

May 13, 2013

From: Dr. Corey S. Goodman

To: Sally Jewell, Secretary, Department of the Interior

Re: Request that Interior investigate allegations of scientific misconduct involving the National Park Service (NPS) and U.S. Geological Survey (USGS)

Dear Secretary Jewell,

As the new Secretary of the Department of the Interior, you assumed leadership of a Department in trouble due to unchecked scientific misconduct at NPS that has now permeated another of your agencies, the USGS. Over the past six years, NPS engaged in scientific misconduct concerning the oyster farm at Drakes Estero. Most recently, NPS was aided by another agency – USGS – as a partner to that misconduct.

The case for scientific misconduct presented here concerns new information obtained since last November 2012, and some of it obtained only in the past week in the form of USGS emails concerning this issue, and a previously undisclosed supplemental report.

I request that you conduct an unbiased and independent investigation of scientific misconduct at NPS and USGS. Whether Interior can conduct such an unbiased and independent investigation – given the inherent conflicts-of-interest – and whether Interior is capable of a finding against itself, will be a test of your leadership.

The four allegations of misconduct (see Appendix 1), involving two DOI agencies, are:

1. **USGS**, in its USGS Report on their analysis of the NPS photographs concerning the oyster farm at Drakes Estero, misrepresented the record from the Stewart Report (by Hubbs-SeaWorld Research Institute harbor seal behavior expert Dr. Brent Stewart), falsely claimed a *correlation* of oyster farm activity and disturbance of harbor seals based upon Dr. Stewart finding of *no evidence of disturbance*, and in so doing violated the DOI Scientific Integrity Policy.
2. **NPS**, in its Final EIS (FEIS) concerning the oyster farm at Drakes Estero, misrepresented the USGS Report, falsely claimed *causation* of oyster farm activity and disturbance of seals based upon the USGS Report finding of a *correlation* (in turn based upon Dr. Stewart's finding of *no evidence of disturbance*), leading to an overall finding in the NPS FEIS of a *moderate adverse impact*, and in so doing violated the DOI Scientific Integrity Policy.
3. **USGS** and **NPS**, in their claims that the USGS analysis of the NPS photographs was *very high profile* and *very high priority*, and *needed to inform Secretary Salazar* for his decision on the oyster farm permit, apparently *briefed Assistant Secretaries Castle and Jacobson* with false claims of evidence of oyster farm disturbances of seals in Drakes Estero, and in so doing violated the DOI Scientific Integrity Policy.
4. **USGS**, after its Report was released, requested a subsequent re-review of key data by Dr. Stewart in his *Supplemental Report* that confirmed his earlier finding of *no evidence of disturbance*, a report that should have led USGS to retract its USGS Report, inform NPS of the major mistakes in their FEIS, and inform the Secretary of mistakes in what was presented to inform his high profile decision, but instead was covered up, and in so doing violated the DOI Scientific Integrity Policy.

## 1. White House OSTP Instructed Me to File This Complaint with Interior

Like me, you are a scientist by training. As a mechanical engineer, you rely on data and facts. In your statement to the Senate Energy and Natural Resources Committee on March 7, 2013, you spoke of the importance of the Department of the Interior using *“the best science available”* to make the best decisions, using the *“vast scientific”* resources at Interior.

As a fellow scientist, I applauded your statements, much as an elected member of the National Academy of Sciences (NAS), I applauded President Obama when, on April 27, 2009, in his address to the NAS, he said:

*“we are restoring science to its rightful place”*

*“the days of science taking a back seat to ideology are over”*

I applauded again when the President addressed the NAS on April 29, 2013 and said:

*“one of the things that I’ve tried to do ... is to make sure that we are promoting the integrity of our scientific process”*

*“I will keep working to make sure that our scientific research does not fall victim to political maneuvers or agendas that in some ways would impact on the integrity of the scientific process”*

In contrast to the President’s stated policies, as applied to Drakes Estero, science has taken a back seat to ideology, and science has fallen victim to political maneuvers. Those *“vast”* resources you cited at NPS and USGS have been squandered and tarnished by NPS before you took over leadership of Interior.

Some of these allegations (#1 and #2) were submitted in March 2013 to Dr. John Holdren, the President’s science advisor, OSTP Director, and architect of the President’s Scientific Integrity Policy. I had five reasons for taking this complaint to the White House.

- First, there has been a repeated pattern of unabated scientific misconduct at NPS, with a six-year history of false claims of harm to harbor seals (see Appendix 3.1).
- Second, Interior has been biased in protecting its own rather than upholding its Scientific Integrity Policy (see Appendix 3).
- Third, Interior’s Scientific Integrity Officers are biased, conflicted, and unresponsive concerning NPS and USGS scientific misconduct (see Appendix 2).
- Fourth, the Interior Inspector General inexplicably dismissed allegations of misconduct against NPS based on far-fetched and tortuous reasons, reinforcing that they are incapable of an honest investigation of NPS (see Appendix 4).
- Fifth, NPS Director Jarvis boldly declared in response to a Data Quality Act complaint about incorrect science in the NPS DEIS that science at his agency is beyond accountability (the Jarvis Doctrine, see Appendix 3.2).

As a result of these biases and conflicts, on March 4, 2013, I wrote to OSTP Director Dr. John Holdren and asked him to oversee a blue-ribbon panel to investigate scientific misconduct at NPS and USGS.

On March 15, OSTP General Counsel Rachael Leonard told me that OSTP takes these charges seriously. She said OSTP understands concerns about the conflicts-of-interest and lack of independence at Interior, and about the Jarvis Doctrine stating that NPS science is beyond accountability. Nevertheless, she said she was compelled to instruct me to file my complaint with the Department of the Interior. I suggested that this was

circular reasoning that would lead to more of the same – bias, a lack of independence, and a resulting whitewash.

In the past week, new, previously undisclosed documents were obtained, documents not available when I originally filed allegations #1 and #2 with OSTP. These new documents reinforce this complaint by providing evidence that (i) two Assistant Secretaries apparently were briefed with this false science to inform the Secretary's high profile decision, and (ii) USGS staff covered-up a subsequent Supplemental Report that confirmed the false science. These revelations lead to allegations #3 and #4 (see Appendix 1).

I must admit that I am a bit apprehensive, given the history (see Appendices 2-4) about submitting this scientific misconduct complaint to Interior (see Appendix 1). I am baffled as to how you can proceed, but given your background as a scientist, your leadership, and your statements to the Senate Committee, I am confident you will find a way. Please be forewarned that in the system you inherited, you will find conflicts-of-interest, particularly in your various Scientific Integrity Officers (see Appendix 2).

## **2. Overview of Allegations of Scientific Misconduct**

On November 20, 2012, a new generation of misconduct emerged when NPS released the Final Environmental Impact Statement (FEIS) for the oyster farm permit at Drakes Estero (see Appendix 1). This is not the first episode of scientific misconduct concerning NPS, and in particular false claims of evidence that the oyster farm disturbs the harbor seals in Drakes Estero, but it now involves another agency within Interior in addition to NPS, namely, USGS.

After six years, secret cameras, and millions of dollars of taxpayer money, there is no evidence that the oyster farm is disturbing or has disturbed the harbor seals in Drakes Estero. The oyster boats stay over 700 yards from the seals, with a sandbar between them. Dr. Brent Stewart (Hubbs-SeaWorld Research Institute harbor seal behavior expert) found *no evidence for disturbance*, the USGS Report misquoted him and claimed he found two *correlations*, and then the NPS FEIS further misrepresented the USGS Report and claimed *causation*, and with it, a finding of a *moderate adverse impact*. The serial misrepresentations, and subsequent cover-up of this misdeed, were done *knowingly*.

On November 20, 2012, NPS released the NPS 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.

This single determination had a significant impact on other findings in the FEIS, and on Secretary Salazar, other top leaders at Interior, elected officials, the public, and media. After six years of false public claims and manipulated reports, NPS claimed that an independent analysis by USGS of NPS photographs supported this finding.

USGS and NPS staff discussed how this analysis was of "*very high priority*" and was necessary to inform the Secretary for his decision on the oyster farm permit. Two Assistant Secretaries apparently were briefed. The NPS FEIS finding of a "*moderate adverse impact*" was presented by Department of Justice lawyers to the Ninth Circuit Court of Appeals as the reason why the public good is in favor of removing the oyster farm.

This analysis was considered "*very high profile*," and USGS and NPS knew it was wrong

and misrepresented Dr. Stewart's findings. Moreover, USGS received a Supplemental Report from Dr. Stewart further showing that the USGS Report and NPS FEIS were wrong, and they did not disclose the Supplement Report, retract the USGS Report, notify NPS that their FEIS was incorrect, or apparently notify the Secretary, his lawyers, and the court that his decision had been misinformed by false science. That was a cover up.

The facts, based upon the "*preponderance of evidence*" reveal that the claim of scientific evidence of oyster farm disturbances was based upon misrepresentations made "*intentionally, knowingly, or recklessly,*" the standard for determining misconduct according to the Federal Policy on Research Misconduct.

The NPS FEIS claimed evidence that the oyster farm occasionally disturbed harbor seals. This finding was inconsistent with the physical landscape: the oyster boats typically stay over 700 yards away from the harbor seals, with an intervening sandbar blocking their view and buffering their sound, while the NOAA and NPS recommendations and protocols call for a 100 yard buffer (facts not disclosed in the FEIS).

NOAA, the agency charged with overseeing the Marine Mammal Protection Act of 1972, recently concluded the harbor seal population in and around Drakes Estero is at or near its carrying capacity. During the Draft EIS (DEIS) comment process, NOAA, the federal agency responsible for administration of the Marine Mammal Protection Act, reported to NPS, in their comments on the DEIS, that their agency had not received reports of harbor seal disturbances by the oyster farm in Drakes Estero.

What data supported the NPS finding in the FEIS of oyster farm disturbances of seals?

The NPS cited a 2012 USGS Report that analyzed, at NPS request, a large subset (165,000 photos from the 2008 harbor seal pupping season) of the 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 from 2007 to 2010). 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: NPS misquoted the USGS Report, and USGS misquoted the original expert's findings (Dr. Brent Stewart, Hubbs-SeaWorld Research Institute). In so doing, both agencies misrepresented the primary scientific analysis and altered the scientist's conclusion.

The USGS Report did not conclude what the NPS claimed. Rather, USGS found an "*association*" (a weak correlation) and not causation of oyster boats and harbor seals getting flushed into the water (a major disturbance) 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 (on May 15 and June 11, 2008).

The Stewart Report did not conclude what the USGS claimed. Rather, Dr. Stewart found "*no evidence of disturbance*" of harbor seals by the oyster farm on both of these dates. A review of his spreadsheet, submitted to both NPS and USGS, confirms his clarity for these two dates. 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 *causation* ("*attribution*") that led to a finding in the FEIS of "*moderate adverse impact.*"

Was this a clerical error in copying Dr. Stewart's spreadsheet from one report to another? Unlikely. Consider: (i) the evidence for *serial misrepresentations* of disturbances in the Stewart, USGS, and NPS FEIS Reports; (ii) the *history* of repeated NPS false claims of harbor seal disturbances by the oyster farm since 2007; (iii) that this is the *only* evidence for such disturbances over the past six years; (iv) that this was a *high priority project* that apparently led to briefings of two Assistant Secretaries of Interior to inform the Secretary's decision; and (v) the cover-up of the subsequent Supplemental Report by Dr. Stewart (requested by USGS) confirming his initial finding of no seal disturbances by the oyster farm (on May 15 and June 11, 2008).

It is alleged that the "*preponderance of evidence*" (as defined by the DOI and White House Scientific Integrity Policies) leads to the conclusion that these serial misrepresentations and cover-up by USGS and NPS were committed "*intentionally, knowingly, or recklessly.*" False science was used to inform the Secretary for a high profile policy decision. The Secretary, public, and federal court were deceived.

### **3. Interior Scientific Integrity Officers and Interior Inspector General Are Conflicted Concerning Allegations of Misconduct at NPS and USGS**

Nine reasons lead me to conclude that Interior's Scientific Integrity Officers and the Interior Inspector General are conflicted concerning allegations of misconduct at DOI.

- 1) Inspector General offices (OIGs) are in general unable or unwilling to properly investigate allegations of scientific misconduct, and have no scientists on staff.
- 2) The Department of the Interior (DOI) OIG provides investigatory oversight for NPS and USGS, but the DOI OIG abdicated its independent investigatory oversight, and went further to engage in a cover-up of NPS misconduct.
- 3) In its most recent report, the DOI OIG went to great lengths to dismiss allegations of scientific misconduct concerning soundscape analysis in the NPS DEIS, altering and ignoring some allegations, creating straw-man arguments, cherry-picking law and policy, and accepting explanations and testimony despite evidence to the contrary – evidence in the form of documents and emails.
- 4) The Public Employees for Environmental Responsibility wrote the DOI OIG pulled its punches and compromised its independence to please superiors.
- 5) The House Committee on Natural Resources wrote that it is deeply concerned that DOI OIG actions are inconsistent with the role of independent watchdog.
- 6) If allegations involve high-level officials, the Scientific Integrity Officers throughout Interior are no less conflicted that the DOI OIG, lacking the independence or willingness to investigate allegations of scientific misconduct.
- 7) The Scientific Integrity Officer for NPS is conflicted by his reporting line (i.e., reporting to NPS Director) and by his prior involvement in this issue.
- 8) The Scientific Integrity Officer for USGS is conflicted and has been unresponsive to repeated requests to describe the nature of her investigation, if any. The USGS SIO was repeatedly notified of allegations #1 and #2 presented here, but remained silent and did not even acknowledge receipt of the allegations.
- 9) The Scientific Integrity Officer for DOI and USGS Acting Director is conflicted by the allegations concerning USGS and the lack of responsiveness by the USGS SIO. How can the DOI SIO also be the Director of USGS and investigate USGS?

#### **4. Request That DOI Establish a Blue-Ribbon Panel of Eminent Scientists to Investigate These Allegations**

This issue has outgrown Drakes Estero. It is no longer a local issue. It involves NPS and USGS. The DOI OIG and three DOI Scientific Integrity Officers have shown their inability to properly investigate misconduct within Interior.

The NPS false science in the FEIS has been used by Department of Justice lawyers in the Ninth Circuit Court of Appeals to assert that the public good favors removing the oyster farm. The false science in the FEIS has been used in regulatory hearings involving oyster farms in other parts of the U.S., and growers in other countries are becoming increasingly concerned. Many people inside and outside government are watching and waiting.

Allowing the scientific misconduct to stand is already having – and will continue to have – a corrosive impact on scientists throughout Interior. It sends a message not to report the facts and data objectively as you find them, but rather to report data as someone else in a powerful position wants them to be reported. It is not healthy for science at Interior, and it undermines what the President hoped to accomplish.

At this juncture, the only way to make sure that science does not take a back seat to ideology is for you, as the new Interior Secretary, to direct a truly independent investigation of the science in this matter at NPS and USGS. It is incumbent upon you to bypass the biases and conflicts that have dominated previous investigations under the leadership of your predecessor, and to find a path forward that is unbiased.

In the January 23, 2013 Huffington Post, Dr. Peter Gleick, President, Pacific Institute (environmental NGO), elected member, NAS, and MacArthur Fellow, wrote:

*“... the National Park Service, the Department of the Interior (DoI), and some local environmental supporters (with whom I often have strong common cause) manipulated, misreported and misrepresented science in their desire to support expanded wilderness. In an effort to produce a rationale to close the farm, false arguments were made that the farm damaged or disturbed local seagrasses, water quality, marine mammals and ecosystem diversity. These arguments have, one after another, been shown to be based on bad science and contradicted by evidence hidden or suppressed or ignored by federal agencies. The efforts of local scientists, especially Dr. Corey Goodman, professor emeritus from both Stanford and Berkeley and a member of the U.S. National Academy of Sciences, were central to revealing the extent of scientific misconduct. Reviews by independent scientists and now confirmed by investigations at the Department of Interior and the U.S. National Academy of Sciences show that arguments of environmental harm from the oyster farm were misleading and wrong.”*

*“... scientific integrity, logic, reason, and the scientific method are core to the strength of our nation. We may disagree among ourselves about matters of opinion and policy, but we (and our elected representatives) must not misuse, hide or misrepresent science and fact in service of our preferences and ideology.”*

The scientific method is core to the strength of our nation. It is also core to the President’s Scientific Integrity Policy. The Jarvis Doctrine (see Appendix 3.2) overturns and undermines what you stand for as a scientist and a leader. It is time for Interior to restore science to its rightful place and not allow science to take a back seat to ideology.

In summary, this issue requires your immediate attention and action. I request that:

- (1) We meet so I can present the allegations and propose a proper investigation.
- (2) The DOI establish a blue-ribbon panel of eminent scientists to conduct this investigation, bypassing its conflicted SIOs and conflicted outside contractors.
- (3) The panel investigate these allegations in a transparent fashion, allowing both sides to respond to statements made by the other in an open fashion.

I look forward to discussing these issues with you as soon as possible.

Sincerely yours,



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## Appendices

### Appendix 1: Overview of Allegations of Scientific Misconduct

Supporting documents:

Stewart Report, May 2012 (HSWRI Tech Rept and HSWRI excel spreadsheet)

USGS Report, November 2012

NPS Final Environmental Impact Statement, November 2012

USGS Dr. Lellis & Dr. Goodman conversation and emails.pdf

USGS response to FOIA: 2013.5.7 Batch #1.pdf

Timeline and quotes from USGS FOIA response.05\_13\_13.pdf

Dr. Brent Stewart's Supplemental Report: BSS Suppl review.pdf

### Appendix 2: Why the DOI OIG and SIOs Cannot Resolve These Allegations of Scientific Misconduct

### Appendix 3: Overview of the History of NPS Scientific Misconduct

### Appendix 4: Analysis of DOI OIG Investigative Report on DBOC EIS: The DOI OIG Did Not Conduct a Proper and Independent Investigation of NPS Misconduct

### Appendix 5: Dr. Corey Goodman, Brief Resume and History of Involvement