our paper shows that both nearshore and offshore fish communities off southern California were in stark decline as measured by two very different time series:

1. The CalCOFI program which samples mostly the offshore waters of the California Current (PC2 CalCOFI in the figure), and
2. Juvenile and adult impinged in the fish monitoring at coastal California power plants (PC1 PPI in the figure).

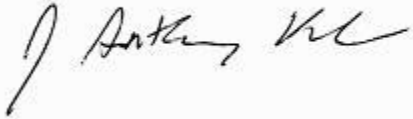
Thus, as we pointed out in our paper, “many of the taxa are predominantly distributed offshore but share the same trend as more coastal taxa.” It is therefore not reasonable to attribute this decline to the impact of coastal development or nearshore power-plant intakes. We also noted that the declines predominantly affected cold-water affinity taxa and therefore concluded that “large-scale environmental forcing [was] the key factor driving this change.”

We have included a reprint of the published article for your review. Should you have any questions, feel free to contact any of us. Dr. McGowan and I can answer any questions regarding the CalCOFI data, while Mr. Eric Miller would be the best source for information regarding the power plant data. We ask that you refrain from repeating your Ventura forum comments, or anything similar, as it presents an almost exactly opposite conclusion to that obtained by our research. Again, the figure you presented shows the offshore taxa sampled by

CalCOFI are declining in a nearly identical pattern as those measured by the power plant monitoring. This demonstrates that large-scale ocean forcing rather than local coastal processes, such as power plant water intakes, are driving the changes we have observed off our coast since the 1970s.

Thank you for your attention to this matter. We hope our science can help inform regulatory decisions wherever applicable, but the science needs to be interpreted correctly.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Anthony Koslow". The signature is fluid and cursive, with the first letter of each name being significantly larger than the others.

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