

ENVIRONMENTAL ACTION COMMITTEE OF WEST MARIN

~ KEEPING WEST MARIN WILD SINCE 1971 ~

May 16, 2013

The Honorable Sally Jewell
Secretary
Department of the Interior
1849 C Street, N.W.
Washington DC 20240

Dear Secretary Jewell,

The Environmental Action Committee of West Marin has been intimately involved in the effort to uphold the government's promise to taxpayers to protect the only designated marine wilderness area in the continental United States at Drakes Estero, the ecological heart of the Point Reyes National Seashore. Former Interior Secretary Ken Salazar rightly decided to let the Drakes Bay Oyster Company's (Company) commercial oyster lease expire on its own terms on November 30, 2012, thus honoring an agreement made to all Americans in 1976. An opponent of this decision, Dr. Corey Goodman, requests the Interior Department facilitate his efforts to infuse another non-germane and manufactured scientific controversy into a matter of decided park policy. **Dr. Goodman's most recent complaint represents his misunderstanding and faulty analysis of wildlife monitoring photos and the associated United States Geological Service (USGS) Report.** Dr. Goodman's accusations have no merit, and continue to ignore that former Interior Secretary Salazar's decision was expressly based on contractual terms and public policy. **We ask that the Interior Department again reject Dr. Goodman's attempts to substitute his baseless accusations for peer-reviewed science and reject his misleading interpretations of the Final Environmental Impact Statement (FEIS).**

As demonstrated in this letter, the Company's and Dr. Goodman's campaigns continue to be unpersuasive and continue to be unsuccessful in attacking peer-reviewed science and the multiple federal agencies, including the National Academy of Sciences, that have detailed the adverse impacts from the oyster operation. Unfortunately, this is not the first time Dr. Goodman has criticized the Interior Department on behalf of the Company. For example, as the Executive Director of the Marine Mammal Commission Dr. Tim Ragen stated to Dr. Goodman on June 6, 2012 regarding the conclusions Dr. Goodman made after reviewing the wildlife photographs: *"Your characterization of the photographs ...is, in my view, incomplete, inaccurate, and misleading...I disagree completely with your interpretation of the seal behavior documented..."* Similarly, Dr. Goodman's criticism of the United States Geological Service's "Assessment of Photographs from Wildlife Monitoring Cameras in Drakes Estero" in the Final EIS is without merit for the following reasons.

I. Dr. Goodman incorrectly describes the data that informed the Final EIS conclusion on adverse impacts to harbor seals from oyster operations.

Dr. Goodman attempts to undermine the FEIS's conclusion that oyster operation's activities, including thousands of motorized boat trips per year and cultivation of oysters on wildlife

habitat, cause moderate adverse impacts to harbor seals by stating that the Park Service relied on the USGS Report: “*The NPS conclusion in the FEIS of a “moderate adverse impact” to harbor seals by DBOC operations appears to be based in large part upon the NPS’s interpretation of the USGS assessment of NPS photographs.*” Dr. Goodman’s statement cited here ignores the plain, unequivocal language of the FEIS.

The FEIS’s conclusion regarding adverse impacts on harbor seals reads: “*the continuation of DBOC activities...are likely to have adverse impacts on harbor seals based on documented correlations between shellfish operations and harbor seals behavior in Drakes Estero (NAS 2009, Becker, Press, and Allen 2011, MMC 2011b).*” This FEIS statement shows that the FEIS impact conclusion regarding harbor seals does not cite or rely on the USGS Report as providing any “documented correlations.” Thus, there is no merit to Dr. Goodman’s claim that the FEIS harbor seal conclusion is based “in large part” on the USGS Report’s conclusion regarding photographs. Rather, the FEIS conclusion about adverse impacts to harbor seals from commercial oyster operations is based on peer-reviewed science with which Dr. Goodman disagrees, but to which he has yet to provide any peer-reviewed science in rebuttal.

II. The National Academy of Sciences and peer-reviewed research confirm harbor seal disturbances from oyster operations, but Dr. Goodman says he knows better.

Concerning harbor seal research put forward in the Draft EIS, the National Academy of Sciences (NAS) August 2012 report concluded that, “*Overall, the best available scientific information was used in the DEIS.*” The NAS did not base its harbor seal impact conclusions on the USGS Report because, as stated above, the NPS did not base its own harbor seal conclusions on the USGS Report. Dr. Goodman apparently does not agree with the findings of the NAS that demonstrate that continued oyster operations would likely result in adverse impacts to harbor seals, but that does not change the fact that the NAS affirmed the peer-reviewed research on this matter.

The NAS report stated:

“Viewed alongside peer review results of short-term disturbance effects in other areas (reviewed in the NRC, 2009 report), the information presented in the DEIS supports the conclusion that alternatives B, C, and D [continued oyster operations at varying production levels] would likely result in moderate adverse impacts on harbor seals due to potential displacement from preferred haul-out sites.” [NAS 2012 p.27]

“In contrast, alternative A [cessation of oyster operations], after the initial short-term impacts during equipment removal, would be expected to lead to fine scale changes in harbor seal distribution that reflect natural site preference and responses to natural, as opposed to anthropogenic, environmental variation.” [Id.]

“The committee is not aware of any data supporting other hypotheses to explain these patterns, and given current understanding of potential disturbance effects in wildlife populations, support a conclusion that moderate impact of mariculture activity is the most parsimonious and reasonable conclusion to be drawn from available data. The suggestion that the extension of the DBOC lease (alternatives B, C, and D) will have moderate adverse impacts on harbor seals is consistent with the peer reviewed literature, and

reasonable given current general understanding of the potential impacts of chronic and cumulative disturbance on pinnipeds and other wildlife populations.” [Id.]

“Alternate hypotheses of impact on the harbor seals could be proposed based on scientific logic but even less information is available to support such hypotheses.” [Id.]

Dr. Goodman, a neurobiologist, is not a trained marine mammal scientist or marine ecologist, and his statistical analyses and criticisms of peer-reviewed harbor seal research were deemed by the MMC to have “*fundamental flaws*.” Despite his desperate attempts, Dr. Goodman has nothing credible or resembling science with which to rebut the strong conclusions of the NAS 2012 Report on harbor seal disturbances caused by oyster operation’s cultivation activities and thousands of motorized boat trips per year.

III. Dr. Goodman unilaterally redefines the purpose of the USGS Report from a photo study to a seal study and then attacks the USGS for something it did not do.

Dr. Goodman has attempted to undermine the Park Service’s FEIS conclusions regarding adverse impacts to harbor seals from oyster operations by criticizing the USGS Report. That Report is a part of the FEIS, and Dr. Goodman twists the purpose of the USGS Report into something it is not. The stated purpose of the USGS Report was to evaluate the photographs, not the seals. The report references seal disturbances only to demonstrate that the photographs are of very limited value, a conclusion already reached by the Park Service (and for which it was heavily criticized by Company and Dr. Goodman). The USGS Report does not attempt to provide a thorough review of seal disturbances and only a small portion of the photographs were analyzed because, “*the distance of the camera from the seals was often too great, the angle of the camera too low to the water, and resolution of the photographs too low to allow an accurate count of the number of individual seals.*”

Further, the USGS Report, which had a specific purpose and scope, did not include other data sources such as eye-witness accounts of disturbances or video records of disturbances that could have informed the poor-quality information from the still photographs. If the USGS had been tasked to identify seal disturbances, they would have included all data sources relevant to identifying seal disturbances. Instead, they limited their review, including Dr. Stewart’s review, to only the still photos. Dr. Goodman makes spurious claims about the USGS Report’s conclusions regarding harbor seal disturbances, but when acknowledging the stated purpose of the USGS Report, his claims must be rejected.

The Marine Mammal Commission (MMC), on the other hand, conducted a thorough scientific study regarding disturbances to harbor seals from commercial oyster operations. Unlike the USGS, which had a narrow scope of research that focused on the *utility* of the photos, the MMC studied all the relevant photos, videos, records of harbor seal docents, and the peer-reviewed science developed by Park Service scientists and researchers in drawing conclusions about impacts to harbor seals from mariculture operations.

The MMC affirmed the peer-reviewed scientific conclusion that a relationship does exist between an increase in mariculture activity and a decrease in seal haul-out use in Drakes Estero. The MMC’s November 2011 report concluded, in disagreement with Dr. Goodman’s assertions, that “*from time to time, mariculture activities in the estuary do disturb harbor seals.*”

Because of the very limited utility of the photos, and for similar reasons described by USGS, the MMC reviewed both photos and videos of instances where harbor seal disturbance by oyster operations was noted. The MMC described this, stating:

“In contrast, on 15 May 2008 the volunteer observed harbor seals resting on OB. She reported witnessing an incident that caused some of the seals to flush into the water. She videotaped the seals at the water’s edge and in the water, and she also videotaped the boat moving northward at some distance from the seals. Importantly, this disturbance of seals also was documented by photographs.”

The MMC then describes the disturbance of seals (flushing), and concludes:

“The combination of video and still photography provides convincing evidence of seal disturbance that likely was caused by the sound of the boat as it left OB and moved up the west channel (a distance of hundreds of meters).”

As Dr. Lellis of the USGS wrote on December 4, 2012 to Dr. Goodman: *“I’m not certain if we found all incidences of flushing. It was not that important to this project to do so, although it would be interesting for a third-party to analyze the videos and see how well we did. The NPS asked us to provide an opinion on the value the photographs would have in conducting an analysis of human-seal interactions. So we were looking for certain pieces of information on the photographs to form an opinion. If we had actually been doing an analysis, we would have added steps to reduce missing events.”*

And on December 13 Dr. Lellis again wrote to Dr. Goodman that, *“there really is a big disconnect in what we attempted to address in the report and what you were attempting to extract.”*

The USGS Report was focused on the utility of the photographs. The USGS was not tasked with reviewing the same information as the MMC. The USGS Report must be viewed in light of the narrow research focus with which it was tasked, and Dr. Goodman’s interpretations from the Report must be rejected.

IV. Dr. Goodman incorrectly describes the USGS consultant’s findings and misleads the public.

In an effort to develop a storyline of conspiracy necessary to benefit the Company’s advocacy against the Park Service, Dr. Goodman initially (12/21/12 Declaration to Court) attempted to buttress his claims about the USGS Report with quotes from the 5/12/12 research notes of USGS consultant Dr. Brent Stewart, apparently trying to make some argument based on the differences between those notes and the final USGS Report. Dr. Goodman claimed that Dr. Stewart’s 5/12/12 notes supported a conclusion that Dr. Stewart found no seal disturbances. But contrary to Dr. Goodman’s claim, Dr. Stewart’s notes do in fact reflect evidence of a seal disturbance, and other USGS reviewers also found evidence of seal disturbances.

Regarding the June 11, 2008 event, Dr. Stewart checked “Yes” in the “Evidence of Disturbance” Data Column, and noted that the “human stimulus” for the harbor seal flush disturbance was

from a skiff (oyster boat). Yet **Dr. Goodman's 12/21/12 assertion ignored Dr. Stewart's statement.**

Dr. Goodman also ignores the fact that other authors of the USGS Report reviewed an animation of the still photos, which the Report indicates provide a better analysis tool than the individual still shots. As explained in the USGS Report at pages 2-3 (emphasis ours):

*“Our **initial approach** of analyzing a random sub-sample of all photographs had two significant limitations...As such, we **changed our approach** to animation of photographs into daily videos.”*

This animation of photos of the June 11, 2008 event indicated to the other USGS reviewers that a harbor seal disturbance flush had occurred, which is what was reported in the USGS Report.

But subsequent to the publication of the USGS Report, Dr. Stewart looked again at the June 11, 2008 photos and seemingly changed his opinion that a disturbance had occurred. Dr. Stewart has the right to change his mind, however, that by itself does not impact the overall review done by the USGS which concurred with Dr. Stewart's prior opinion. Further, that seeming change of opinion of one author of the USGS Report does not warrant a withdrawal of that Report given that there was admittedly some “back-and-forth” given the limitation of the USGS Report due to the poor quality of the photos.

Regarding the May 15, 2008 event, the USGS Report concluded that a disturbance occurred on May 15, 2008. Yet based on his analysis of the still photos, Dr. Stewart could not conclude that any disturbance had occurred. Dr. Goodman would have the public believe that this is a contradiction and evidence of a conspiracy. It is not. It is simply a legitimate difference of opinion possibly caused by use of different analytical tools – the animation of the photos versus the still photos. **Further, the USGS conclusion of a seal disturbance on May 15, 2008 is supported by the analysis conducted independently by the MMC, which is noted in the prior section as also incorporating eye-witness accounts and a video of the event.** Dr. Stewart, limited to a review of the still photos only, had no way to analyze this other important data. *Again, Dr. Stewart's later conclusion of “no disturbance” on May 15, 2008 is a function of the scope of the USGS Report, which was only to study the usefulness of the still photos.*

Further since the Secretary made his decision on matters having nothing to do with harbor seal science or the USGS Report, Dr. Goodman cannot blame USGS or the NPS. The USGS Report concluded that the NPS photos alone were of limited use to determine harbor seal flushes. Dr. Goodman would have the public believe that the USGS analysis limited to these poor-quality photos is not only an exhaustive compilation of all seal disturbances, but further that the thousands of NPS photos that show nothing but gray or black due to fog or operator error are definitive proof purportedly evidencing that oyster boats were not associated with any disturbances. Now Dr. Goodman asserts that these poor quality NPS photos formed the basis for the Secretary's decision. Such an approach by Dr. Goodman confirms his obsession to advocate on behalf of Company, even when neither the evidence nor the peer-reviewed science supports his regurgitated allegations.

V. Conclusion: Dr. Goodman's latest accusations against the Interior Department, like the others, have no merit and should be rejected.

Dr. Goodman proceeds once again to attempt to construct a mountain of conspiracy out of a molehill of pedestrian incidents. Not only does Dr. Goodman offer no credible evidence to support his criticisms of the USGS Report and the Final EIS but ironically his efforts do offer evidence to support the speculation that he exerted considerable effort first to build and then attack straw-man caricatures of these Reports. Dr. Goodman's repeated claims of scientific misconduct are a waste of taxpayer money, fail miserably on the merits, and must be rejected.

Thank you very much for your consideration of our comments. We would be happy to discuss this matter further with you.



Amy Trainer, Executive Director
Environmental Action Committee of West Marin

Cc: Senator Barbara Boxer
Senator Dianne Feinstein
Congressman Jared Huffman
National Park Service Director Jon Jarvis
Acting USGS Director Suzette Kimball