

Appendix 1:

Overview of Allegations of Scientific Misconduct

1. **USGS**, in their Report, misrepresented and falsified the record from the Stewart Report (by Hubbs SeaWorld harbor seal behavior expert Dr. Stewart), falsely claimed a *correlation* of oyster farm activity and disturbance of harbor seals, and in so doing violated the DOI and White House Scientific Integrity Policies.
2. **NPS**, in the Final EIS (FEIS), misrepresented the USGS Report, falsely claimed *causation* of oyster farm activity and disturbance of seals, and in so doing violated the DOI and White House Scientific Integrity Policies.
3. **Marine Mammal Commission**, while claiming to be independent of NPS in their review, release, and later private reversal (without public acknowledgment or retraction) of a key conclusion on the impact of the oyster farm on harbor seals in the MMC Report, violated the MMC and White House Scientific Integrity Policies.
4. **NPS**, in the FEIS, cited the NPS Becker et al. 2011 paper as providing statistical support for the NPS correlation on the impact of the oyster farm on harbor seals, when NPS knew the correlation was not valid, in so doing violated the DOI and White House Scientific Integrity Policies.
5. **NPS**, in the FEIS, cited the MMC Report as an independent validation of the Becker 2011 paper NPS correlation on the impact of the oyster farm on the seals, when NPS knew MMC was not independent and had reversed its support of the NPS correlation, violated the DOI and White House Scientific Integrity Policies.
6. **NPS**, in a six-year pattern of repeated misrepresentations and falsifications concerning the impact of the oyster farm on the harbor seals, demonstrated that it has "*intentionally, recklessly, or knowingly*" misrepresented data and in so doing violated the DOI and White House Scientific Integrity Policies.

On November 20, 2012, NPS released the NPS Final Environmental Impact Statement (FEIS) for the Drakes Bay Oyster Company (DBOC) Special Use Permit. The FEIS concluded that continuation of the oyster farm would result in a long-term "*moderate adverse impact*" on harbor seals due to the "*potential for disturbances*" and "*continued disturbances*" caused by DBOC oyster boats.

A "*moderate*" adverse impact was defined as "*impacts on harbor seals would result in readily apparent effects on the population, natural processes, or habitat in the project area.*" It is the second most serious category of adverse impacts.

This single determination of a "*moderate adverse impact*" on the harbor seals at Drakes Estero had a significant impact on other findings in the FEIS, and on elected officials, the public, and media. After six years of false public claims, manipulated reports, and secret cameras – and millions of taxpayer dollars – two pieces of alleged evidence supported this finding by NPS. The facts, based upon the "*preponderance of evidence*" reveal that both claims of scientific evidence were based upon misrepresentations made "*intentionally, knowingly, or recklessly.*"

First, the FEIS claimed evidence that the oyster farm had occasionally disturbed the harbor seals. This finding was inconsistent with the physical landscape: the oyster boats typically stay over 700 yards away from the harbor seals, and with an intervening sandbar blocking their view and buffering their sound (a fact not disclosed in the FEIS).

Second, the FEIS claimed that these disturbances were, in fact, 'chronic' (with no evidence) and led to a spatial displacement of harbor seals out of Drakes Estero. This claim was equally inconsistent with the lack of any evidence for the claim of 'chronic' disturbance, and the fact that NOAA, the agency charged with overseeing the Marine Mammal Protection Act of 1972, claims the harbor seal population in and around Drakes Estero is at or near its carrying capacity. Moreover, during the DEIS comment process, NOAA reported to NPS that their agency had received no reports of disturbances.

What are the data supporting the finding of oyster farm disturbances of harbor seals? The NPS cited a 2012 USGS Report that analyzed, at NPS request, over 300,000 time- and date-stamped NPS photographs of the oyster boats and harbor seals (from secret cameras operational for three and one-half years). The FEIS quoted the USGS Report as concluding that on two occasions in 2008, oyster boats caused seals to flush into the water.

There are, however, two major problems with this claim: USGS misquoted the original expert's findings (Dr. Brent Stewart) (allegation #1), and NPS misquoted the USGS Report (allegation #2).

The USGS Report didn't conclude what NPS claimed. Rather, it found an "*association*" (a weak correlation) and not causation of oyster boats and seals getting flushed into the water on these two occasions. The USGS had no harbor seal behavior expert, and so relied on an analysis of NPS photos, as contracted by NPS, conducted by Dr. Brent Stewart, a harbor seal behavior expert at Hubbs SeaWorld Research Institute in San Diego (the 2012 Stewart Report). The USGS Report quoted the Stewart Report as finding two "*associations*" of oyster boats and harbor seals getting flushed into the water.

The Stewart Report didn't conclude what USGS claimed. Rather, Dr. Stewart found "*no evidence of disturbance*" of harbor seals by oyster boats. He was very clear. The USGS Report misrepresented the Stewart Report, claiming a correlation where Dr. Stewart found none, and then the NPS FEIS misrepresented the USGS Report, claiming causation where the USGS claimed a weak correlation. In this way, a finding of "*no evidence of disturbance*" was transformed into a finding of cause-and-effect that led to a finding of "*moderate adverse impact*."

Was this a clerical error in copying a spreadsheet from one report to another? Unlikely. Consider: (i) the evidence for *serial misrepresentations* of disturbances in the three reports, (ii) the *history* of repeated NPS false claims of disturbances since 2007, and (iii) that this is the *only* evidence for disturbances over the past six years.

It is alleged here that the "*preponderance of evidence*" (the criteria defined by the White House and DOI Scientific Integrity Policies) leads to the conclusion that these serial misrepresentations were committed "*intentionally, knowingly, or recklessly*."

There were two steps in the FEIS finding of a "*moderate adverse impact*" of oyster boats on harbor seals. First, NPS misrepresented the USGS and Hubbs SeaWorld Reports to incorrectly claim evidence that the oyster farm disturbed seals. Second, based upon this false evidence, NPS argued that these disturbances were chronic and led to displacement of the harbor seals out of Drakes Estero. This claim is based on two misrepresentations.

The NPS based this claim on a paper published by NPS scientists using statistical analysis to claim evidence that the oyster farm caused a spatial displacement of harbor seals. However, at best, NPS scientists presented evidence for a weak correlation, not causation. A finding of impact in an EIS requires evidence for causation, not correlation.

The NPS argued that their weak correlation, although scientifically challenged based

upon an independent analysis of NPS data, was independently verified by further analysis by the Marine Mammal Commission (the 2011 MMC Report) which found that the NPS data, although “scant” and “stretched to the limit,” appeared to provide “some support” for the NPS correlation.

NPS knowingly misrepresented the truth; the MMC Report was not independent (allegation #3). As both the MMC and NPS are aware, the MMC violated its own Scientific Integrity Policy, had biased interactions with NPS, and essentially allowed the NPS to review the NPS, while claiming the MMC Report was an independent review.

When further challenged scientifically, seven months after release of the MMC Report, and five months prior to release of the FEIS, the MMC Executive Director reversed his conclusion in a private letter in June 2012. The MMC never publicly acknowledged that reversal, and the NPS, fully aware of this, failed to acknowledge this in their FEIS, but rather concluded that the NPS paper had been independently validated by the MMC (allegations #4 and #5).

The allegations described here are presented in the context of the six-year history of repeated misrepresentations and falsifications to further support the case for “intent” (allegation #6).

1 & #2: Detailed Allegations and Supporting Documents

1. **USGS**, in their Report, misrepresented and falsified the record from the Stewart Report (by Hubbs SeaWorld harbor seal behavior expert Dr. Stewart), falsely claimed a *correlation* of oyster farm activity and disturbance of harbor seals, and in so doing violated the DOI and White House Scientific Integrity Policies.
2. **NPS**, in the Final EIS (FEIS), misrepresented the USGS Report, falsely claimed *causation* of oyster farm activity and disturbance of seals, and in so doing violated the DOI and White House Scientific Integrity Policies.

These two allegations of scientific misconduct are interconnected, and arise from an analysis of the scientific basis for the claim made in the NPS Final Environmental Impact Statement (FEIS) for the Drakes Bay Oyster Company (DBOC) Special Use Permit, released by the National Park Service (NPS) on November 20, 2012, that continuation of the oyster farm would result in a long-term “*moderate adverse impact*” on harbor seals due to the “*potential for disturbances*” and “*continued disturbances*” caused by DBOC oyster boats (FEIS, pg. 377).

In particular, these allegations are based on the scientific analysis submitted to NPS and the U.S. Geological Survey (USGS) by Hubbs-Sea World Research Institute (HSWRI) harbor seal behavior expert Dr. Brent Stewart, who was contracted by NPS to perform a third-party review of NPS photographs of harbor seal behavior in Drakes Estero (FEIS, pg. 371), to provide that analysis of the NPS photos to both NPS and USGS.

My analysis considered Dr. Stewart’s May 12, 2012 letter and spreadsheet analysis (together the Stewart Report), the November 26, 2012 USGS report with Appendix 1 based on Dr. Stewart’s Report (together the USGS Report), and the NPS FEIS, which relied on the USGS Report and Stewart Report.

My findings are summarized in the following five conclusions:

- 1) The May 2012 Stewart Report (contracted by NPS, and submitted to NPS and USGS) concluded that there was no evidence that DBOC oyster boats caused disturbances of harbor seals in the NPS photographs reviewed (165,000 photographs taken during the 2008 harbor seal pupping season) (Stewart Report, spreadsheet).
- 2) The November 2012 USGS Report based on the Stewart Report did not have scientific evidence to conclude that two flushing disturbances of harbor seals were “*associated with [DBOC] boat activity*” (USGS Report, pg. 3) because the Stewart Report found no such association and no evidence for DBOC disturbances (Stewart Report, spreadsheet).
- 3) The FEIS lacked the scientific evidence to conclude that two flushing disturbances of harbor seals were “*attributed*” to DBOC boats because the FEIS relied on both the USGS Report and the Stewart Report, neither of which found a cause-and-effect relationship between flushing disturbances and DBOC’s oyster boats (FEIS pg. 376). In fact, the Stewart Report found no evidence for DBOC disturbances.
- 4) Dr. Stewart’s finding of no harbor seal disturbances by DBOC oyster boats was transformed by two sequential misrepresentations — the first by USGS and the second by NPS — from a finding of no evidence of DBOC boat disturbances of harbor seals to the cause-and-effect conclusion made in the FEIS.
- 5) In summary, the FEIS lacked the scientific evidence to conclude that continuation

of the oyster farm would result in a long-term “*moderate adverse impact*” on harbor seals due to the “*potential for disturbances*” and “*continued disturbances*” caused by DBOC oyster boats (FEIS, pg. 377).

NPS Conclusions Regarding DBOC Seal Disturbances in the FEIS

In response to criticism that the Draft EIS (DEIS) failed to analyze over 300,000 NPS photographs of harbor seal haul-out areas in Drakes Estero, the NPS turned to the USGS to provide a third-party review of those photographs.

“... NPS initiated a third-party review of the photographs with the USGS, in consultation with a harbor seal specialist with the Hubbs-Sea World Research Institute. The USGS assessment (Lellis et al. 2012) focused on the 2008 harbor seal pupping season, when more than 165,000 photos were collected from two sites overlooking Drakes Estero between March 14, 2008 and June 23, 2008.” (FEIS, pg. 371)

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, entitled “*Assessment of Photographs from Wildlife Monitoring Cameras in Drakes Estero, Point Reyes National Seashore, California,*” by William A. Lellis, Carrie J. Blakeslee, Laurie K. Allen, Bruce F. Molnia, Susan D. Price, Sky Bristol, and Brent Stewart, United States Geologic Survey (Open-File Report 2012-1249) (USGS Report) (FEIS, pgs. 376-377).

The USGS Report in turn was based in large part upon a NPS commissioned third-party evaluation of the NPS photographs by Dr. Brent Stewart, Ph.D., J.D., Senior Research Scientist at the Hubbs-SeaWorld Research Institute (HSWRI), entitled “*Evaluation of Time-Lapse Photographic Series of Harbor Seals Hauled Out In Drakes Estero, California, For Detecting and Assessing Disturbance Events,*” Technical Report 2012-378, submitted to the NPS, on May 12, 2012 (Stewart Report) (Technical Report 2012-378). In its discussion of the USGS Report in the FEIS, NPS wrote:

“Further, after examining individual disturbance records, MMC (2011b) concluded that, “from time to time, shellfish operation activities have disturbed the seals. However, the data used in the analysis are not sufficient to support firm conclusions regarding the rate and significance of such disturbance” (MMC 2011b). Additionally the USGS assessment (Lellis et al. 2012) of the more than 250,000 digital photographs taken from remotely deployed cameras overlooking harbor seal haul-out areas in Drakes Estero attributed a specific stimulus to 6 of the 10 observed flushing disturbance events. Two flushing disturbance events were attributed to [DBOC] boat traffic at nearby sand bars, two were attributed to a kayak using the lateral channel (note kayak was in Drakes Estero in violation of seasonal closure), and two appeared to be related to seabirds landing among the seals.

Alternative B [DBOC 10-year renewal] would result in long-term moderate adverse impacts on harbor seals for another 10 years due to the seal displacement effects of human activities in Drakes Estero associated with DBOC’s operation, and the potential for disturbances known to disrupt harbor seal behavior.” (FEIS, pgs. 376-377).

It is noteworthy that NPS found that the USGS Report “*attributed*” two seal “*flushing disturbance events . . . to [DBOC] boat traffic at nearby sand bars . . .*” (FEIS, pg. 376). In this

sense, attribution appears to refer to a cause-and-effect relationship.

The NPS reference to “MMC 2011b” in the quote above is a reference to the Marine Mammal Commission’s November 22, 2011 report, entitled “*Mariculture and Harbor Seals in Drakes Estero, California*” (MMC Report). After reviewing NPS records prepared by volunteers and the NPS photographs at issue here, the MMC Report concluded that, “*from time to time, shellfish operation activities have disturbed the seals*” (MMC Report, pg. ii). The MMC Report described a potential DBOC oyster boat disturbance on May 15, 2008, based upon analysis of the NPS photographs, and advised that “[a] fuller examination of the photographs is necessary to form a conclusion with a reasonable level of confidence.” (*Id.*, pgs. 26-27).

Thus, according to NPS, the USGS Report validated the MMC finding of a DBOC disturbance on May 15, 2008. According to the NPS FEIS, there were now two independent verifications – one by MMC and the other by USGS – of a DBOC oyster boat disturbance to harbor seals on May 15, 2008.

Based upon the combined assessments of the MMC and the USGS reports, the NPS concluded that continuation of the oyster farm would result in a long-term “*moderate adverse impact*” on harbor seals due to the “*potential for disturbances*” and “*continued disturbances.*” (FEIS, pg 377).

“Association”: USGS Report Claimed a Weak Correlation of DBOC Boats with Two Harbor Seal Flushing Events

All of the authors of the USGS Report are USGS employees except for Dr. Brent Stewart, Ph.D., J.D., Senior Research Specialist, a harbor seal behavioral expert from the Hubbs-SeaWorld Research Institute, who was hired under contract with NPS to analyze the USGS-prepared videos composed of the series of photographs of potential harbor seal disturbance events from the 2008 NPS photographs.

The USGS Report summarized its methodology and findings in this way:

“Photographic sequences of each event, plus the 10 photographs before the start of each event and the 10 photographs after the end of each event (3,140 photographs total) were analyzed for incidence and cause of seal disturbance. Ten of the 75 events were classified as containing behaviors indicative of disturbance in the form of flushing (table 1, figs. 2-11, appendix 1). Two flushing events were associated with the presence of a kayak, two were associated with birds landing in the area, two were associated with boat activity, and four occurred when no obvious stimuli were visible within the field of view of the camera.” (USGS Report, pg. 3).

Thus, the USGS Report associated two flushing disturbance events with DBOC boats. The USGS also reported that over 40 reviewed instances of DBOC boat visits to the adjacent sand bar did not cause a disturbance of the harbor seals (*Id.*, pg. 5).

Later in the report, the USGS Report concluded that a “*flushing level of [harbor seal] disturbance*” on May 15, 2008, and June 11, 2008, “*could be directly connected, or at least associated with ... [DBOC] boat traffic at nearby sandbars ...*” (USGS Report, pg. 5).

This statement in the USGS report is misleading. The USGS wrote that the stimuli (kayaks, birds, and DBOC boats) “*could be directly connected, or at least associated with a flushing level of disturbance in the OB seals ...*” (*Id.*). When the entire USGS Report is carefully reviewed, it becomes clear that the USGS Report concluded that several

disturbance events can be directly connected to kayaks and birds, but that the two disturbance events are only “associated” — i.e., weakly correlated with, but not caused by — DBOC oyster boats.

This confusion is unresolved by analysis of Appendix 1 in the USGS Report, which summarizes Dr. Stewart’s research analysis (i.e., his spreadsheet) used to reach the conclusions in the main report. In fact, Appendix 1 contradicts the USGS Report’s conclusion on June 11, 2008 that an oyster boat was at least associated with a disturbance. That is so because Appendix 1 observed in the “*Connection Between Stimulus and Seal Flushing*” column, “*Minor flushing before boat arrival, cause unknown,*” and described the event in detail in the “*Comments*” as follows: “*Boat visits area; people walking; very poor camera focus; rafting birds scattered; brief movement of seals toward water’s edge several minutes before boat arrives but none seen to enter water; no obvious disturbance to seals*” (USGS Report, pg. 24; Appendix 1, June 11, 2008, emphasis added).

With respect to May 15, 2008, Appendix 1 does not document any evidence of a harbor seal disturbance caused by DBOC oyster boats. Appendix 1 provides no conclusion in the “*Connection Between Stimulus and Seal Flushing*” column, and described the event as follows: “*Boat visits area; people walking; very poor camera focus; some seals flush into water just after boat leaves the area*” (USGS Report, pg. 23, Appendix 1, May 15, 2008).

Accordingly, Appendix 1 of the USGS Report does not support the report’s finding of an “association” between DBOC oyster boats and harbor seal flushing events on May 15, 2008, or June 11, 2008.

“No Evidence of Disturbance”: Hubbs-SeaWorld Report Found No Evidence of Harbor Seal Disturbance by DBOC Oyster Boats

As described in the FEIS, the USGS worked “... in consultation with a harbor seal specialist with the Hubbs-SeaWorld Research Institute” (FEIS, pg. 371). That expert was Dr. Stewart, the Hubbs-SeaWorld Research Institute harbor seal behavior specialist. Dr. Stewart is a named author on the USGS Report.

During the two first weeks of December 2012, I exchanged a series of emails and telephone calls with Dr. William Lellis, Deputy Associate Director, Ecosystems, USGS, and senior author of the USGS Report, regarding the report. In those communications Dr. Lellis confirmed three key points regarding Dr. Stewart’s role in the preparation of the USGS Report:

- 1) Dr. Stewart was the harbor seal behavior expert on the USGS review of NPS photographs (none of the other USGS scientists had this expertise);
- 2) Dr. Stewart’s work provided the analysis on a spreadsheet to determine if there was an *association* (according to USGS, a weak correlation), and if so, whether there was a cause-and-effect relationship between a harbor seal flushing disturbance and a specific stimulus, and
- 3) Dr. Lellis confirmed that Dr. Stewart’s work was presented in specific columns in Appendix 1 in the USGS Report.

I acquired Dr. Stewart’s May 12, 2012 report and spreadsheet with his supporting analysis (together the Stewart Report), as submitted to NPS and USGS, by requesting it directly from the Hubbs-SeaWorld Research Institute.

Dr. Stewart wrote in his report that he evaluated time-lapse NPS photographic records provided to him by USGS “to determine if there were disturbances to harbor seals and if there

were correlative potential human related stimuli recorded in the photographs” (Stewart Report, pg. 1).

Dr. Stewart’s written report is brief — only two pages. The supporting analysis for the conclusions in his report is found in the accompanying Excel spreadsheet, which was reproduced by USGS as several columns in Appendix 1 of the USGS Report.

After reviewing the time-lapse photographs, Dr. Stewart focused on three disturbance events where the potential stimulus of an oyster skiff (DBOC oyster boat) was present. After analyzing each of the three events, Dr. Stewart concluded that none of the events were determined to have been caused by or attributed to the presence of an oyster skiff:

“Four of those disturbance events corresponded with potential stimuli nearby, once when a kayak was present and three times when a skiff was present. The disturbance event associated with the kayak appears to have been directly caused by the close presence of the kayak and the seals’ detection of it. One disturbance reaction of seals correlative with the presence of a skiff beached on mud flats several hundred meters away can not [sic] be causally linked to human presence as no humans were in the field of view of the camera when the seals’ movements occurred. Another movement of seals toward the water (but where none entered the water) occurred several minutes before a skiff was observed in the area and could not be determined [to] have been caused by [a] skiff’s presence in the area. The third disturbance event occurred when a skiff and people associated [with] it were within the field of view of the camera and several hundreds meters away from the seals; that event was difficult to attribute directly to human presence because the seals appeared to respond to birds that had evidently flushed from an area near the camera site rather than near the persons working near the skiff. There was no identifiable stimulus source for each of the other three disturbance events.” (Stewart Report, pg. 2).

More detailed information is provided in Dr. Stewart’s Excel spreadsheet entitled, “Drakes Estero Harbor Seals HSWRI.xlsx”, which provides the detailed analysis he summarized in his report. Dr. Stewart’s notes for May 15, 2008, and June 11, 2008, the two dates the USGS Report found a flushing disturbance was “associated” with DBOC’s oyster skiffs, contradict the USGS Report’s findings. Dr. Stewart found no evidence for DBOC disturbances.

May 15, 2008. The most important insight from Dr. Stewart’s spreadsheet is that this date is NOT one of his seven disturbance events evaluated in the body of his report (although June 11, 2008 is one of the seven).

In the section “Stimuli and disturbances” of Dr. Stewart’s spreadsheet, he wrote the following about the May 15, 2008 photographs:

“very poor camera focus; skiff visits; no evidendence [sic] of disturbance to seals” (Stewart Report, spreadsheet, May 15, 2008)

Dr. Stewart’s conclusion was clear. The NPS photographs from May 15, 2008, contained no evidence of disturbance to seals. Dr. Stewart acknowledged the presence of the DBOC “skiff,” but wrote “no” in the column titled “evidence of disturbance to seals.”

For most dates, the USGS Report’s Appendix 1 accurately represented the analysis presented in Dr. Stewart’s Excel spreadsheet. I confirmed by

comparison that the Appendix accurately reflects Dr. Stewart's Excel spreadsheet for over 40 individual dates. On May 15, 2008, however, there is a striking divergence in Appendix 1 from Dr. Stewart's spreadsheet. The USGS Report Appendix 1 entry for May 15, 2008, was re-written, and excluded Dr. Stewart's conclusion, "*no evidendence [sic] of disturbance to seals.*" Thus, the USGS Report appears to have misrepresented Dr. Stewart's findings for May 15, 2008.

June 11, 2008. Dr. Stewart found "*no obvious disturbance*" in the photographs for June 11, 2008. On his spreadsheet, he wrote:

"very poor camera focus; rafting birds scattered; skiff visits; brief movement of seals towards waters edge several minutes before skiff arrives but none seem to enter water; no obvious disturbance" (Stewart Report, spreadsheet, June 11, 2008)

In his spreadsheet, Dr. Stewart acknowledged the presence of the DBOC "skiff," and wrote "*yes, minor before skiff arrival*" in the column noting "*evidence of disturbance to seals.*" He concluded that there was no evidence that the DBOC oyster boat caused the disturbance, and thus, did not attribute it to the DBOC oyster boat, but rather wrote, "*no obvious disturbance.*"

Summary

The NPS FEIS finding that two harbor seal flushing disturbances were "*attributed*" to DBOC oyster boats by the USGS Report is a misrepresentation of the findings in that report because the USGS Report only noted an "*association*" — a weak correlation — not "*attribution,*" or a cause-and-effect relationship.

Further, the USGS Report's finding that two harbor seal flushing disturbances were "*associated*" with DBOC oyster boats is a misrepresentation of the findings reached by the team's harbor seal behavior expert, Dr. Stewart. This is so because Dr. Stewart concluded that there was no evidence of disturbance by DBOC's oyster boats on the two days — May 15, 2008, and June 11, 2008 — identified in the USGS Report.

In fact, there does not appear to be evidence to support the NPS's assertion in the FEIS that DBOC oyster boats have caused disturbances to harbor seals and, therefore, evidence to conclude that future disturbances will occur.

The NPS conclusion in the FEIS was based upon two sequential misrepresentations — a FEIS misrepresentation of the USGS Report, and a USGS Report misrepresentation of its primary source, Dr. Stewart's analysis.

Furthermore, Dr. Stewart's finding that there was no evidence of seal disturbance on May 15, 2008 provides the further expert analysis called for in the 2011 MMC Report to eliminate the episode from consideration.

Accordingly, the NPS FEIS's conclusion of a "*moderate adverse impact*" to harbor seals by DBOC is a misrepresentation because the two disturbance events it relied upon do not appear to have been related to DBOC's oyster boats.

In summary, based on the analysis performed by Dr. Stewart, there is no evidence that DBOC oyster boats caused a flushing disturbance of harbor seals in Drakes Estero in the NPS photographs analyzed by the USGS and Dr. Stewart.

Were the two misrepresentations committed “intentionally, knowingly, or recklessly”?

The USGS Report misrepresented the Stewart Report, and the NPS FEIS misrepresented the USGS Report. The Stewart Report was contracted by NPS, and Dr. Stewart submitted his report simultaneously to both NPS and USGS on May 12, 2012. The NPS EIS team had access to the Stewart Report. From Dr. Stewart’s finding of “no evidence of disturbance,” two serial misrepresentations transformed that finding into one of attribution of two disturbances caused by DBOC oyster boats, which led to a finding of “moderate adverse impact.”

NPS scientific misconduct. Were these two serial misrepresentations committed “intentionally, knowingly, or recklessly”? The misrepresentations were reckless on behalf of NPS, and apparently knowingly and intentionally as well. For six years, NPS has claimed – at every opportunity and in multiple forums, testimony, and reports – that oyster boats disturb harbor seals. All of the previous NPS claims of evidence have fallen by the wayside (see allegation #6 here). The MMC Report suggested one potential DBOC disturbance on May 15, 2008, based upon analysis of the NPS photographs, and advised that “[a] fuller examination of the photographs is necessary to form a conclusion with a reasonable level of confidence.” (*Id.*, pgs. 26-27).

Thus, according to NPS, the USGS Report validated the MMC finding of a DBOC disturbance on May 15, 2008. According to the NPS FEIS, there were now two independent verifications – one by MMC and the other by USGS – of a DBOC oyster boat disturbance to harbor seals on May 15, 2008.

Based upon the combined assessments of the MMC and the USGS reports, the NPS concluded that continuation of the oyster farm would result in a long-term “moderate adverse impact” on harbor seals due to the “potential for disturbances” and “continued disturbances.” (FEIS, pg 377).

Thus, Dr. Stewart’s finding – as reflected in the USGS Report and as submitted directly to NPS – was critical to permit NPS to make this finding in the FEIS. Given the six-year controversy concerning this exact topic, it would have been crucial for those preparing the EIS to examine the Stewart Report to see if Dr. Stewart actually reported a finding of a DBOC disturbance on May 15, 2008 (he did not). Moreover, even if the authors of the FEIS only examined the USGS Report (which would be negligent, given the submission of the Stewart Report to NPS), then nevertheless, they misrepresented the (incorrect) finding of “association” (a weak correlation) in the USGS Report, and called it “attribution” (causation) in the FEIS.

When considered within the six-year history of false claims by NPS of DBOC disturbances of harbor seals, and the use of the USGS Report and Stewart Report to drive the FEIS finding of a “moderate adverse impact,” the preponderance of evidence leads to the conclusion that this represents scientific misconduct by unknown NPS employees (allegation #6 here).

USGS scientific misconduct. USGS does not have a six-year history with this issue. Why did USGS Dr. Lellis, senior author of the USGS Report, change this entry (May 15, 2008) in the appendix of the USGS Report to not accurately represent the Stewart Report? What happened between May 12, 2012, when the Stewart Report was submitted simultaneously to USGS and NPS, and November 2012, when both the NPS FEIS and USGS Report were publicly released?

How did Dr. Lellis make these two mistakes to misrepresent the Stewart Report, thereby providing NPS with the finding of disturbances they were seeking? Dr. Lellis provided NPS with their so-called independent verification of DBOC disturbances, in the form of two “*associations*,” evidence that Dr. Stewart did not find.

Was this an innocent clerical mistake? Much time was spent on the part of USGS scientists generating the videos, analyzing the videos, identifying all of the potential flushing events, sending them to Dr. Stewart, reviewing Dr. Stewart’s findings, and ultimately writing the USGS Report. Given that this was a *major finding* of the report, did anyone double-checked the Stewart Report for accuracy? The USGS Report had high-level visibility; USGS Director Dr. Marcia McNutt reviewed the report.

This misrepresentation by USGS appears to have been committed “*intentionally, knowingly, or recklessly*.” OSTP needs to investigate who in NPS discussed the Stewart Report and USGS Report with Dr. Lellis. Was Dr. Lellis pressured in any way to misrepresent the Stewart Report? Were changes made during the review of the draft USGS Report? Were NPS or DOI employees involved in that review process? Why did Dr. Lellis make these misrepresentations?

On December 16, 2012, I spoke by telephone with Dr. Marcia McNutt, Director, USGS, about the misrepresentations of the Stewart Report in the USGS Report, and the sequential misrepresentations of the USGS Report in the NPS FEIS. She asked me to send her the Stewart Report, and said that she would ask Dr. Linda Gundersen, USGS Scientific Integrity Officer, to investigate the issue. I told Dr. McNutt that I had additional information based upon several email exchanges, and seven pages of notes from a lengthy telephone discussion, with USGS Dr. Lellis, the senior author on the USGS Report. I offer those same emails and notes to the OSTP panel that investigates this matter.

On December 17, I sent the Stewart Report and my analysis to Dr. McNutt, and wrote:

It appears that the USGS report misrepresented Dr. Stewart’s analysis in Appendix 1, and then incorrectly concluded that there was an association of the DBOC boat with the harbor seal disturbance on May 15, 2008. Finally, the NPS FEIS misrepresented the USGS report and claimed that the USGS had attributed the May 15, 2008 disturbance to the DBOC boat. Two layers of successive misrepresentations led to the opposite conclusion by NPS as compared to harbor seal expert Dr. Brent Stewart.

I appreciate your willingness to investigate this issue. As you can imagine, this is a very important matter for the DBOC-NPS issue. But I also think this is a very important matter for USGS, which has long been the most trusted scientific body in the U.S. government.

Dr. McNutt did not respond. On December 23, 2012, I wrote again:

I wanted to get back to you about the materials that I sent you last Monday. I have extensive notes from my conversation with Dr. Lellis, and my many emails back and forth with him. When will the USGS Scientific Integrity Officer be contacting me and arranging for an interview? Would you please send me a copy your directive or memo to the USGS SIO specifying the nature of your request.

Thank you for recognizing the significance of the apparent contradictions between Dr. Stewart’s report, the USGS report, and the NPS FEIS. ...

Thanks very much. I look forward to receiving your directive, and speaking with your Scientific Integrity Officer about my conversations and emails.

Neither Dr. McNutt nor Dr. Gundersen responded. I never heard back from either one of them. On January 17, 2013, I wrote to USGS SIO Dr. Gundersen:

"I write to ask for an update of your investigation of the USGS Report misrepresentation of the Stewart Report. Are you in fact conducting an investigation? When will you be interviewing me?"

First you need to determine if the USGS Report in fact misrepresented the Stewart Report, and if so, if that misrepresentation was done intentionally, knowingly, or recklessly. Please focus on one particular date: May 15, 2008.

Second, if you find that the USGS Report misrepresented the Stewart Report, then I ask you to retract or correct the USGS Report, and to publicly notify the NPS (and public) that they need to revise their Final EIS on Drakes Estero in that the USGS Report was incorrect, and the NPS further misrepresented your report.

It should not surprise you that once a federal scientific document is released into the public domain, unless corrected or retracted, it can and will be used in decision-making processes throughout the nation, and around the world. In this case, I have already been notified that the NPS FEIS has been raised in cases involving mariculture in two other states, and in two other countries.

After examining the videos of the NPS photographs prepared by USGS, Dr. Brent Stewart wrote in his report that he found no evidence for disturbances by the oyster farm. Your USGS Report incorrectly listed that as a finding of two associations (a correlation), and the NPS FEIS further incorrectly listed that as a finding of two attributions (cause and effect), thus allowing them to conclude a moderate adverse impact of the oyster farm on the harbor seals. I ask you to please correct the public documents and public record.

Please get it touch with me to schedule an interview. I look forward to talking with you."

Dr. Gundersen did not reply. I wrote back to her on January 23, 2013:

I have not heard back from you since my email of January 17. It is now over one month since I alerted Dr. McNutt to this issue that the authors of the USGS Report misrepresented the Stewart Report, and she agreed to investigate whether this misrepresentation was done intentionally or knowingly, or was an honest error.

When I spoke with USGS Director Dr. McNutt on December 16, she indicated that there were two alternatives: either Dr. Stewart changed his conclusions after filing his May 2012 Stewart Report with NPS and USGS, in which case there should be a written record of that change, or alternatively someone misrepresented his report in the USGS Report. Have you determined which alternative is correct?

To date, Dr. Gundersen has not responded to my emails, has not confirmed if she is conducting an investigation or not, has not interviewed me, has not sought additional information from me, and if she has conducted an investigation, has not informed me of the outcome. Based on the available information, such behavior is not consistent with what OSTP intended for the White House Scientific Integrity Policy.

In summary, the Stewart Report was submitted to NPS and USGS. Stewart found no evidence of disturbance of harbor seals by DBOC boats. The USGS Report incorrectly quoted the Stewart Report as finding a correlation. The NPS FEIS incorrectly quoted the

USGS Report and Stewart Report as finding causation. Both agencies had the Stewart Report as of May 12, 2012. These serial misrepresentations meet the "*knowingly*" test. Given the six-year history of false NPS claims concerning DBOC disturbances of harbor seals, making these claims without double-checking the Stewart Report meets the "*recklessly*" test. The Stewart Report was in their hands for six months prior to the release of both the FEIS and the USGS Report. Was it intentional? OSTP needs to investigate. The record is replete with NPS preoccupation with false claims of DBOC disturbances of harbor seals. These misrepresentations need to be viewed in the context of the six year history (allegation #6).

OSTP needs to investigate the serial misrepresentations by USGS of the Hubbs SeaWorld Stewart Report, and by NPS of the USGS Report. No one Scientific Integrity Officer can oversee this investigation, and the DOI OIG has abdicated its oversight, and thus, for all of the reasons provided in this complaint, only OSTP can investigate these allegations.

3 - #5: Detailed Allegations and Supporting Documents

3. **Marine Mammal Commission**, while claiming to be independent of NPS in their review, release, and later private reversal (without public acknowledgment or retraction) of a key conclusion on the impact of the oyster farm on harbor seals in the MMC Report, violated the MMC and White House Scientific Integrity Policies.
4. **NPS**, in the FEIS, cited the NPS Becker et al. 2011 paper as providing statistical support for the NPS correlation on the impact of the oyster farm on harbor seals, when NPS knew the correlation was not valid, in so doing violated the DOI and White House Scientific Integrity Policies.
5. **NPS**, in the FEIS, cited the MMC Report as an independent validation of the Becker 2011 paper NPS correlation on the impact of the oyster farm on the seals, when NPS knew MMC was not independent and had reversed its support of the NPS correlation, violated the DOI and White House Scientific Integrity Policies.

Here I refer OSTP to the following four enclosures with this appendix:

A. "CSG to Zinser.11_07_12.cover letter.pdf"

Three-page cover letter for the complaint filed with DOC Inspector General Zinser on November 7, 2012, and returned because, according to the DOC OIG, and contradicting the MMC Scientific Integrity Policy filed with OSTP, the DOC OIG does not oversee MMC. Thus, this complaint is now formally submitted to OSTP.

Re: Request that DOC OIG investigate allegations that Marine Mammal Commission Exec. Director Dr. Timothy Ragen, in the review and release, and later private reversal of the key conclusion, of his MMC Report on "Mariculture and Harbor Seals in Drakes Estero, California," violated MMC policies, FOIA, and the MMC Scientific Integrity Policy

B. "CSG to Zinser.11_07_12.complaint.pdf"

Fifty nine-page complaint filed with DOC Inspector General Zinser on November 7, 2012, and returned because, according to the DOC OIG, and contradicting the MMC Scientific Integrity Policy filed with OSTP, the DOC OIG does not oversee MMC.

Overview:

I filed a misconduct complaint concerning Dr. Tim Ragen, Executive Director, MMC, with the DOC Inspector General Zinser. My original complaint to the DOC OIG, now forwarded to OSTP was based in large part upon evidence received from two parallel FOIA requests submitted to the NPS and MMC. This complaint alleged:

- a) Publicly Dr. Ragen claimed to be transparent, inclusive, and to support equal access, and to be independent, unbiased, and without conflict, but
- b) Privately Dr. Ragen was dependent upon NPS, exclusive, biased, and conflicted, giving NPS inappropriate access, privilege, and veto power including
 - i. Access to documents not provided to other parties,
 - ii. Ability to critique work of other parties without disclosure or comment,

and

- iii. Power to not respond to questions and not participate in open discussions.
- c) As a result of Dr. Ragen's inappropriate actions, the MMC Report was:
 - i. Not an independent review of NPS science as claimed by MMC, and
 - ii. Not a legitimate independent peer review of the draft EIS as claimed by NPS.
- d) Dr. Ragen deceived the public, the press, elected officials, and all parties involved by privately allowing NPS to review itself, while publicly claiming that the MMC Report represented an independent review of the NPS science. While purporting to be transparent, fair, inclusive, and independent, Dr. Ragen failed to disclose his inappropriate relationship with NPS. Dr. Ragen went to great lengths not to disclose his private bias – apparently violating FOIA by withholding key communications.
- e) In my complaint, I wrote: *“Dr. Ragen established a public process with a veneer of fairness, balance, and independence, while his private activities subordinated that independence to the very entity being investigated and reviewed – the National Park Service.” “Dr. Ragen and NPS employees deceived the public to believe that the MMC review and MMC Report was independent. Superintendent Muldoon and other NPS employees similarly deceived the public to believe that the MMC Report was independent.”*

C. *“CSG to Muldoon.11_07_12.cover letter.pdf”*

Two-page cover letter to NPS Superintendent Cicely Muldoon, that accompanied the complaint filed with DOC Inspector General Zinser on November 7, 2012.

To: Cicely Muldoon, Superintendent, Point Reyes National Seashore, NPS

Re:

- (1) Notification that a misconduct complaint was filed with Department of Commerce OIG against Dr. Ragen and his MMC Report on Drakes Estero;
- (2) Notification that the misconduct complaint includes evidence that Superintendent Muldoon and Dr. Becker were complicit and participated in this misconduct; and
- (3) Request that NPS refrain from falsely citing the MMC Report as an independent peer-review in the final EIS, refrain from falsely citing the Becker et al. 2011 paper conclusions as valid in the final EIS, and retract the Becker et al. 2011 paper.

Overview:

On November 7, 2012, I submitted a letter to PRNS Superintendent Cicely Muldoon in which she was notified that I filed a misconduct complaint against Dr. Tim Ragen, Executive Director, MMC, with the Department of Commerce Office of the Inspector General.

- 1) My letter to Superintendent Muldoon served to notify the NPS that the misconduct complaint filed with the DOC OIG contained evidence that several NPS staff and scientists, including but not limited to PRNS Superintendent Cicely Muldoon and PRNS scientist Dr. Ben Becker, were both complicit and active

- participants in Dr. Ragen's misconduct, including knowingly accepting inappropriate access to documents not provided to other parties. By his actions, Dr. Ragen empowered the NPS to secretly review itself, and to deceive the public.
- 2) Given the information provided in the misconduct complaint, and the active, complicit role of NPS employees in the MMC misconduct, I made three requests to PRNS Superintendent Muldoon.
- a) *"First, given the fact that the MMC Report was not an independent peer-review of the NPS Becker et al. 2011 paper, and was not an independent peer review of the harbor seal section of the draft EIS, I ask NPS to refrain from citing it as such in your final EIS."*
 - b) *"Second, given the fact that Dr. Becker's analysis (Table 2) in Dr. Ragen's June 17, 2012 letter (and further analysis in Appendix to the complaint) revealed a lack of statistical support for the Becker et al. 2011 paper (something Dr. Becker has known for many months), I ask NPS to refrain from citing the Becker et al. 2011 paper in the final EIS."*
 - c) *"Third, given the fact that Dr. Ragen's June 17, 2012 letter contained new analysis from Dr. Becker showing that there is no longer statistical support for either causation or correlation as claimed in the Becker et al. 2011 paper (see Appendix to the complaint), I ask NPS to notify the journal, retract the paper, and notify the public."*
 - i. Superintendent Muldoon never responded. In subsequent actions, all three requests were ignored. Both the MMC Report and the Becker et al. 2011 paper were cited in the NPS FEIS with total disregard for my complaint and letter.
 - ii. The MMC Report was cited in the FEIS as if it was an independent review of the Becker et al. 2011 paper.
 - iii. The NPS correlation in the Becker et al. 2011 paper was cited in the FEIS without noting that Dr. Ragen's June 17, 2012 letter, including new analysis from NPS Dr. Becker, had reversed the statistical support for the Becker et al. 2011 paper.
 - iv. Finally, NPS did not notify either the scientific community or the public that Dr. Becker's new analysis (as cited in Dr. Ragen's June 17, 2012 letter) had essentially retracted the major conclusion of the Becker et al. 2011 paper.

D. "CSG to Zinser.11_09_12.response to MMC.pdf"

To: Todd J. Zinser, Inspector General, Department of Commerce

Re: Response to MMC General Counsel's public statement concerning the misconduct complaint filed with the Department of Commerce Office of the Inspector General

6: Detailed Allegations and Supporting Documents:

6. NPS, in a six-year pattern of repeated misrepresentations and falsifications concerning the impact of the oyster farm on the harbor seals, demonstrated that it has *"intentionally, recklessly, or knowingly"* misrepresented data and in so doing violated the DOI and White House Scientific Integrity Policies.

Here I refer OSTP to the following two enclosures with this appendix:

A. *"CSG.summary of history of NPS harbor seal claims.1_27_13.pdf"*

Ten-page summary of the history of NPS harbor seal claims concerning the oyster farm at Drakes Estero.

B. *"CSG. history of NPS harbor seal claims.1_27_13.pdf"*

Fifty four-page outline of the history of NPS harbor seal claims concerning the oyster farm at Drakes Estero.