INTRODUCTION TO COMPLAINT AGAINST DR. RAGEN

On February 18, 2010, just a few days before the four-day Marine Mammal Commission (MMC) panel meeting at Point Reyes National Seashore, MMC Executive Director Dr. Timothy Ragen wrote to Drakes Bay Oyster Company (DBOC) owner Kevin Lunny and former Sierra Club representative Gordon Bennett, and copied David Weiman (DBOC consultant), Neal Desai (National Parks Conservation Association), Mike Gosliner (MMC General Counsel), and Samantha Simmons (MMC Assistant Scientific Program Director). Dr. Ragen wrote to Mr. Lunny and Mr. Bennett concerning his decision to allow Mr. Bennett to participate in a key site visit during the panel meeting.

This was an important policy decision based upon "basic principles that the Commission has long espoused and sought to foster in the face of such issues ..." Dr. Ragen wrote:

Based on the above, I have decided that Gordon should be invited [to] participate in the trip to the estero.

Dr. Ragen made this key policy decision based upon well-reasoned MMC principles. Dr. Ragen described the MMC principles as follows:

To make this decision, I have looked to basic principles that the Commission has long espoused and sought to foster in the face of such issues, and which we have embraced in structuring this review.

The first principle is that of <u>transparency</u>. At all levels of the government, our business should be transparent to the people we serve. The Obama Administration has made a strong commitment to such transparency, and in the course of this Drake's Estero matter, I have heard a call for greater transparency from all quarters. I do not believe that such transparency can be achieved if we selectively allow some parties greater access to the panel or access that is not subject to some sort of outside scrutiny. Transparency must apply equally to all parties – otherwise the process is not truly transparent.

The second principle is <u>inclusiveness</u>. The Commission has long advocated that, in the face of difficult challenges involving multiple perspectives, all affected parties and perspectives should be represented or included in discussions. To deny participation by any one party or perspective would not be consistent with this principle and, among other things, would undermine transparency.

The third principle would be <u>equal access</u>. In this case, we have asked the involved parties not to communicate with the panel outside of the meeting itself. The intent of that request is twofold: (1) to allow the panel to prepare for the meeting without interruption and (2) to ensure that the all involved parties have equal access to them. To deny Gordon, or at least some outside observer/participant, the opportunity to be present during the estero trip would run counter to the principle of equal access.

Dr. Ragen's decision stood for principles of <u>transparency</u>, <u>inclusiveness</u>, <u>and equal access</u>. He wrote eloquently, for example, that:

I do not believe that such transparency can be achieved if we selectively allow some parties greater access to the panel or access that is not subject to some sort of outside scrutiny. Transparency must apply equally to all parties – otherwise the process is not truly transparent.

These words established principles that our community and elected officials share with Dr. Ragen. We could all find common ground with these principles of transparency, inclusiveness, and equal access. We looked forward to a fair MMC process.

The principles Dr. Ragen described in his email on February 18, 2010 were echoed in the MMC Scientific Integrity Policy that he filed with the While House Office of Science and Technology Policy on March 29, 2011. Dr. Ragen assured the White House of:

"honest investigation, open discussion, refined understanding, and a firm commitment to evidence."

Dr. Ragen wrote that the Commission seeks:

" input from and open dialogue among all parties engaged in all issues ..."

"open exchange of information and viewpoints ..."

Dr. Ragen's principles in his Scientific Integrity Policy in March 2011 -- open discussion, open dialogue, and open exchange – were aligned with the principles he wrote in February 2010 – transparency, inclusiveness, and equal access.

Some of Dr. Ragen's principles were repeated once again on September 29, 2011 in an email to David Weiman (DBOC consultant) when he wrote concerning his conversation with Mr. Gordon Bennett and Mr. Neal Desai:

I reminded them that the Commission won't use anything they send unless it is available for all to review.

That was an excellent re-statement of Dr. Ragen's principles of inclusion and equal access. The problem is that Dr. Ragen did not follow his own principles. Much of what was submitted and discussed with Dr. Ragen by Drs. Harwood, Becker, and Richard, and Mr. Bennett and Mr. Desai, during September-October 2011 was not shared with Dr. Goodman, even though much of it was featured in or influenced what Dr. Ragen wrote in his MMC Report release on November 22, 2011.

Dr. Ragen promised the community and elected officials that he would conduct an independent review – without bias or conflict – that would be fair and provide equal access to all parties. He claimed that he was only interested in the science, not politics, and that he would treat all parties equally without bias, would not have inappropriate interactions with any side, would share all data and analyses with all parties, and would recruit his own independent statistician to review the NPS Becker et al. 2011 paper.

The problem is that by the time Dr. Ragen released his MMC Report on November 22, 2011, he had failed in every promise he made to the community, to our elected officials, and to the White House. Dr. Ragen's failures became more profound with release of his 'private' letter to Dr. Goodman on June 17, 2012.

This complaint documents in detail the failures of Dr. Ragen to abide by the principles he established for the MMC in general, and the review of Drakes Estero in specific. In public, Dr. Ragen spoke and wrote of his lofty principles. In private, a picture emerges of another Dr. Ragen, working in secrecy rather than transparency, working exclusively with NPS rather than inclusively with all parties, and providing special access to NPS rather than equal access to all parties. As described below, much but not all of the evidence comes from two parallel FOIA requests submitted to the NPS and the MMC.

"Ben, as promised."

Those three words summarize this complaint. Those three words were the entirety of an email message from MMC Executive Director Dr. Tim Ragen to NPS scientist Dr. Ben Becker on Monday morning, August 29, 2011. Dr. Ragen's email contained a document (from Dr. John Harwood) that never should have been sent that morning to Dr. Becker.

While telling the public and elected officials that he was independently reviewing a key NPS scientific publication co-authored by Dr. Becker, Dr. Ragen was privately working with Dr. Becker to enable NPS to help review NPS, all under the auspices of the name and independence of the Marine Mammal Commission.

That one email reveals the two faces of Dr. Ragen: one public – proclaiming independence, fairness, equality, and a lack of bias – and the other private – conducting a secret, biased, one-sided process with NPS Dr. Becker. While proclaiming that he was conducting an independent review of Dr. Becker's key NPS paper, Dr. Ragen actually allowed Dr. Becker to staff and have a major impact on the review of his own paper.

Dr. Ragen empowered NPS to publicly proclaim that the MMC independently validated the NPS science in Dr. Becker's paper – that the MMC Report served as an independent peer-review of that paper – when in fact MMC Dr. Ragen and NPS Dr. Becker knew all along that this was really a self-review of NPS evaluating NPS.

Dr. Ragen's private actions contradicted many of his public principles, and violated many MMC policies and guidelines. As shown in detailed examples in this complaint, Dr. Ragen appears to have engaged in misconduct in the review and release, and later private reversal of the key conclusion, of his MMC Report on Drakes Estero.

"Ben, as promised." Those three words – and the implications of what had been promised and what it meant – say it all. Dr. Ragen violated the public trust. Dr. Ragen misled the public and elected officials. Dr. Ragen appears to be guilty of misconduct.

At the conclusion of the MMC review, Dr. Ragen initiated a statistical review of the NPS Becker et al. 2011 paper. Dr. Ragen espoused the principles of transparency, inclusiveness, and equal access. He wrote of open discussion, dialogue, and exchange.

Dr. Ragen directed three scientists, representing three parties, to submit reports to him by close of business on August 29, 2011. Publicly, Dr. Ragen promised to treat all parties equally, and to distribute all three reports simultaneously to all parties at close of business on August 30. He wrote to all parties at 7:37 pm.

Privately, however, Dr. Ragen conducted a secret email conversation with Dr. Becker. One minute before his public email, Dr. Ragen wrote to Dr. Becker (the fifth email below). Throughout that day, beginning in the morning, Dr. Ragen inappropriately shuttled every report to Dr. Becker as soon as it arrived, violating his promises and principles.

"Ben, as promised."
"Ben – this just in – please replace the version I just sent."
"Ben, these two files from Corey are the last of the three reviews."
"Ben, second part of Corey's analysis"
"Ben, I sent you two files using YOUSENDIT."
7:36 pm

The messages in red are the ones Dr. Ragen did not include in his FOIA response.

How do we know about these emails? Some of the evidence presented in this complaint was uncovered from two parallel FOIA requests. A nonprofit public advocacy organization, Cause of Action, submitted parallel FOIA requests (with Dr. Goodman's assistance) to both MMC and NPS, seeking all communications between Dr. Ragen and NPS officials and scientists over a time period that included August to November, 2011, the key four months in the review and release of the MMC Report on Drakes Estero.

We compared the responses to the two parallel FOIA requests. Nearly everything in the two responses (for the same time period) was identical. But certain emails and transmittals were missing from Dr. Ragen's response to the parallel FOIA requests. What was missing was not random, and apparently not accidental. The emails and transmittals that Dr. Ragen failed to disclose are key to this complaint (e.g., the three red "Ben" emails above #3-5). Dr. Ragen apparently violated the federal FOIA law.

Five specific allegations are presented here concerning Dr. Ragen's misconduct and deception involving his oversight of the MMC Report on "Mariculture and Harbor Seals in Drakes Estero, California" on November 22, 2011, and his private (concealed) reversal of the key conclusion from his MMC Report in a letter on June 17, 2012. It is alleged that:

1) Dr. Ragen Violated MMC Policies Established for Scientific Review

- a. Did Not Treat All Parties Equally But Had Biased Interactions with NPS
- b. Did Not Conduct an Independent Review of NPS Data and Analysis

2) Dr. Ragen Changed MMC Terms of Reference Without Disclosure or Discussion

- a. Changed Scope, Title, and Purpose of MMC Report
- b. Accepted Lack of Disclosure of Key Data and Paper by NPS

3) Dr. Ragen Violated the Federal Freedom of Information Act (FOIA)

- a. Failed to Disclose and Release Key Communications
- b. Failed to Provide Basis for Failing to Disclose & Release Key Communications

4) Dr. Ragen Violated MMC Scientific Integrity Policy

- a. Did Not Follow Open Discussion, Open Dialogue, Open Exchange
- b. Undermined and Avoided Meetings to Discuss Data and Analysis

5) Dr. Ragen Failed to Properly Disclose Reversal of Key Conclusion of MMC Report

- a. Reversed MMC Support of Key NPS Paper In a 'Private' Letter
- b. Concealed Reversal While Claiming Key MMC Conclusion Was Unchanged

This complaint focuses on a series of examples of Dr. Ragen's misconduct from August to November 22, 2011 when his MMC Report was released, and from November 29, 2011 (when Dr. Goodman and Mr. Lewis submitted a critique of the MMC Report to Dr. Ragen) until June 17, 2012 when Dr. Ragen sent a 'private' letter to Dr. Goodman (in which he reversed his key conclusion, without public disclosure). The appendix provides a detailed analysis of Dr. Ragen's June 17, 2012 letter to Dr. Goodman. On that basis alone, the MMC Report and the Becker 2011 paper should be retracted.

These examples are not exhaustive. Additional examples, particularly involving events prior to August 2011 (e.g., during the MMC panel meeting in February 2010, when the NPS secret cameras were discovered in summer 2010, and when Dr. Ragen's first draft of his MMC Report in June 2011 accepted the NPS Becker et al., 2011 paper without doing an independent review of it) will be provided during interviews and fact-finding.

MISCONDUCT COMPLAINT AGAINST MMC DR. TIM RAGEN

1. Dr. Ragen Violated MMC Policies Established for Scientific Review

Evidence is presented below that shows that Dr. Ragen did not treat all parties equally, had biased interactions with NPS, and did not conduct an independent review of NPS data and analysis.

1A. Promised Independence of Dr. Ragen's MMC Report

Beginning in 2007, NPS and their supporters claimed that NPS had 'evidence' showing that Drakes Bay Oyster Company (DBOC) boats and workers were disturbing the harbor seals in Drakes Estero (in violation of the Marine Mammal Protection Act). Critics of the NPS, based upon reviews of NPS data and reports, contended that NPS did not have scientific evidence that the oyster farm was harming the harbor seals in Drakes Estero and that the NPS harbor seal database did not support the NPS claims.

On July 21, 2007, then-NPS Director Mary Bomar and Senator Dianne Feinstein directed then-West Regional Director Jon Jarvis (now NPS Director) to engage the National Academy of Sciences (NAS) to conduct an independent study of NPS science to determine the validity of the NPS claims that the oyster farm was causing environmental impacts in Drakes Estero (Pt. Reyes National Seashore, Marin County, California).

The NAS panel released its report "Shellfish Mariculture in Drakes Estero" on May 5, 2009. The NAS panel found the NPS misrepresented NPS data in every category of environmental harm including harbor seals. The NAS concluded:

"... there is a lack of strong scientific evidence that shellfish farming has major adverse ecological effects on Drakes Estero"

In June 2009, a month after the NAS Report was released, the Sierra Club and the National Parks Conservation Association (NPCA), with the active support of then-NPS West Regional Director Jon Jarvis, petitioned the MMC. Together they claimed that the NAS Report was wrong concerning the impact of the oyster farm on the harbor seals, and asked the MMC to conduct yet another investigation of the same issue.

On July 1, 2009, the MMC formally notified the petitioners that the MMC would undertake the investigation as requested. Over the next several months, Dr. Ragen prepared a detailed 'Terms of Reference' – a scope of work concurred to by all parties including the NPS – by which the MMC agreed to re-review the NPS harbor seal data.

In January 2010, shortly before a scheduled four-day MMC panel meeting in February, Dr. Ragen promised that the MMC would function independently, be guided exclusively by science, show no bias or favoritism toward any party, treat all parties equally, and arrange for an independent statistician to analyze the NPS data for the MMC.

Dr. Ragen cautioned his panel members not to socialize with one side or the other

 but he violated his own policy by, for example, socializing in the evening with a
 key NPS scientist during his MMC panel meeting.

- Dr. Ragen assured all parties and the public that his review would be unbiased but his private actions were biased throughout the process towards NPS.
- Dr. Ragen promised to distribute documents equally to both sides at the same time – but he sent key documents to NPS months before sending them to DBOC.
- Dr. Ragen vowed to conduct an open process with open meetings, discussion, exchange, and dialogue – but he facilitated NPS' scuttling of multiple meetings.
- Dr. Ragen frequently repeated these principles and rules throughout his review but he secretly violated them in his private interactions with NPS scientists.
- Dr. Ragen assured the public, its elected officials, and all parties that his process would be independent, open, and transparent, neither relying on nor siding with the NPS or its scientific critics. We now know that was not the case.

This complaint provides examples of Dr. Ragen's bias, and of violations of his own policies and guidelines. Additional examples of Dr. Ragen's misconduct will be provided to the DOC OIG by Dr. Goodman, Mr. Weiman, and Mr. Lunny during interviews and fact-finding.

1B. Five Examples of Dr. Ragen's Misconduct and Deception

The five examples presented below provide evidence that Dr. Ragen did not treat all parties equally, had biased interactions with NPS, and did not conduct an independent review of NPS data and analysis.

1B1. Two Critical Days in Late August 2011

An example is presented here that contrasts Dr. Ragen's public vs. his private actions, and shows that Dr. Ragen was deceptive and violated his own policies and guidelines. This example serves as a striking example of Dr. Ragen's misconduct by showing his bias and willful disregard for his own policies and rules. The timeline in Figure 1 below of two critical days in late August 2011 is described in detail in the text.

Public communications equal with all parties

On July 28, 2011, Dr. Ragen sent an email to all parties involved in the statistical review of the NPS Becker, Press, and Allen 2011 paper (herein called the Becker 2011 paper). Dr. Becker, Mr. Press, and Dr. Allen are NPS scientists at Point Reyes National Seashore, and their paper was the key NPS 'evidence' for DBOC harm to harbor seals in Drakes Estero. To this day, this NPS paper remains the basis for "evidence" of harm to harbor seals by the DBOC oyster boats and workers.

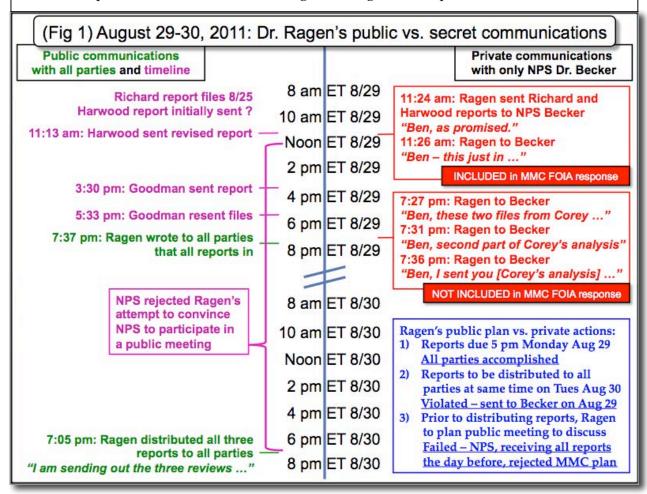
The Becker 2011 paper asserted NPS had "evidence" showing the oyster farm caused a spatial displacement of harbor seals out of Drakes Estero. The paper was entitled:

Evidence for long-term spatial displacement of breeding and pupping harbour seals by shellfish aquaculture over three decades

Dr. Ragen set the ground rules for the review of the Becker 2011 paper and the data upon which it was based. He asked that all reviews be completed by August 19 (he

subsequently extended that deadline to August 29). He asked that the reviews be independent.

Figure 1: the two faces of Ragen: public vs. private. Ragen's process over two days in August 2011 (29th-30th). Figure shows public communications and timeline on left, and private communications with NPS Dr. Becker on right. Some of his communications with NPS were not disclosed by MMC in response to a FOIA request. The blue box contrasts Dr. Ragen's public vs. private actions and consequences. Dr. Ragen deceived the public and elected officials to believe he was unbiased and independent, when in fact he had a special relationship with NPS and, as shown in Figures 1-5, gave NPS special access and control.



Dr. Ragen asked the scientists conducting the reviews not to contact the other parties to discuss their reviews and findings prior to submission. Dr. Ragen wrote:

"I will distribute all three reviews to all three parties after I receive them all."

On August 25, Gordon Bennett (originally representing the Sierra Club, one of the two petitioners) wrote to Dr. Ragen:

"We would appreciate (and insist) that this Review not be shared with any other party to this matter until all parties' statistical reviews are irreversibly filed with you. It has been our experience over the past years that other parties to this matter have repeatedly gained early and unfair access to documents that have materially helped them hone their lobbying or their public messaging. We thus ask that you take special care that this does not occur with our expert's Report. We expect that after all parties' expert Reports have been filed, there will be the usual amount of

controversy and attempts to undermine one or the other of the expert Reports. We can accept that only so far as it occurs on an "equal opportunity" basis."

Forty minutes later, on August 25, Dr. Ragen responded:

"I am considering how to go forward from here, but I can assure you that I will not share your experts review until I have discussed that plan with you."

A few hours later, on August 25, Dr. Ragen wrote to all parties, reminding us that all reports were due by Monday August 29 at 5 pm ET. In various conversations, he assured all parties, as he had told us previously, that he would distribute the three reports to all parties simultaneously, just as he had implied to Gordon Bennett in writing earlier that day.

The three reviews were written by Dr. Dominique Richard (an engineer and consultant) on behalf of Mr. Bennett, an NPS supporter; Dr. John Harwood (University of St. Andrews, Scotland) on behalf of Dr. Ragen; and Dr. Corey Goodman (U.C. San Francisco faculty member) on behalf of Steve Kinsey, Marin County Supervisor.

As represented in green on the left-hand side of the figure above, Dr. Dominique Richard's report was submitted (by Mr. Bennett) to Dr. Ragen on August 25, 2011. We don't know when Dr. John Harwood's original report was submitted, but he sent a revised version on Monday August 29 at 11:13 am ET to Dr. Ragen.

Dr. Goodman's report was submitted to Dr. Ragen on Monday August 29 at 3:30 pm ET. The files were submitted to Dr. Ragen using 'YouSendIt' at 4:02 pm ET. At 4:42 pm ET, Dr. Ragen said that he was not able to download the files sent through 'YouSendIt'. Less than an hour later, at 5:30 pm ET, Dr. Ragen asked that the files be sent via 'TransferBigFiles' and instructed Dr. Goodman to use Dr. Ragen's personal email address instead. Dr. Goodman did as requested at 5:33 pm ET.

Two hours later, at 7:37 pm ET on Monday, August 29, Dr. Ragen sent the following to all involved (i.e., Drs. Richard, Harwood, and Goodman, as well as other parties):

"Thanks, All, for getting me your analyses. I will send you a plan for our next steps tomorrow morning."

Twenty-four hours later, at 7:05 pm ET on Tuesday August 30, Dr. Ragen sent the submitted reports to all parties involved with the note:

"I am still working on the next steps for completing this review and the Commission's report. In the meantime, I am sending out the three reviews in a zip file (containing 5 files). I will be in touch with you tomorrow regarding the next steps."

Throughout Monday August 29 and Tuesday August 30, prior to his release of all three critiques at 7:05 pm ET on Tuesday, Dr. Ragen worked with Senator Feinstein's office to arrange for a public meeting sponsored by the MMC to review the NPS Becker 2011 paper and the three critiques of that paper.

Late on Monday afternoon, Dr. Ragen told David Weiman (DBOC consultant) that he was working with Senator Feinstein's staff to develop a short-term plan as follows. All parties would be provided copies of the three reviews, NPS would be asked to respond within 48 hours, and Dr. Ragen would organize a near-term date (next week or two) for the public meeting at Point Reyes (so the community would be afforded the opportunity to listen and judge for itself whether or not the NPS data supported the NPS claims). Dr.

Ragen told Mr. Weiman that he would circulate the plan and timetable on Tuesday morning.

The following afternoon (Tuesday August 30), a few hours before distributing the three reports, Dr. Ragen and Mr. Weiman had another conversation. A short time later (5:46 pm ET), Mr. Weiman informed Dr. Goodman and others of his conversation with Dr. Ragen:

- " (1) NPS will not agree to review and comment on the three analyses Goodman, Harwood and Bennett.
- (2) NPS will not agree to a meeting."

Twenty-five minutes later (6:13 pm ET, August 30), Mr. Weiman sent a follow up note:

"Tim said he would try and circulate all received materials later tonight."

Indeed, nearly one hour later, at 7:05 pm ET on Tuesday August 30, Dr. Ragen sent all three reports to all parties involved with the note:

"I am still working on the next steps for completing this review and the Commission's report. In the meantime, I am sending out the three reviews in a zip file (containing 5 files). I will be in touch with you tomorrow regarding the next steps."

Dr. Harwood's and Dr. Goodman's reviews had many similarities. Both recognized the same factors that influenced the NPS data and analysis (e.g., the "marauding" elephant seal at Double Point in 2003). Both were critical of the NPS Becker 2011 paper.

The next morning (Wednesday August 31) at 10:03 pm ET, Dr. Goodman talked with Dr. Ragen and took the following notes. Dr. Ragen was highly critical of the NPS. He told Dr. Goodman: "NPS refused to participate." This is the "nail in the coffin." "I have no doubt your analysis is going to hold up just fine." Dr. Ragen told Dr. Goodman that interacting with both NPS and their supporters the day before (Tuesday August 30) was as if he was in "The Twilight Zone" (citing the famous 1960's TV series). He called his conversations with NPS and their supporters the day before "surreal."

Private communications in secret with only NPS

What happened behind the scenes? Instead of announcing the MMC plan to proceed, Dr. Ragen gave NPS veto power over an open discussion and exchange, and over a true independent review of NPS science – and they exercised it.

Dr. Ragen's 'plan' was to get a commitment from all parties – including NPS in particular – for a public meeting prior to the distribution of the three reports. Why did Dr. Ragen's and Senator Feinstein's plans for a public meeting get turned down by NPS? Why did NPS and their supporters refuse to participate in this meeting? Why didn't Dr. Ragen stick to his plan and organize the meeting (as was his prerogative) and simply announce that NPS refused to participate? Why did Dr. Ragen allow NPS to have veto power?

DBOC requested a public meeting. Senator Feinstein made the same request. So did Dr. Goodman. NPS said no – and their decision was controlling. Dr. Ragen withdrew his plan for a MMC-sponsored public meeting.

The emails obtained pursuant to FOIA reveal that Dr. Ragen was not functioning independently as promised, but rather was secretly working closely with NPS. Dr. Ragen

gave NPS decision-making authority.

The MMC-hosted public meeting to discuss the statistical reviews of the key Becker 2011 paper never occurred. From hereon, as documented later in this complaint, Dr. Ragen never again discussed the substance of the scientific reviews and statistics with either Dr. Goodman or David Lewis, Dr. Goodman's collaborator (Director, University of California Cooperative Extension, Marin County).

Dr. Ragen's last substantive scientific discussion with Dr. Goodman took place on August 25, 2011, when Dr. Goodman made a preliminary presentation by telephone of his report – still in draft form – to Dr. Ragen. As shown later in this complaint, an undisclosed double standard emerged. While excluding Dr. Goodman and Mr. Lewis, Dr. Ragen worked extensively and separately with NPS Dr. Becker and NPS supporter Dr. Richard.

What went on behind the scenes over those two days prior to 7:05 pm ET on Tuesday August 30 when Dr. Ragen sent all three reports to all parties involved? We do not know all of the details, and ask the DOC OIG to investigate and report your findings. Nevertheless, the following is known based upon responses to parallel FOIA requests made to both MMC and NPS.

The MMC and NPS responses to parallel FOIA requests provide evidence that Dr. Ragen was not telling the truth when he said he was treating everyone equally and not showing any bias. Rather, Dr. Ragen was actively violating his own promises and policies.

A nonprofit public advocacy organization, Cause of Action, Washington, DC, submitted parallel FOIA requests (with Dr. Goodman's assistance) to both MMC and NPS, seeking all communications between Dr. Ragen and NPS officials and scientists over a time period that included this critical two-day period of time.

Dr. Ragen provided some – but not all – of the emails and communications between himself and NPS Dr. Becker. In apparent violation of the Federal FOIA law and the President's policy on transparency (January 21, 2009), Dr. Ragen failed to provide certain key communications by withholding and not disclosing documents that revealed his double standard. The MMC neither acknowledged the existence of these communications nor provided a reason for withholding them. The MMC response was silent on the topic. The key transmittals were not provided by MMC, but were provided by NPS in response to the parallel FOIA request submitted to NPS.

From MMC and NPS, Cause of Action received the following two emails, as represented in the top red box on the right-hand side of the figure above.

At 11:24 am ET on Monday August 29, in violation of his policies and promises, Dr. Ragen sent both Dr. Richard's and Dr. Harwood's reports to NPS Dr. Becker with the email note:

"Ben, as promised."

Since the FOIA response provided no previous emails on this topic, we presume that the "as promised" refers to a conversation (or conversations) in the previous days. This transmittal and comment "as promised" also raises the questions of whether Dr. Ragen had told Dr. Becker ahead of time about the conclusions and criticisms raised by Dr. Harwood, and by Dr. Goodman as well. The comment "as promised" is one of the

clearest examples of the two faces of Dr. Ragen, one public and the other private. The comment "as promised" supports the hypothesis that selected documents were provided to Dr. Becker in advance of public distribution of them (and in many other cases, as detailed in later sections below, in the absence of public distribution of them).

Two minutes later, at 11:26 am ET on Monday August 29, Dr. Ragen sent another email to Dr. Becker, and wrote:

"Ben – this just in – please replace the version I just sent. Thanks, Tim"

This email included a revised version of Dr. Harwood's report with the cover note from Dr. Harwood. None of this was shared with Dr. Goodman or Mr. Lunny.

Those were the only specific communications between Dr. Ragen and NPS Dr. Becker on August 29, 2011 provided by the MMC in response to the FOIA request. These were not the only communications between them that day.

In contrast, the FOIA response from the NPS provided not only these two emails from Dr. Ragen to Dr. Becker, but an additional four emails and transmittals that day between Dr. Ragen and Dr. Becker, not provided by the MMC FOIA response, as represented in the second red box on the right-hand side of figure 1 above.

At 7:27 pm ET on Monday August 29, Dr. Ragen sent to Dr. Becker via 'YouSendIt' Dr. Goodman's file entitled "analysis of Becker 2011.CSG.part1.pdf" with the note:

"Ben, these two files from Corey are the last of the three reviews"

At 7:31 pm ET, Dr. Ragen sent Dr. Becker part 2 of Dr. Goodman's analysis with the note:

"Ben, second part of Corey's analysis"

At 7:36 pm ET, Dr. Ragen sent Dr. Becker the following with subject "Corey's analysis":

"Ben, I sent you two files using YOUSENDIT. Let me know if you don't get them. Thanks"

Then finally, at 7:37 pm ET, as reported above, Dr. Ragen sent a note to all parties telling us:

Hi All, Thanks, All, for getting me your analyses. I will send you a plan for our next steps tomorrow morning. Best, Tim

At 8:32 pm ET, Dr. Becker replied to Dr. Ragen's "Corey's analysis" with the following: "got them, thanks."

What is most remarkable about this timeline is that it reveals that around 7:30 pm on Monday evening, August 29, 2011, Dr. Ragen was conducting two simultaneous email conversations – the two faces of Dr. Ragen were communicating nearly simultaneously:

- the first openly with all parties (consistent with the rules Dr. Ragen had established for the review, and what he told Feinstein's office and Mr. Weiman), and
- the second secretly with NPS Dr. Becker (inconsistent with his MMC rules and policies).

At 7:36 pm, Dr. Ragen emailed Dr. Becker and asked him to let him know if he did not receive "Corey's analysis" – the report from Dr. Goodman. One minute later, at 7:37 pm,

Dr. Ragen sent a message to all parties involved (including Drs. Becker, Richard, Harwood, and Goodman, as well as other parties), and wrote:

"Thanks, All, for getting me your analyses. I will send you a plan for our next steps tomorrow morning."

Dr. Ragen secretly gave all three reports to Dr. Becker one day before he gave them to the other parties. Why was this secret transmittal of the three reports to NPS Dr. Becker important? The timing was critical.

Dr. Ragen told Senator Feinstein's office and Mr. Weiman that he would spend the next day (prior to distributing the reports) getting commitments from all parties (particularly from NPS) to participate in an MMC-sponsored public meeting to discuss the Becker et al. 2011 paper, and the three critiques of it. Dr. Ragen knew NPS would be reluctant to participate.

Dr. Ragen knew NPS wanted to know what Drs. Harwood and Goodman had concluded before agreeing to such a public meeting. Dr. Ragen promised Feinstein's office that he would hold the reports back for a day until all parties agreed to the meeting.

Thus, when Dr. Ragen secretly sent NPS the statistical reviews ahead of time, he predetermined his efforts would be futile. His attempt to organize a public meeting became a charade. Everything had been given to NPS. When NPS saw how Dr. Harwood's critiques paralleled Dr. Goodman's, they would (and did) surely decline to participate in any public meeting at which the NPS Becker et al. 2011 paper was critiqued.

If Dr. Ragen was committed to the plan of holding a public meeting, his actions certainly did not indicate as much. Were he committed, he would not have secretly given Dr. Harwood's and Dr. Goodman's reports to Dr. Becker while trying to negotiate the meeting with NPS. Were he committed, he would have held the meeting regardless of NPS refusing to participate. Were he committed, he would have behaved in private as he claimed in public – he would have acted independently.

As soon as NPS declined, Dr. Ragen cancelled plans for a public meeting and open discussion, and replaced it instead, as described in detail later in this complaint, with a private and secret one-sided process in which he had no substantive scientific discussions with Dr. Goodman or Mr. Lewis, and instead relied and interacted extensively with Dr. Becker.

NPS officials actively participated in covert interactions with MMC's Dr. Ragen

It is clear from FOIA responses that private, substantive communications were taking place between Dr. Ragen (MMC) and Dr. Becker (NPS). Next is the question of whether NPS officials and scientists were passive recipients of Dr. Ragen's inappropriate and asymmetric distribution of information, or alternatively, whether they were active participants in these covert communications. Based upon the limited (and manipulated) record, it is clear that NPS officials and scientists actively participated in communications not available to other parties.

From what is documented above from the disclosed emails, transmittals, and MMC statements, NPS scientist Dr. Ben Becker was aware that the parties involved in the statistical review of the NPS paper he co-authored and elected officials (e.g., Senator

Feinstein's office and Supervisor Kinsey) believed that all parties were being treated equally, and that the three statistical reviews were being distributed simultaneously to all parties on Tuesday evening August 30.

Dr. Becker knew that it was inappropriate for him to receive these documents in advance of the others, but he accepted Dr. Ragen's 'promise' to provide them early, accepted the information and documents, and remained silent on this topic. He thanked Dr. Ragen for sending them.

Dr. Becker knew he participated in private (and inappropriate) conversations with Dr. Ragen about the reviews, and had been prematurely (and inappropriately) sent the reviews prior to the group distribution. Dr. Becker knew that Dr. Ragen's group distribution on Tuesday August 30 falsely implied to the group that this was the promised simultaneous distribution to all parties.

Did Dr. Becker tell his superior, Superintendent Cicely Muldoon? Did Dr. Becker tell others? With whom did Dr. Becker share the information – either the reviews themselves or his description of them? Did this premature and inappropriate distribution of information influence Superintendent Muldoon's decision to refuse to participate in the MMC-sponsored public meeting to discuss the statistical reviews of the NPS Becker paper? The meeting was intended to allow MMC to reconcile the different analyses.

Superintendent Muldoon, like Dr. Becker, remained silent on the fact that NPS was provided the reviews one day prior to everyone else.

On Tuesday August 30, 2011 at 5:53 pm PT, Kevin Lunny wrote to Ms. Muldoon:

"The MMC just informed us that NPS will not review Dr. Goodman's analysis and will not participate in a meeting to review the Becker paper. Is this accurate? Why?"

On Wednesday August 31, 2011, at 7:20 pm PT, Ms. Muldoon responded:

"The NPS is looking at all three of the reviews of the statistical analysis that Tim sent to the group yesterday, as I expect all parties involved are. Just as he did during the review period, Ben will continue to answer any remaining questions about the analysis that Tim asks as he works towards finalizing the Commission's report."

By this email, Superintendent Muldoon confirmed that NPS would not participate in a public meeting, as Dr. Ragen previously announced. In her email to Mr. Lunny, the Superintendent perpetuated the myth that the three reviews were distributed to the group on Tuesday, as publicly announced and according to MMC guidelines, when in fact Dr. Becker had been given a copy of the three reviews a day earlier (and had possibly known about them earlier still).

In other words, NPS was *not* a passive recipient of Dr. Ragen's covert communications. They knew they were participating in the violation of MMC policies and rules. In other words, they were not passive recipients, but rather active co-participants in this private channel of inappropriate transmittals and communications.

Conclusions from example #1 of Dr. Ragen's public policies vs. secret actions

What do we learn from Dr. Ragen's actions over this two-day period from Monday

August 29, 2011 to Tuesday August 30, 2011, and his response to a FOIA request that included a request for his communications with NPS over these two days?

- First, Dr. Ragen violated the very policies he established by prematurely and inappropriately distributing Dr. Harwood's, Dr. Richard's, and Dr. Goodman's analyses to only NPS Dr. Becker on Monday August 29.
 - Dr. Ragen promised all parties that he would distribute the three statistical reviews simultaneously to all parties on Tuesday August 30. Instead, he secretly sent all three reports to Dr. Becker on Monday August 29. He did so just a few minutes before his disingenuous email to all parties telling them that he would send next steps on the following morning. His public policies were in marked contrast to his private interactions with NPS.
 - The following evening, at 7:05 pm ET on Tuesday August 30, Dr. Ragen distributed the three statistical reviews to all parties including Dr. Becker (as if Dr. Becker were receiving them for the first time). This was the second time in two days that Dr. Becker received these same documents. Dr. Ragen excluded any reference in his public email that the documents were previously provided to Dr. Becker.
- Second, by prematurely and surreptitiously sending both Dr. Harwood's and Dr. Goodman's critique of the NPS Becker 2011 paper to NPS Dr. Becker, Dr. Ragen thereby undermined (i.e., scuttled) the opportunity to abide by MMC policies and sponsor an open discussion of the Becker et al. 2011 paper at a public meeting.
 - While publicly stating that MMC wanted to sponsor a public meeting to discuss the Becker 2011 paper, Dr. Ragen secretly allowed NPS to control the so-called 'independent' MMC agenda and veto the public meeting.
 - When Dr. Ragen spoke with Mr. Weiman and Dr. Goodman, he acted surprised and frustrated at the refusal from NPS, when in fact he predestined (and all but predetermined) the NPS refusal by prematurely sending them Dr. Harwood's and Dr. Goodman's critical analyses.
- Third, by failing to provide (and deliberately withholding the disclosure of) the key emails and transfers of Dr. Goodman's report to Dr. Becker in the MMC FOIA response to Cause of Action, Dr. Ragen appears to have violated the Federal FOIA law. Dr Ragen did not provide, pursuant to FOIA, his emails to Dr. Becker that would have revealed his violation of the MMC policies he established for the statistical review.
- Fourth, the transfer of Dr. Goodman's report to Dr. Becker on Monday August 29 represents misconduct and it was these emails that Dr. Ragen specifically withheld. Absent the Cause of Action parallel FOIA requests to NPS and MMC, Dr. Ragen's misconduct would not be disclosed today.
- Fifth, this secret transfer of documents to NPS Dr. Becker is indicative of the
 pervasive and inappropriate relationship between the MMC Executive Director
 and NPS staff in which he favored them, relied on them, and accepted their
 analysis to the exclusion of other parties.
- Sixth, in the end, there were two faces to Dr. Ragen, one public and the other

private. In public he espoused his fairness, independence, and lack of bias, while in private he established a secret back-channel of communications with NPS Dr. Becker.

"Ben, as promised." This is just one example. Below are further examples of Dr. Ragen's inappropriate and deceptive actions, and his misconduct.

1B2. Dr. Harwood's Response to Dr. Goodman's Critique

The critiques by Drs. Goodman, Richard, and Harwood of the NPS Becker et al. 2011 paper were due to Dr. Ragen by 5 pm on Monday August 29, 2011, and were distributed by Dr. Ragen to all parties at 7:05 pm on Tuesday August 30, 2011. After reading Dr. Harwood's critique on Tuesday night, August 30, Dr. Goodman noticed some striking similarities in Harwood's criticisms and comments compared to his own. The next morning (August 31), Dr. Goodman emailed to Dr. Harwood:

Once you've had a chance to read my review, I'd like to compare notes and get your feedback. Could we talk Thursday?

Needless to say, there are a lot of similarities in our two reviews, with mine taking a more quantitative approach to many of the issues both of us raised.

An hour later, Dr. Harwood emailed back to Dr. Goodman:

I agree that we do seem to have identified some similar issues with the analysis in Becker et al. However, I think we should wait until Tim Ragen has decided on "the next steps for completing this review and the Commission's report" (as he mentioned in his most recent e-mail) before we compare notes. Once Tim has sorted that out, I'd be happy to talk.

In a phone conversation later that day, Dr. Ragen confirmed by phone with Dr. Goodman that:

- Dr. Ragen had spoken with Dr. Harwood,
- Dr. Ragen did not want Dr. Goodman talking to Dr. Harwood, and
- Dr. Ragen would let Dr. Goodman know when he could speak with Dr. Harwood.

A few hours later, Dr. Goodman wrote to Dr. Harwood and copied Dr. Ragen:

Thanks John. Tim and I just spoke on the phone, and he suggested the same. Looking forward to talking.

Dr. Ragen never allowed Dr. Goodman to speak with Dr. Harwood. In fact, as shown below, Dr. Ragen went one-step further – prohibiting communications between Dr. Goodman and Dr. Harwood, while secretly sending Dr. Harwood's comments to NPS Dr. Becker (but not to Dr. Goodman). Dr. Ragen controlled the flow of information, and he did so in a biased, asymmetric fashion.

A few days later (September 2), Dr. Ragen received an important set of questions and comments from Dr. Harwood in response to Dr. Goodman's critique. These were Dr. Harwood's written responses to Dr. Goodman's critique. Dr. Ragen sent them within one business day to NPS Dr. Becker, and asked him to respond, but Dr. Ragen never sent Dr. Harwood's response to Dr. Goodman, and only sent them to DBOC consultant Mr. Weiman over two months later (November 4), after Dr. Ragen's draft MMC Report was

nearly finished and ready to be sent out for review (November 8).

On Friday September 2, 2011, Dr. Harwood emailed his analysis of Dr. Richard's and Dr. Goodman's critiques to Dr. Ragen. Dr. Harwood wrote:

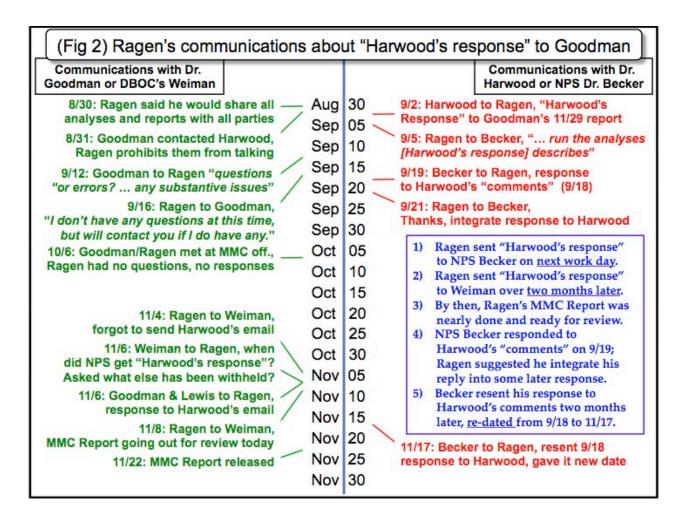
In case we can't get in touch, here are my thoughts on the possible next steps:

- 1. Dr Richard's review focuses on the statistical methods used by Becker et al (GLMMs etc). He concludes, correctly in my opinion, that these are appropriate for the kinds of data used in the analyses and that they appear to have been implemented correctly. He does not consider the appropriateness of any of the response variables and covariates used in the analyses.
- 2. Dr Goodman and I agree that there are problems with the covariates used in the regional level analyses of Becker et al., in particular the way in which changes at Double Point are accounted for and the inclusion of survey results from 1982 and 1983. Dr Goodman has rerun these analyses using different covariates and a different analytical approach (simple multiple regression, as far as I can tell). He also provides more detailed information about the impact of the "rogue" elephant seal at Double Point in 2003, which suggest that its impact was greater than described in Becker et al (they simply describe it as "aggressive", not lethal!), and compelling arguments why the data points from 1982 and 1983 are not strictly comparable with those in the rest of the time series.
- 3. I think the statistical approach adopted by Becker et al is more robust than that used by Dr Goodman, so I suggest you ask [Ben] to rerun his regional level analyses for pups (as I have pointed out, I don't think the total count data are independently informative) using either the covariates proposed by me or those proposed by Dr Goodman, with and without the 1982 and 1983 values. If, as I suspect, this confirms Dr Goodman results, then I think the only valid conclusion is that there is no evidence for long-term displacement of seals from Drakes Estero that can be related to shellfish aquaculture.
- 4. Dr Goodman is also unimpressed by the results of the intra-colony analysis, mainly because he does not think oyster harvest is a good proxy for disturbance associated with the operation of the oyster farm. I'm not qualified to comment on this, but the magnitude of the effect documented by Becker et al is small and I think even this is an over-estimate. It's hard to see how it would have any measurable effect on the viability of the Drakes Estero colony.

In point #2, Dr. Harwood noted his agreement with Dr. Goodman concerning the importance of the rogue elephant seal at Double Point in 2003. He also noted his agreement with Dr. Goodman concerning why the data points from 1982 and 1983 should be not included with the rest of the timeline. But most important, Dr. Harwood asked that NPS Dr. Becker re-run his statistical analysis using the covariates proposed by Dr. Goodman (and without 1982 and 1983). He stated:

"If, as I suspect, this confirms Dr Goodman results, then I think the only valid conclusion is that there is no evidence for long-term displacement of seals from Drakes Estero that can be related to shellfish aquaculture."

That was a very important proposal by Dr. Harwood, and, depending upon the outcome of the analysis, a very strong statement as to the conclusion that he would draw. Was this comment sent to Dr. Goodman in a timely fashion? No. Dr. Ragen sent it to Mr. Weiman (but not Dr. Goodman) two months later when his draft MMC Report was essentially complete. Was it sent to Dr. Becker? Yes, within one business day.



On the next business day, Monday September 5, 2011, Dr. Ragen forwarded Dr. Harwood's email to NPS Dr. Becker with the cover note:

Ben, I got the email below from John Harwood. Can you run the analyses he describes? Thanks, Tim

We do not know what kind of phone conversations Dr. Ragen and Dr. Becker had concerning this communication from Dr. Harwood, or many others. Dr. Ragen never forwarded Dr. Harwood's comments and questions to Dr. Goodman, and he only forwarded them to DBOC consultant Mr. Weiman over two months later (November 4), after his draft MMC Report was nearly finished and ready to be sent off for review (November 8).

One paragraph is key to what Dr. Harwood wrote to Dr. Ragen on September 2:

I think the statistical approach adopted by Becker et al is more robust than that used by Dr Goodman, so I suggest you ask [Ben] to rerun his regional level analyses for pups (as I have pointed out, I don't think the total count data are independently informative) using either the covariates proposed by me or those proposed by Dr Goodman, with and without the 1982 and 1983 values. If, as I suspect, this confirms Dr Goodman results, then I think the only valid conclusion is that there is no evidence for long-term displacement of seals from Drakes Estero that can be related to shellfish aquaculture.

Dr. Harwood wrote that if in fact the models were re-run using Dr. Goodman's covariates and Dr. Becker's statistical method (generalized linear model or GLM), and if that

analysis showed that Dr. Goodman's models were indeed superior to Dr. Becker's, that "... the only valid conclusion is that there is no evidence for long-term displacement of seals from Drakes Estero that can be related to shellfish aquaculture."

- Dr. Ragen never allowed that "no evidence" conclusion to be drawn he
 protected NPS from Dr. Harwood's hypothetical conclusion by preventing the
 analysis Dr. Harwood proposed from being conducted. Alternatively, if NPS ran
 the analysis and submitted it to Dr. Ragen, then he failed to disclose it pursuant to
 FOIA.
- Dr. Ragen did not disclose the existence of Dr. Harwood's comments and questions and did not submit them to Dr. Goodman during the critical two months of September and October 2011.
- Dr. Ragen allowed Dr. Becker (without the knowledge of all other parties involved) to respond to Dr. Harwood's comments in private without ever re-running the models in the precise way that Dr. Harwood proposed. To our knowledge, there was no NPS written response to Dr. Harwood's September 2 request.
- Transparency and equal access were denied by MMC and NPS actions, in violation of MMC policies and guidelines.
- Dr. Ragen apparently did not require NPS Dr. Becker to run the analysis as recommended by Dr. Harwood using the NPS statistical method and Dr. Goodman's covariates. Instead Dr. Ragen permitted Dr. Becker to change the covariates, data, and the metrics. Dr. Harwood's specific request was not run (or if it was, it was not disclosed).
- Dr. Harwood was not informed by Dr. Ragen that Mr. Lewis had collaborated with Dr. Goodman and had in fact run the analysis using the same statistical method as Dr. Becker, and gotten the same results as reported by Dr. Goodman.
- Dr. Harwood was not informed that minor statistical modifications of Dr. Goodman's covariates (to eliminate what NPS Dr. Becker called "overfitted models") led to the same results as reported by Dr. Goodman.
- When Dr. Goodman asked Dr. Ragen by email on September 12 if he or Dr. Harwood had any comments or questions or critiques of his analysis, Dr. Ragen responded 'no.' Dr. Ragen was specifically asked, and he gave a false answer.
- When Dr. Goodman met with Dr. Ragen in his MMC office on October 6 and asked if he or Dr. Harwood had any comments or questions or critiques of his analysis, Dr. Ragen responded 'no.' Dr. Ragen did not disclose Dr. Harwood's comments and questions concerning Dr. Goodman's analysis, and prevented Dr. Goodman from speaking with Dr. Harwood.
- The first time that Dr. Ragen asked NPS Dr. Becker to re-run his analysis using modified versions of Dr. Goodman's covariates (although allowed to do so using different data and metrics) was for his June 17, 2012 'private' letter to Dr. Goodman (seven months after releasing the MMC Report).
 - In his June 17, 2012 letter, Dr. Ragen did not admit what is clearly shown in Table 2 of his letter, namely, that the only model of Dr. Goodman's that Dr. Becker re-ran (Dr. Goodman's 7th best model) was superior to Dr. Becker's

own best model.

 Had Dr. Ragen asked Dr. Becker to re-run Dr. Goodman's best model (as Dr. Harwood requested on September 2, 2011), he would have found – and been compelled to admit in Table 2 and the text of his June 17, 2012 letter – that Dr. Goodman's best model was far superior to Dr. Becker's best model.

In summary, Dr. Harwood was correct in what he requested on September 2, but Dr. Goodman was never informed, and Dr. Becker's response to Dr. Harwood's comments became a private conversation between Dr. Ragen and NPS Dr. Becker and was not properly disclosed. Dr. Ragen violated the MMC Scientific integrity Policy. Dr. Harwood's instinct was right. In fact, when Dr. Goodman's models were run using Dr. Becker's statistical method, they remained superior to Dr. Becker's models, and thus, as Dr. Harwood wrote, "... the only valid conclusion is that there is no evidence for long-term displacement of seals from Drakes Estero that can be related to shellfish aquaculture."

The manipulation of the MMC process – the privatizing of it among two federal agencies – fundamentally altered the conclusions in the MMC Report (November 22, 2011).

Dr. Ragen did not require a full and complete review as recommended by Dr. Harwood. Instead, Dr. Ragen allowed NPS Dr. Becker (to the exclusion of Dr. Goodman) to conduct further analysis in secret. Dr. Ragen also allowed NPS Dr. Becker to alter what Dr. Harwood requested. Dr. Ragen allowed Dr. Becker to change the data, metrics, and covariates. Dr. Ragen allowed NPS to call the shots.

It was also not what Dr. Ragen concluded at the end of his 'private' letter to Dr. Goodman on June 17, 2012, but buried in the text of Dr. Ragen's letter, and clearly presented in Table 2, is the analysis that confirmed Dr. Harwood's hypothetical conclusion. In other words, buried in Table 2 in Dr. Ragen's June 17, 2012 letter was finally presented the response to Dr. Harwood's key question from over nine months earlier.

All of this shows the profound bias, lack of transparency, and lack of independence that Dr. Ragen brought to his review, in contrast to what he publicly announced would guide the MMC process, statistical review, and ultimate MMC Report. Moreover, it reveals that Dr. Ragen violated his own policies and guidelines in allowing NPS to effectively privately review NPS, while publicly asserting that he was independent and unbiased.

This complaint is based on a partial, limited, and restricted access to the record. The DOC OIG may find additional evidence of misconduct if additional emails are released. We know of at least one additional key email from Dr. Harwood that the DOC OIG may wish to obtain – a key email that MMC refused to provide in response to our FOIA request, claiming exemption (b)(5) – pre-decisional deliberations. This email was sent by Dr. Harwood to Dr. Ragen on February 13, 2012 and, according to MMC, "contained John Harwood's substantive comments on the review questions from Corey Goodman." This email may further reveal Dr. Harwood's response to Dr. Goodman's analysis and questions – responses that Dr. Ragen prevented Dr. Goodman from seeing.

MMC withheld this email from Dr. Harwood, citing pre-decisional deliberations. MMC was not engaged in decision-making. It was engaged in statistical analysis. Data analysis is not decisional. It is analytical. This should have been disclosed. It should

now be disclosed.

Beginning on September 5, 2011, when Dr. Ragen forwarded Dr. Harwood's comments to NPS Dr. Becker and not to Dr. Goodman, communications between Drs. Ragen and Becker occurred as shown by the NPS and MMC responses to the FOIA requests. These communications are described below in the context of Dr. Goodman's interactions with Dr. Ragen.

On September 12, 2011, Dr. Goodman wrote to Dr. Ragen (in an email titled "questions or errors?"):

It's been two weeks since I submitted my analysis of Becker 2011 to you and it was forwarded to Dr. Harwood, Dr. Richard, and Dr. Becker. Have you, Dr. Harwood, or anyone else found any errors with my report, or require any clarification or additional analysis? Have any substantive issues for disagreement with the report emerged? Thanks. I look forward to hearing from you.

On September 16, 2011, Dr. Ragen responded to Dr. Goodman:

Corey, sorry to be slow responding. I don't have any questions at this time, but will contact you if I do have any. Thanks, Tim

Dr. Ragen gave no indication of having received Dr. Harwood's questions or comments concerning Dr. Goodman's analysis. Dr. Ragen had shared Dr. Harwood's questions concerning Dr. Goodman critique with Dr. Becker on September 5, but did not disclosure their existence to Dr. Goodman eleven days later on September 16.

Three days later, on September 19, 2011, Dr. Becker responded to Dr. Ragen (and cc'ed NPS Dr. Allen and Mr. Press) concerning Dr. Harwood's review of the Becker et al. 2011 paper:

Here are the requested analyses and comments in response to John Harwood's review of Becker 2011. Please let me know if you need any clarification or more detail. I believe that these analyses also address the bulk of comments found in the other reviews.

Dr. Becker included an attachment (labeled: "Becker MMC Stats Review Response.pdf") that was co-authored by Dr. Becker, Mr. Press, and Dr. Allen – the three NPS scientists.

This NPS response to Dr. Harwood's critique was never provided to Dr. Goodman during the two key months of September and October 2011. Dr. Goodman was given neither Dr. Harwood's response nor Dr. Becker's response.

The September 19, 2011 response from Dr. Becker et al. was focused on Dr. Harwood's August 29, 2011 critique of the Becker et al. 2011 paper, and did not include a response to Dr. Harwood's specific comments, questions, and requests on September 2, 2011. Dr. Becker et al. did not provide point-by-point responses to Dr. Harwood's requests and questions in his September 2, 2011 email. Dr. Becker and colleagues clearly did not provide the requested re-run of Dr. Goodman's covariates using Dr. Becker's statistical model.

Nevertheless, Dr. Ragen responded in such a manner as to give the impression that Dr. Becker had indeed responded to Dr. Harwood's September 2 questions. On September 21, 2011, Dr. Ragen responded to Dr. Becker:

I have your responses. I'll be getting back to you with at least one more list of questions. I am compiling it now. I may integrate John Harwood's questions into

my next list, and might ask you to insert these responses there. I think it will be far simpler to have one set of questions and responses than multiple sets.

The key phrase is "John Harwood's questions" which appears to refer to Dr. Harwood's September 2, 2011 letter. Dr. Ragen wrote about integrating Dr. Harwood's questions into his next list with other questions, all of which would have arisen after the three August 29, 2011 critiques. Thus, Dr. Ragen's email to Dr. Becker gives the impression that he interpreted Dr. Becker's September 19 email as a response in part to Dr. Harwood's September 2 questions.

In both the NPS and MMC responses to our FOIA request, we received no other communication between Dr. Becker and Dr. Ragen that was a separate response to Dr. Harwood's September 2, 2011 email to Dr. Ragen.

Given the absence of other documents in the FOIA responses from NPS and MMC, I assume that Dr. Ragen incorrectly interpreted this September 19, 2011 email from Dr. Becker as being in part the NPS response to Dr. Harwood's September 2 response to Dr. Goodman's critique. If this is not the case, then (i) Dr. Ragen did not require that Dr. Becker respond in writing to Dr. Harwood's September 2 questions (requested on September 5), or alternatively, (ii) Dr. Becker responded by some other form of communication that was not disclosed by either NPS or MMC to our FOIA requests.

In either case, there is no evidence that Dr. Becker ever performed the precise analysis recommended by Dr. Harwood– an analysis that, if performed, would have confirmed Dr. Goodman's analysis – namely that "... the only valid conclusion is that there is no evidence for long-term displacement of seals from Drakes Estero that can be related to shellfish aquaculture."

On October 6, Dr. Goodman met with Dr. Ragen (along with Mr. Weiman and his assistant Melissa Cichantek) at his MMC office for over one hour. Dr. Goodman asked Dr. Ragen several times over the course of the conversation if he had any questions or comments concerning his critique of the Becker et al. 2011 paper, or whether he had received any responses to his critique, particularly from Dr. Harwood. Dr. Ragen answered multiple times that he had no questions and no responses (as Mr. Weiman and Ms. Cichantek can verify), with one exception.

A few weeks earlier, Dr. Ragen said that he had received a response to Dr. Goodman's critique from Mr. Bennett and Dr. Richard. They had since retracted that response and asked that it not be shared with Dr. Goodman (even though it was publicly release in West Marin – selectively – and quoted in a local newspaper). According to Dr. Ragen, just that day (i.e., October 6), he received an email from Mr. Bennett that he believed was the revised version of the retracted critiques, but he said he had not yet read them (the following day, those documents were provided).

In repeated questions from Dr. Goodman concerning Dr. Harwood and Dr. Becker, Dr. Ragen denied having received any responses or questions or comments from them, and said that he had no questions or comments from his own analysis. Two months later, on November 4, 2011, Dr. Ragen sent Dr. Harwood's September 2, 2011 email (his response to Dr. Goodman's critique) to DBOC consultant Mr. Weiman with the following note:

David, - this is another email that I couldn't find in my sent files. If I haven't sent, you should have it. Tim

Although largely a response by Dr. Harwood to Dr. Goodman's critique, and a request for further analysis, Dr. Ragen never sent this email to Dr. Goodman. Moreover, he waited until November 4 to send it to Mr. Weiman, just a few days before Dr. Ragen indicated on November 8 that he was sending his draft MMC Report out for review.

Dr. Ragen's email made it seem as if he simply forgot to send Dr. Harwood's email to Mr. Weiman, that he "couldn't find [it] in my sent files." Given the level of communication that occurred from late August through October – the sharing of everything with Dr. Becker, the private communications with Dr. Becker, and the refusal to share any questions or comments with Dr. Goodman in spite of his public promises to do so and repeated requests from Dr. Goodman -- Dr. Ragen's note to Mr. Weiman was disingenuous.

Dr. Ragen created an interesting pair of emails to make it seem as if his biased behavior was innocent. Just three minutes before sending his 12:40 pm ET email to Mr. Weiman as shown above, at 12:37 pm ET he sent another email to Mr. Weiman and wrote:

David, I couldn't find in my email records an indication that I had forwarded to you these pictures from Ben. At the risk of being redundant, I'm sending this now (possibly again). My apologies if I did not. Tim

This email included two (largely irrelevant) photographs that Dr. Becker had sent Dr. Ragen on August 19, 2011. Why did Dr. Ragen do this? Why did he realize he hadn't shared those items during those past several months? Given the many (more substantive) communications and documents between Dr. Becker and Dr. Ragen (e.g., see 1B3 below), and multiple communications and documents that were never shared, this seemed liked an odd email, and only makes sense now in the context of what was sent three minutes later – Dr. Harwood's September 2, 2011 email with his response to Dr. Goodman's critique.

All of this has the appearance of being an attempt by Dr. Ragen to cover-up his inappropriate behavior of having prevented Dr. Goodman from talking with Dr. Harwood, and then having shared Dr. Harwood's September 2 comments and questions with Dr. Becker and not with Dr. Goodman. This is just one more example of Dr. Ragen's misconduct – his violation of his own MMC policies and guidelines concerning this review.

On Sunday November 6, 2011, Mr. Weiman responded to Dr. Ragen's November 4 email concerning Dr. Harwood's response, and wrote:

Tim. Thank you for sending the September 2 Harwood evaluation of Goodman's review of Becker. I immediately forwarded it to the Lunnys and Dr. Goodman.

We find ourselves hopelessly confused by the MMC review process. Analyses of Becker, by MMC direction, were submitted on August 29. On August 30, the next day, we learned that the NPS rejected the MMC review process. NPS informed you that they would not comment on Goodman or any other analysis. And further, they would not participate in the MMC-recommended statisticians review meeting. The MMC did not offer an alternative – and we have largely been in the dark since.

We had to ask about the Gordon Bennett-Neal Desai review (after we read about it in the local papers and you were unaware that a Scientific Misconduct Complaint was filed against Kevin Lunny and Dr. Goodman). And notwithstanding requests that you address and resolve the matter, it remains unaddressed.

Then, on Friday, you provide a critique from Dr. Harwood – from September 2.

Given the lack of an identified process, and the lack of interaction with Kevin and Nancy Lunny and/or Dr. Goodman, I am compelled to ask the following:

- (1) The Harwood email to MMC on September 2 indicates that you and Harwood were about to have a telephone call to discuss his recommendations. Please provide a summary of each recommendation provided by Dr. Harwood (in addition to his email).
- (3) The email transmittal below was sent only to me. It was not sent to NPS and/or Gordon Bennett-Neal Desai. I infer that it the Harwood document was shared with them prior to November 4. To whom was this first distributed and when? Please send copies of (a) each transmittals, and (b) all responses.
- (4) Did the MMC discuss the Harwood concerns with NPS Superintendent Muldoon, Dr. Becker or others and if so, what was discussed? On numerous occasions, you indicated that all parties would get the same information at the same time. Was that policy adhered to or modified? If it was modified, when and why?
- (5) In light of the release of the Harwood paper, we are now compelled to ask what other comments, evaluations, analyses or other reports on Becker analysis have been received and ask that they all be shared immediately.

Tim, these developments are serious and require your immediate attention. Thank you. Dave W.

Even though Mr. Weiman had called these developments "serious" and requiring "your immediate attention," Dr. Ragen never responded to his email, and never answered Mr. Weiman's (highly appropriate, given the circumstances) questions. The key questions were #4 and #5 – essentially, what did NPS know, and when did they know it?

Mr. Weiman reminded Dr. Ragen that "on numerous occasions, you indicated that all parties would get the same information at the same time." He asked whether Dr. Ragen had adhered to that policy. The documents obtained by FOIA confirm that the answer is no.

It is telling that Dr. Ragen refused to tell Mr. Weiman when he had sent Dr. Harwood's September 2, 2011 email to NPS Dr. Becker, and whether NPS had responded to it. Dr. Ragen's silence spoke volumes.

As described above, on September 21, 2011, two days after receiving Dr. Becker's response to Dr. Harwood's comments, Dr. Ragen responded to Dr. Becker:

I have your responses. I'll be getting back to you with at least one more list of questions. I am compiling it now. I may integrate John Harwood's questions into my next list, and might ask you to insert these responses there. I think it will be far simpler to have one set of questions and responses than multiple sets.

This "one more list of questions" was supposedly going to include a set of seven questions for Dr. Becker sent by Mr. Lunny to Dr. Ragen on September 12 (see example #5 below) to go along with Dr. Harwood's questions, which Dr. Ragen assumed Dr. Becker had just responded to. Dr. Becker was not required to respond to either Mr. Lunny's questions or Dr. Harwood's questions. We have no record of a list of additional questions from other parties ever being forwarded to Dr. Becker for the purpose of him answering (Dr. Ragen's behavior is actually more complicated and includes another

violation of the FOIA law; see example #5 below).

Dr. Ragen suggested that Dr. Becker "insert these responses there" – in other words, put his response to Dr. Harwood into a later document. Keep in mind that Dr. Ragen, based on previous communications, thought that Dr. Becker had responded to Dr. Harwood's September 2 questions (which he had not).

Whatever the explanation, something very odd occurred on November 17, 2011. Dr. Becker resubmitted the same response (with a few small changes in individual words) that he had previously submitted two months earlier on September 19 (the attachment dated September 18). Dr. Becker wrote:

Hi Tim, See attached for requested document. Please let me know if you have questions or comments. Thanks, -Ben

The original attachment had been called "Becker MMC Stats Review Response.pdf". The new version (virtually identical) was called: "Becker Re MMC Stats Comments 11-17-2011.docx". Dr. Becker had gone to the trouble to re-name and re-date a document that he had sent to Dr. Ragen two months earlier. Why? What was the purpose?

We do know one place the re-dated November 17,2011 version was sent – to Senator Feinstein's staff on November 23.

This raises a whole series of questions. Dr. Ragen's MMC Report was finished and about to be released in a few days (November 22, 2011). Why the charade with changing the date and title? Why resend the same document when the MMC Report was finished? What were Dr. Ragen and Dr. Becker doing and why?

On this matter, I can only speculate, but these questions should be addressed by the OIG:

- Could it be that Dr. Ragen thought this was Dr. Becker's response to Dr. Harwood's questions concerning Dr. Goodman's critique?
- Could it be that Dr. Ragen already knew he had done something inappropriate back in September when he sent Dr. Harwood's September 2 email to Dr. Becker and not Dr. Goodman?
- Could it be that Mr. Weiman's November 6 email to Dr. Ragen, in which he asked what did NPS know and when did they know it, had raised Dr. Ragen's concern that his behavior was indeed inappropriate and that Mr. Weiman was probing the truth?
- Why was the document re-dated and resubmitted?
- Does it reveal that Dr. Ragen and Dr. Becker were working together?
- Does it indicate that Dr. Ragen knew MMC policies and guidelines had been violated?

Conclusions from example #2 of Dr. Ragen's public policies vs. secret actions

What do we learn from Dr. Ragen's actions over this two and one-half month period from September 2, 2011 to November 17, 2011?

• First, Dr. Ragen violated the very policies he established by inappropriately

distributing Dr. Harwood's September 2, 2011 response to Dr. Goodman's critique to NPS Dr. Becker (one business day after receiving it) but not to Dr. Goodman.

- Dr. Ragen promised all parties and elected officials (e.g., Senator Feinstein and Marin County Supervisor Kinsey) that he would treat all parties equally, would have open communication, and would share all correspondence, critiques, and documents with all parties. His public policies were in marked contrast to his private, undisclosed interactions with NPS.
- o Dr. Ragen eventually sent Dr. Harwood's September 2, 2011 response to Mr. Weiman (but not Dr. Goodman) on November 4. Dr. Ragen offered an excuse that he forgot to send Dr. Harwood's email to Mr. Weiman in a timely fashion. This explanation is not credible in light of the ongoing communications between Dr. Ragen and Dr. Becker, and the many documents not shared with Dr. Goodman or Mr. Weiman.
- Second, Dr. Ragen permitted Dr. Becker to avoid answering Dr. Harwood's September 2, 2011 questions and comments.
 - Dr. Ragen interpreted Dr. Becker's September 19 response to Dr.
 Harwood's comments as if he had responded to Dr. Harwood's September 2 questions and requests, when in fact he had not.
 - Dr. Harwood had asked that Dr. Goodman's models be re-run using Dr. Becker's statistical method. He reasoned that if Dr. Goodman's models remained superior to Dr. Becker's models, then "... the only valid conclusion is that there is no evidence for long-term displacement of seals from Drakes Estero that can be related to shellfish aquaculture."
 - Dr. Ragen never received written answers to Dr. Harwood's questions and requests. Dr. Ragen shielded NPS from Dr. Harwood's September 2 questions, never requiring a response, prior to release of the MMC Report.
 - Only for his 'private' June 17, 2012 letter to Dr. Goodman did Dr. Ragen ask Dr. Becker to partially replicate Dr. Goodman's models (although using different data and metrics). Table 2 of Dr. Ragen's letter revealed that Dr. Harwood's instincts were correct, and that Dr. Goodman's models were indeed superior to Dr. Becker's models. Thus, the correct conclusion of the MMC Report should have been, as Dr. Harwood suggested, that "... there is no evidence for long-term displacement of seals from Drakes Estero that can be related to shellfish aquaculture."
- Third, when Mr. Weiman asked Dr. Ragen on November 6 why he had not forwarded Dr. Harwood's September 2 response for two months, and what NPS knew and when they knew it, Dr. Ragen failed to respond. Dr. Ragen had been challenged for his inappropriate behavior, and he refused to answer.
- Fourth, Drs. Ragen and Becker did something odd on November 17 that is difficult to explain unless both Drs. Ragen and Becker were attempting to avoid disclosure of their September undisclosed communications between them. Dr. Becker resubmitted his September 18, 2011 document (his response to Harwood's comments) that he had previously submitted to Dr. Ragen on September 19, but he gave it a new title and a new date on the document November 17. The MMC

Report was finished and about to be released in a few days (November 22).

- Fifth, on two occasions, Dr. Goodman specifically asked Dr. Ragen if he had received any feedback from Dr. Harwood, and whether Dr. Harwood or anyone else had found errors with Dr. Goodman's report, or required any clarification or additional analysis, and Dr. Ragen responded an emphatic no.
 - o The first exchange took place in writing. On September 9, Dr. Goodman wrote to Dr. Ragen: "Have you, Dr. Harwood, or anyone else found any errors with my report, or require any clarification or additional analysis?" Dr. Ragen responded 'no.'
 - The second was in person on October 6 when, in the presence of Mr. Weiman and his assistant Ms. Cichantek, Dr. Goodman once again asked Dr. Ragen if he had received any feedback or critiques on Dr. Goodman's report, and whether he had any questions or requests for additional analysis. Dr. Ragen responded 'no.'
 - Dr. Ragen did not disclose Dr. Harwood's response to Dr. Goodman on both occasions, and was not truthful when he answered 'no.'
- Sixth, in the end, there were two faces to Dr. Ragen, one public and the other private. In public he espoused his fairness, independence, and lack of bias, while in private he maintained regular, undisclosed communications with NPS Dr. Becker in violation of the MMC rules for the review. He withheld Dr. Harwood's comments from Dr. Goodman, prevented them from speaking with one another, and when specifically asked if Dr. Harwood had sent any comments said 'no,' but Dr. Ragen sent Dr. Harwood's comments to NPS Dr. Becker.

This is a second example of Dr. Ragen's misconduct and deception. Below are further examples of Dr. Ragen's misconduct.

1B3. Dr. Ragen's asymmetric communications with NPS Dr. Becker

There is a pattern emerging from the examples provided above – the two faces of Dr. Ragen – and this section provides a third example.

As shown below, Dr. Ragen also withheld Dr. Becker's responses to Dr. Goodman's report from Dr. Goodman, and gave Dr. Goodman no opportunity to discuss or rebut these criticisms. This too violated Dr. Ragen's policies and promises, and belied his public statements that he would share all submitted comments with all parties.

There were so many private emails between Dr. Ragen and NPS Dr. Becker between August 29 (when the three critiques of the Becker et al. 2011 paper were submitted) and November 22 (when the MMC Report was released) that only some of them are shown below as a single timeline in two parts in Figure 3.

As shown below, most of the information and analyses and reports sent by Dr. Becker to Dr. Ragen were in response to specific requests from Dr. Ragen, requests that Dr. Goodman never knew about, with both questions and answers that Dr. Goodman was never privy to, and yet concerning statements and conclusions that were found throughout the final MMC Report.

(Fig 3) Ragen's com	mun	cations with NPS	Becker
Communications with Dr. Goodman, Lewis, or Lunny			Communications with NPS Dr. Becker
8/30: Ragen said he would share all —— analyses and reports with all parties	Aug	30 9/6: Becker t	o Ragen, s you asked about"
9/5: Goodman to Ragen, introduction to —— Goodman's collaborator David Lewis	Sep		o Ragen, "as you requested, op overfitted models"
9/9: Goodman to Ragen, "all of the regression analyses I ran"	Sep	10	to Ragen, "requested"
9/12: Goodman to Ragen "questions	Sep	15 /	"Harwood's response" (9/18)
or errors?any substantive issues?" / 9/12: Lewis talked to Ragen by phone,	Sep		to Ragen, "I'll call you" or redo them for tomorrow"
was brief and Ragen avoided all science 9/16: Ragen to Goodman,	Sep	25 / 9/26: Becker answers and	to Ragen, "Please see my attachments below"
"I don't have any questions at this time, but will contact you if I do have any." Note: Ragen contacted me once on 11/5	Sep		to Ragen, "Attached is a sponding to your request"
and requested analyses sent him on 9/9 10/6: Goodman/Ragen met at MMC off.,	Oct		to Ragen, "You had asked] Please see attached"
Ragen had no questions, no responses			to Ragen, "You asked for any
	Oct	15	als Here is another map" r to Ragen, "I will be away
10/23: Goodman & Lewis to Ragen, got same results from R ² & AIC methods	Oct	20 I will answer	my cell phone, though"
10/24: Lewis to Ragen, "I am travelling but can make time to talk"	Oct	10/30: Becke 25 "As you requ	r to Ragen, Jested, see attached"
10/24: Ragen to Lewis, "I'll wait until you return"	Oct	00/	r to Ragen, "please resend attachment or send to my"

	(Fig 3 cont.) Ragen's c	omm	unication	ons with NPS Becker
	Communications with Dr. Goodman, Lewis, or Lunny			Communications with NPS Dr. Becker
but these analyses sent Ragen on 9/9		30 11/4: Becker to Ragen, "attached is a file you were looking 11/5: Becker to Ragen, "Here is the means modeling you requested"		
		Nov	05	11/7: Becker to Ragen, "Here is the updated analysis you requested"
1)	Becker sent Ragen his response to "Harwood's 9/2 response" on 9/19; Ragen never shared with Goodman	Nov	10	11/7: Ragen to Becker, "use your software to rerun Corey's main analyses"
2)	Becker sent Ragen his response to Goodman's 8/29 report on 9/9;		//	11/8: Becker to Ragen, "as requested" "Here is what I could find:"
3)	Ragen never shared with Goodman Becker sent Ragen his response to Goodman's method on 9/28;	Nov	15	11/9: Becker to Ragen, "csg model replication analyses you requested"
4)	Ragen never shared with Goodman Becker sent Ragen his rerun of		1100	11/10: Becker to Ragen, "I'm attaching the requested analysis Double Point"
=1	Goodman's main analyses on 11/9; Ragen never shared with Goodman	Nov	20	11/17: Becker to Ragen, "See attached for requested document."
5)	Becker sent Ragen further analyses throughout September to November; Ragen never shared with Goodman	Nov	25	11/18: Becker to Ragen, "Here is the doc. you requested removing 2003 and 2004"
				11/22: Becker to Ragen, "Run for all 21 years without 2003-2004"
	11/22: MMC Report released	Nov	30	11/23: Becker to Ragen, "I'd like to discuss before you send out that last analysis"

Not only had Dr. Ragen told all parties involved that he would treat all parties equally and distribute all documents and critiques to everyone involved, but he made the same assertions to elected officials.

In lieu of an open public meeting to discuss the critiques of the Becker et al. 2011 paper, Dr. Ragen promised an open distribution of further responses and analyses. As shown below, Dr. Ragen did not keep that promise, but rather had a separate private channel of communication with NPS Dr. Becker.

On November 1, 2011, Dr. Ragen responded to Mr. Weiman's request (made over one month earlier) for a copy of Dr. Richard's September 13, 2011 critique of Dr. Goodman's analysis of the NPS Becker et al. 2011 paper. Dr. Ragen wrote:

David, As discussed, I have decided to send this to you and am doing so with the understanding that I won't deny any requests for other materials that people have asked me to withhold. That seems the fairest approach. Tim

While Dr. Ragen wrote to Mr. Weiman about his principles of fairness and equal access to materials, he had steadfastly ignored Dr. Goodman's requests throughout September and October – both in writing and in person – for any critiques and comments on his analysis from Drs. Harwood and Becker. Dr. Ragen was anything but fair and honest and unbiased in his responses to Dr. Goodman's requests for other materials.

As will be shown in a later section (1B5. Mr. Lunny's Questions for NPS Dr. Becker), Dr. Ragen went so far as to tell Mr. Lunny that he had not asked a specific question of Dr. Becker from Mr. Lunny, when in fact, one day after telling Mr. Lunny that he had not asked Dr. Becker to run a certain analysis (i.e., Dr. Becker's best model without the 2003 and 2004 data), Dr. Becker sent Dr. Ragen that precise analysis and wrote that it was as requested by Dr. Ragen. Dr. Becker's analysis was never shared with either Dr. Goodman or Mr. Lunny.

On September 6, Dr. Becker sent Dr. Ragen "a few things you asked about," all pertaining to specific issues raised by Dr. Goodman's report. Some of these answers effectively became part of the ultimate MMC Report. This communication was never shared with Dr. Goodman. To a large extent, these issues were never discussed with Dr. Goodman or Mr. Lunny. This is another example of undisclosed communication between Dr. Ragen and Dr. Becker.

On September 9, Dr. Becker sent Dr. Ragen "as you requested" an analysis of Dr. Goodman's models from his critique of the Becker et al. 2011 paper, and concluded that some of Dr. Goodman's models were "overfitted." The way it as written – "as you also requested, for Corey's top overfitted models (Slide #44) which were ranked with R2 …" – made it clear that Dr. Ragen and Dr. Becker previously discussed these criticisms of Dr. Goodman's models.

Dr. Ragen never shared Dr. Becker's September 9 criticisms of Dr. Goodman's models with Dr. Goodman, criticisms that Drs. Ragen and Becker had clearly already discussed by phone. There was a vibrant scientific discussion underway, but Dr. Goodman was excluded from it. Yet these were the very criticisms (the ones Dr. Goodman and Mr. Lewis were never given an opportunity to discuss and rebut) that Dr. Ragen featured in the final MMC Report in Figure 20 in which Dr. Ragen wrote (concerning Dr. Goodman's models): "The models are confounded because terms in the dependent variable are also part of the independent variable; thus the models have a built-in dependency."

Dr. Becker's word "overfitted" is another descriptor of Dr. Ragen's "built-in dependency" – they mean the same. Dr. Ragen thus dismissed Dr. Goodman's and Mr. Lewis' models without ever discussing the issues with either of them – not once. Dr. Ragen never discussed these issues with Dr. Goodman or Mr. Lewis, even though he discussed them with Dr. Becker prior to September 9, and Dr. Becker put them in writing to Dr. Ragen on September 9. Dr. Ragen never gave Dr. Goodman and Mr. Lewis an opportunity to respond, or to modify their models.

On September 12, when Dr. Goodman wrote to Dr. Ragen and asked him if there were any "questions or errors" or any "substantive issues" that had arisen, Dr. Ragen answered no. Surely the notion that Dr. Goodman's models were "overfitted" and had "built-in dependency" rose to the level of "questions or errors" or "substantive issues." After all, they were substantive enough for Dr. Ragen and Dr. Becker to have discussed, for Dr. Ragen to have requested further analysis from Dr. Becker, and that took up several pages of Dr. Ragen's final MMC Report. But they were not substantive enough to discuss with either Dr. Goodman or Mr. Lewis, even though both asked him repeatedly for feedback, criticisms, errors, and substantive issues concerning Dr. Goodman's report.

On September 13, Dr. Goodman wrote to NPS Superintendent Muldoon and asked for a "written critique of my analysis" and with which conclusions NPS disagreed. He wrote:

Is there anything in my statistical analysis that he [Dr. Becker] believes is wrong, and if so, how?

Dr. Goodman also asked to get together with Superintendent Muldoon and Dr. Becker to discuss the Becker et al. 2011 paper and Dr. Goodman's analysis of it.

On September 14, Superintendent Muldoon wrote back to Dr. Goodman, saying that this was a question "more appropriate to the ongoing work of the Marine Mammal Commission" and saying that NPS "will continue to work with Dr. Ragen as requested."

We now know that as of September 9, Dr. Becker had submitted his first of several critiques of Dr. Goodman's analysis to Dr. Ragen, but neither MMC Dr. Ragen nor NPS Superintendent Muldoon would share those critiques with Dr. Goodman. Dr. Goodman was told nothing about them. None of Dr. Becker's responses were shared with him.

On October 6, when Dr. Goodman met with Dr. Ragen in his MMC office and asked him the same questions, Dr. Ragen answered 'no.' Yet during that time, in private Dr. Ragen had a secret channel of communication with Dr. Becker about the so-called fatal errors in Dr. Goodman's analysis, errors that, once they read the publicly released MMC Report, Dr. Goodman and Mr. Lewis showed were not fatal, and were easily adjusted with minor revisions. Dr. Ragen got it wrong – but he never gave either Dr. Goodman or Mr. Lewis an opportunity to discuss these issues, and thus never allowed for open discussion, exchange, and dialogue, in violation of his Scientific Integrity Policy.

On September 28, Dr. Becker wrote to Dr. Ragen: "You had asked about r2. [R²] Please see ... attached." The "r2" refers to the statistical method Dr. Goodman had used to analyze the Becker et al. 2011 paper. Dr. Becker criticized that method, and Dr. Ragen followed Dr. Becker's lead in the final MMC Report.

Not only did Dr. Ragen never share Dr. Becker's criticism with Dr. Goodman, he also ignored the collaborative reports submitted jointly by Dr. Goodman and Mr. Lewis on both October 23 and November 6 in which they used both statistical methods in parallel (i.e., that used originally by Dr. Becker and that used by Dr. Goodman) and showed that

they both led to the same results and conclusions.

Dr. Ragen never discussed this issue or analysis with Dr. Goodman or Mr. Lewis, and he falsely concluded in his final MMC Report that Dr. Goodman used the wrong method (when in fact Goodman/Lewis had used both methods and derived the same results).

Dr. Ragen finally admitted in his 'private' June 17, 2012 letter (discussed in detail in section 5 below), in Table 2 that both methods gave the same results, even though in the text of his letter he made the same criticism of Dr. Goodman's method as he had in the MMC Report. It is difficult to determine if Dr. Ragen was deceiving the reader in the text of his letter, or if he himself did not fully understand what was presented in Table 2.

Regardless, this whole issue could have been scientifically resolved had Dr. Ragen (i) shared Dr. Becker's analysis with Dr. Goodman and Mr. Lewis (as his policy and promises dictated should have been done), (ii) read Dr. Goodman and Mr. Lewis' letters of October 23 and November 6 (which he cleared should have done), and (iii) had an open discussion of these issues with Drs. Becker and Goodman and Mr. Lewis (as dictated by his MMC Scientific Integrity Policy, and as he promised he would do with both the public and elected officials throughout his review process).

Without going into the same level of detail, I refer you to subsequent emails from Dr. Becker to Dr. Ragen (as summarized in the two parts of Figure 3), in which, throughout September to November, considerable further analysis was submitted by Dr. Becker to Dr. Ragen (never shared with Dr. Goodman). A couple of highlights are:

- On November 9, Dr. Becker sent Dr. Ragen his "csg [Dr. Goodman's initials] model replication ... analyses you requested" (never shared with Dr. Goodman),
- On November 7, Dr. Ragen asked Dr. Becker to "use your software to rerun Corey's main analyses" (neither the request nor the answer was ever shared with Dr. Goodman, even though Dr. Goodman and Mr. Lewis had already used Dr. Becker's software to rerun Dr. Goodman analyses and had reported them to Dr. Ragen on October 23 and again in more detail on November 6), and
- On November 18, Dr. Becker sent Dr. Ragen "Here is the document you requested removing 2003 and 2004" (never shared with Dr. Goodman), even though this was central to Dr. Goodman's critique of the Becker et al. 2011 paper, and was also one of the key seven questions Mr. Lunny asked Dr. Ragen to ask Dr. Becker (and that the day before November 17 Dr. Ragen told Mr. Lunny that he had not and would not ask of Dr. Becker).

Conclusions from example #3 of Dr. Ragen's public policies vs. secret actions

What do we learn from Dr. Ragen's actions over this two and one half month period from August 29, 2011 to November 22, 2011?

- First, Dr. Ragen violated the very policies he established by inappropriately asking
 for and obtaining multiple reports and analyses from NPS Dr. Becker in response
 to Dr. Goodman's August 29, 2011 critique of the Becker et al. 2011 paper, and
 not sharing them with either Dr. Goodman or his collaborator Mr. Lewis, and not
 discussing the issues arising from them with Dr. Goodman and Mr. Lewis.
- Second, when asked in writing and in person on multiple occasions (in writing on

September 9 and in person in Dr. Ragen's office on October 6 by Dr. Goodman, and separately by Mr. Lewis) if Dr. Ragen had been sent any critiques of Dr. Goodman's report, and whether any questions, errors, or substantive issues had arisen, Dr. Ragen said no. That was false. Dr. Ragen kept all of his private communications with Dr. Becker just that – undisclosed.

- Third, the very criticisms of Dr. Goodman's analysis that appeared in several pages and in Figure 20 in the final MMC Report released on November 22 were already being discussed in writing by Dr. Becker and Dr. Ragen as early as September 9, but Dr. Ragen refused to share these criticisms with Dr. Goodman or Mr. Lewis, failed to have any open discussion or dialogue, failed to provide an opportunity to rebut them, and thus published criticisms in his MMC Report that could have (and subsequently were) easily answered.
- Fourth, consider all of the key reports and documents from Dr. Becker that were never shared with Dr. Goodman:
 - Dr. Becker sent Dr. Ragen his response to "Harwood's 9/September 2 response to Goodman" on September 19, but Dr. Ragen never shared this response with Dr. Goodman,
 - Dr. Becker sent Dr. Ragen his response to Goodman's August 29 report on September 9, but Ragen never shared this response with Dr. Goodman,
 - Dr. Becker sent Dr. Ragen his response to Goodman's August 29 method on September 28, but Dr. Ragen never shared this response with Dr. Goodman,
 - Dr. Becker sent Dr. Ragen his rerun of Goodman's main August 29 analyses on November 9, but Dr. Ragen never shared this response with Dr. Goodman,
 - Dr. Becker sent Dr. Ragen his rerun of his own analysis without 2003 and 2004 on November 18 (as proposed by Dr. Goodman in his August 29 report and requested by Mr. Lunny), but Dr. Ragen never shared this response with Dr. Goodman, and
 - Dr. Becker sent Dr. Ragen further analyses throughout September to November, but Dr. Ragen never shared any of these responses with Dr. Goodman.
- Fifth, this third set of examples further supports the complaint that there were two faces to Dr. Ragen, one public and the other private. In public Dr. Ragen espoused his fairness, independence, and lack of bias, and he said he would and was sharing all documents and materials equally with all parties involved. In contrast, in private Dr. Ragen had a secret back channel of communications with NPS Dr. Becker. He withheld all of Dr. Becker's responses to Dr. Goodman's August 29 report from Dr. Goodman, many of which found there way into prominent places in the final MMC Report.
- Sixth, these emails between Dr. Ragen and Dr. Becker give us a glimpse as to the
 extent to which NPS Dr. Becker was, in effect, secretly staffing Dr. Ragen's review
 and his MMC Report. We get glimpses of what must have been extensive
 telephone conversations because everything Dr. Becker sent to Dr. Ragen he

cited "as requested" even though for very few are their records of email requests. From the outset, Dr. Ragen promised the public and elected officials that he would be fair, independent, and unbiased, and that one way to accomplish that mission was to get his own independent statistician to run all of his analysis. Dating back to February 2010, Dr. Ragen promised all parties that he would get an independent statistician to do a complete independent analysis of the data in the Becker paper. Whether he did so, we do not know. Dr. Becker performed much of the MMC 'independent' analysis.

We now know that NPS Dr. Becker essentially 'staffed' Dr. Ragen's analysis. According to FOIA materials, much of Dr. Ragen's analysis was done by NPS Dr. Becker. This analysis was not independent. Co-variants changed, metrics changed, years and data changed. By relying so heavily on Dr. Becker, Dr. Ragen effectively allowed NPS to review NPS. Today what NPS cites as the independent MMC Report was actually a self-review of NPS by NPS.

This is the third example of Dr. Ragen's misconduct and deception. Below are further examples of Dr. Ragen's misconduct.

1B4. Dr. Richard's Response to Dr. Goodman's Critique

Dr. Ragen did not share important communications from Dr. Richard (the scientist working with NPS supporter Gordon Bennett to criticize Dr. Goodman) involving responses and critiques of Dr. Goodman's analysis. On September 15, Dr. Ragen received Dr. Richard's September 13 critique of Dr. Goodman's analysis of the Becker et al. 2011 paper.

Vibrant discussions were apparently going on between Dr. Ragen and Dr. Richard, Mr. Bennett, and Mr. Desai that Dr. Goodman was unaware of. For example, Mr. Desai wrote to Dr. Ragen:

Gordon and I spoke Saturday. As follow up on a key point of Dominique's critique of Goodman and hopefully to assist your work and maybe even cut down on some potentially unnecessary analysis: R2 vs AIC is important to address, and we believe Dominique does, but the foundation is that the model should be logical. In Goodman's case, Dominique finds that the models used by Goodman are significantly flawed as he introduces a dependent variable as a covariant (making them meaningless tautologies). Thus we suggest if you look at the foundation first and concur that the models used by Goodman are flawed, the r2 vs AIC analysis is potentially unnecessary.

Mr. Desai's email suggests that two topics already under major discussion were the choice of method by Dr. Goodman (R2 vs. AIC) and the potential flaws in Dr. Goodman's models. This was yet another private conversation that Dr. Ragen was conducting concerning Dr. Goodman's analysis to the exclusion of Dr. Goodman. Dr. Ragen made mistakes concerning both of these issues in his November 22, 2011 MMC Report.

The first Dr. Goodman knew that Dr. Richard had submitted a critique of Dr. Goodman's report was not from Dr. Ragen, but rather when Dr. Goodman read about Dr. Richard's submission on September 22 in The West Marin Citizen, a local weekly newspaper. Amy Trainer, Executive Director of the Environmental Action Committee of West Marin (EAC), wrote:

According to professional statistician Dr. Dominique Richard, Goodman's latest critique of Dr. Becker's 2011 research "is fundamentally flawed and arbitrarily removes relevant data points in an attempt to explain the dynamics of the Estero seals population as merely the "work of mother nature." Dr. Richard put Goodman's approach in laymen's terms by saying "If the only tool you have is a hammer, everything looks like a nail." He also characterized Goodman's review as "deserving an F in a college level introductory statistics class" as well as an insult to the very diligent and fairly sophisticated analyses that the park provided. Dr. Richard has submitted a technical response to Dr. Goodman's critique to the Marine Mammal Commission. Dr. John Harwood, the Commission's independent statistician from Scotland, writes in the first sentence of his review of Becker's peer-reviewed research: "The analyses reported in Becker et al (2011) provide convincing evidence that the proportion of harbour seals and pups counted at the three haul-out sites closest to oyster cultivation in Drakes Estero was lower in years of high oyster production."

Both Mr. Weiman and Dr. Goodman subsequently asked Dr. Ragen for copies of Dr. Richard's critique, and Dr. Ragen turned them down, saying that Mr. Bennett and Dr. Richard did not want it released to Dr. Goodman. Mr. Weiman and Dr. Goodman found this puzzling, since Dr. Richard's critique had already been released to the EAC, publicly disclosed in the local newspaper, and used to publicly criticize Dr. Goodman (in rather derisive words including "deserving an F in a college level introductory statistics class") and yet Dr. Ragen refused to release Dr. Richard's critique to Dr. Goodman.

One week later, on September 29, Mr. Bennett formally retracted Dr. Richard's critique from Dr. Ragen (the same critique distributed to Amy Trainer, EAC).

Some of Dr. Ragen's principles were repeated on September 29, 2011 in an email to David Weiman (DBOC consultant) when he wrote concerning his conversation with Mr. Gordon Bennett and Mr. Neal Desai:

I reminded them that the Commission won't use anything they send unless it is available for all to review.

That was an excellent re-statement of Dr. Ragen's principles of inclusion and equal access. The problem is that Dr. Ragen did not follow his own principles. Much of what was submitted and discussed with Dr. Ragen by Dr. Richard, Mr. Bennett, and Mr. Desai, during September-October 2011 was not shared with Dr. Goodman.

On October 6, a few hours before meeting with Dr. Goodman, Mr. Weiman, and Ms. Cichantek in his MMC office, Dr. Ragen received from Mr. Bennett a new revised version of Dr. Richard's critique of Dr. Goodman's analysis. When they met in Dr. Ragen's office later that day, Dr. Ragen claimed he had not yet read the new critique, and did not comment to Dr. Goodman about any of the criticisms of his analysis from Dr. Richard.

Even though Dr. Richard's criticisms had already been published (without the scientific details) in the local newspaper two weeks earlier, Dr. Ragen would share none of the science and none of the statistics with Dr. Goodman. Dr. Ragen remained silent when asked by Dr. Goodman on October 6 if he had received any critiques or had been informed of errors or substantive issues.

On October 7, Dr. Ragen sent Dr. Richard's October 6 critique to Mr. Weiman who

forwarded it to Dr. Goodman (note – even though it was a critique of Dr. Goodman's analysis, Dr. Ragen did not send it directly to Dr. Goodman). Dr. Goodman and Mr. Lewis answered each and every point in Dr. Richard's critique in a lengthy letter to Dr. Ragen on October 23.

This was the same report in which they showed Dr. Ragen that they got the same results using either Dr. Becker's method (AIC) and Dr. Goodman's method (R²), a finding Dr. Ragen ignored in his final MMC Report and in his communications with the press after his MMC Report was released on November 22.

Dr. Ragen had subsequent email communications and phone calls with Dr. Richard, none of which he shared with Dr. Goodman. In late October, Dr. Ragen spoke with Dr. Richard by phone, and Dr. Ragen's notes show that Dr. Richard raised the issue of Goodman's models being flawed due to built-in dependencies (not shared with Dr. Goodman), the same criticism that Dr. Becker had made in writing on September 9 (also not shared with Dr. Goodman), and that Dr. Ragen featured in Figure 20 in his final MMC Report. This may or may not have been the October 31 phone call, as described below.

On October 31, Dr. Richard sent Dr. Ragen a more detailed analysis of Dr. Goodman's models in which he claimed to show that the models were flawed due to built-in dependencies. This analysis was never shared with Dr. Goodman, even though it is this analysis from Dr. Richard that was featured in Dr. Ragen's final MMC Report.

Also on October 31, 2011, Dr. Ragen had a phone call with Dr. Richard, Mr. Bennett, and Mr. Desai to discuss Dr. Richard's statistical criticisms of Dr. Goodman's analysis. Mr. Bennett wrote on October 29 to confirm the October 31 phone call:

Confirming Monday 10/31/11 at 2:00 PM PST.

We will have Dr. Richard on the line with us to follow up on the three statistical criticisms of Dr. Goodman's analysis that he raised in his letter (SOS-4) and any other statistical issues remaining on Becker 2011. Gordon

Neither the documents submitted by Dr. Richard in late October and early November, nor the content of their discussions about these issues, was shared with Dr. Goodman.

In contrast to what Dr. Ragen wrote to Mr. Weiman on September 29 ("... the Commission won't use anything they send unless it is available for all to review."), in fact Dr. Ragen was influenced by Dr. Richard's input and did not make it available for all to review.

On November 6, Mr. Bennett submitted yet another report from Dr. Richard to Dr. Ragen, further analyzing the errors in Dr. Goodman's analysis of the Becker et al. 2011 paper. This analysis was never shared with Dr. Goodman, and it went into even further detail on the issue Dr. Ragen featured in his final MMC Report.

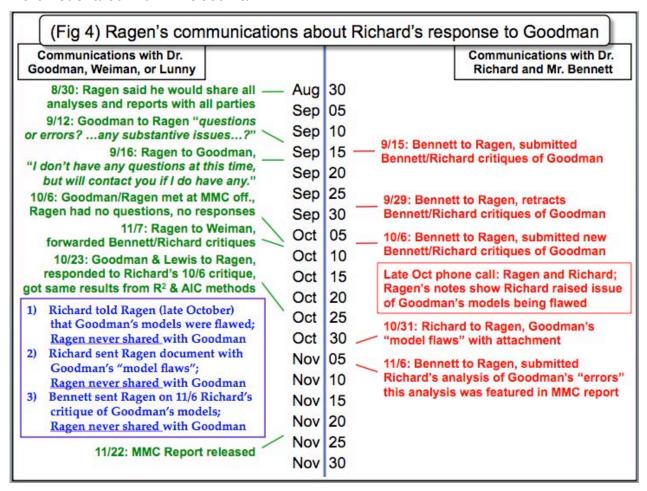
Interestingly, on November 1, 2011, Dr. Ragen finally sent Mr. Weiman the original September 15 analysis from Dr. Richard that Mr. Bennett had refused to share with Dr. Goodman. Dr. Ragen wrote:

As discussed, I have decided to send this to you and am doing so with the understanding that I won't deny any requests for other materials that people have asked me to withhold. That seems the fairest approach. Tim

Following his principles of inclusiveness, equal access, and fairness, Dr. Ragen sent Dr. Richard's September 15 critiques to Mr. Weiman (but not Dr. Goodman)

on November 1, and wrote of "the fairest approach." However, Dr. Ragen did not follow his own principles. He did not distribute Dr. Richard's October 31 and November 6 critiques, just as he did not distribute Dr. Becker's many critiques, to Dr. Goodman.

Below in Figure 4 is a timeline of Dr. Richard's communications with Dr. Ragen concerning his critiques of Dr. Goodman's analysis, critiques that in large part were not shared with Dr. Goodman.



In summary, Dr. Richard both talked to Dr. Ragen by phone in late October, and submitted several reports to him on October 31 and November 6, offering detailed statistical criticisms of Dr. Goodman's analysis. These criticisms paralleled the written comments from Dr. Becker to Dr. Ragen on September 9.

These criticisms were highlighted in Dr. Ragen's final MMC Report on November 22, 2011. None of these criticisms were ever shared with Dr. Goodman or his collaborator Mr. Lewis.

There was no open discussion, open exchange, and open dialogue, as dictated by the MMC Scientific Integrity Policy. Dr. Ragen violated his own policies and promises by not sharing and having an open discussion about these critiques. Nevertheless, Dr. Ragen featured Dr. Richard's criticisms in Figure 20 in his MMC Report on November 22, 2011.

Here is a summary of the three key critiques from Dr. Richard that were never shared with Dr. Goodman:

o Dr. Richard told Dr. Ragen (late October) that Dr. Goodman's models were

- flawed, but Dr. Ragen never shared this critique with Dr. Goodman,
- Dr. Richard sent Dr. Ragen a document on October 31 saying that Goodman's models were flawed but Dr. Ragen never shared this critique with Dr. Goodman, and
- Mr. Bennett sent Dr. Ragen on November 6 Dr. Richard's critique of Dr.
 Goodman's models, but Ragen never shared this critique with Goodman.

These examples of Dr. Ragen withholding Dr. Richard's criticisms of Dr. Goodman's analysis further support the complaint that there were two faces to Dr. Ragen, one public and the other private.

In public Dr. Ragen espoused his fairness, independence, and lack of bias, while in private he organized a channel of undisclosed communications with both NPS Dr. Becker and NPS supporter Dr. Richard. He withheld most of Dr. Richard's responses to Dr. Goodman's August 29 report from Dr. Goodman, many of which found their way into prominent places in the final MMC Report on November 22, 2011.

This is yet another example of Dr. Ragen's misconduct and deception. Below are further examples of Dr. Ragen's misconduct.

1B5. Mr. Lunny's Questions for NPS Dr. Becker

To recap: at the end of the day on August 29, 2011, the three critiques of the NPS Becker et al. 2011 paper were due in Dr. Ragen's office. All parties complied with that policy. Dr. Ragen said he would distribute all three critiques to all parties at the end of the day on August 30, 2011. Dr. Ragen publicly complied with that policy, but privately violated it. Dr. Ragen secretly sent all three reports to NPS Dr. Becker – author of the scientific paper and claims under question – on August 29, allowing NPS the right to an exclusive preview of both the Goodman and Harwood analyses.

On August 30, NPS refused to participate in an MMC-sponsored public meeting to openly discuss the NPS Becker et al. 2011 paper and the three critiques of it.

On the same day, Dr. Ragen assured Mr. Weiman that he would share all analyses and reports with all parties. He made a similar promise to Senator Feinstein's office.

On August 30, Kevin Lunny (owner, DBOC) wrote to NPS PRNS Superintendent Cicely Muldoon:

Dear Cicely, The MMC just informed us that NPS will not review Dr. Goodman's analysis and will not participate in a meeting to review the Becker paper. Is this accurate? Why? Kevin

The next day, Superintendent Muldoon responded:

Hi Kevin - The NPS is looking at all three of the reviews of the statistical analysis that Tim sent to the group yesterday, as I expect all parties involved are. Just as he did during the review period, Ben will continue to answer any remaining questions about the analysis that Tim asks as he works towards finalizing the Commission's report. I'm copying Tim on this as the MMC is referenced. Cicely

Superintendent Muldoon told Mr. Lunny that NPS would not meet publicly to discuss the NPS Becker paper, would not respond to Dr. Goodman's review (although they did so

secretly to Dr. Ragen on multiple occasions throughout September-November), and would not answer Mr. Lunny's or Dr. Goodman's questions or critique, but they would answer questions from MMC Dr. Ragen. Ms. Muldoon wrote:

"Ben [NPS Dr. Ben Becker] will continue to answer any remaining questions about the analysis that Tim [MMC Dr. Tim Ragen] asks ..."

Based upon this reply from Superintendent Muldoon, on September 12, Mr. Lunny sent the following email to Dr. Ragen with seven key questions for NPS Dr. Becker:

Dear Dr. Ragen,

On Tuesday, 8/31/11, I sent Superintendent Muldoon an email after you told us that NPS informed the MMC that NPS would not provide a review of Dr. Goodman's analysis of NPS-Becker 2011 and further, would not participate in a MMC meeting to review the statistical analysis asking if this was true.

A day later, on Wednesday, I received a reply in which Muldoon said, "The NPS is looking at all three of the reviews of the statistical analysis that Tim sent to the group yesterday, as I expect all parties involved are. Just as he did during the review period, Ben (Becker) will continue to answer any remaining questions about the analysis that Tim asks as he works towards finalizing the Commission's report."

Notwithstanding the challenges before all involved, I am encouraged that Muldoon is reassuring us that "Dr. Becker will continue to answer all additional questions…" asked by you. We ask that the MMC please submit the following questions pertaining to NPS-Becker 2011 to Dr. Becker:

- (1) I have reviewed the materials made available by NPS for the Statistical review. I was not able to locate the data cited and used in NPS-Becker 2011 for the years 1982 and 1983, 22 and 23 years before the Lunny family purchased DBOC. If the data was provided, please advise where it can be located. If it wasn't provided, why not? And if it was not provided, please provide the data from its original source.
- (2) Is your OYST independent variable on its own, when run against the proportion of pups in Drakes Estero, still statistically significant when you exclude the years 1982 and 1983? When you exclude 2003 and 2004? Or when you exclude all four years? Is this a robust model that predicts the variation in the proportion of pups at Drakes Estero?
- (3 Is your best model (OYST and Double Point seal counts), when run against the proportion of pups in Drakes Estero, still statistically significant when you exclude the years 1982 and 1983? When you exclude 2003 and 2004? Or when you exclude all four years? Do you still believe that your best model is robust in that it best predicts the variation in the proportion of pups at Drakes Estero?
- (4) Do you agree or disagree with the conclusion that there was no long-term spatial displacement of pups out of Drakes Estero, but rather a short-term transient spatial displacement of pups into Drakes Estero in 2003 and 2004? Do you agree or disagree that the marauding elephant seal at Double Point accounts for most of this spatial displacement shown in your paper, and that the oyster farm was not involved?
- (5) Did you run total regional seals against the proportion of pups in Drakes Estero? If not, why not? Did you run the proportion of pups at Double Point against the proportion of pups at Drakes Estero? If not, why not? Are these

models better or worse than your best model? How many different ways did you analyze the impact of the events at Double Point on the seals in Drakes Estero? On Table 3 you look at total seal count, whereas on Table 5 you look at pups. Did you run many possible models involving pups and seals at Double Point?

- (6) Would you please replicate Dr. Goodman's top six models and let us know if you agree or disagree that they are far superior to your best model in terms of both the adjusted R squared and the P-value. In light of Dr. Goodman's and Dr. Harwood's reports, please provide us with a corrected ranking of best models.
- (7) In light of these findings, do you stand by the title of your paper or would you revise it, and if so, how would you word it today?

We request that the MMC, as part of its on-going review, submit these questions to Dr. Becker.

Thank you,

Kevin and Nancy Lunny

Some of Mr. Lunny's questions were similar to the questions posed by Dr. Harwood to Dr. Ragen on September 2 (questions never shown to Mr. Lunny or Dr. Goodman until November 4, when the MMC Report was nearly finished). Mr. Lunny's questions were precisely the kind of specific questions that Dr. Ragen should have asked of NPS Dr. Becker. The public deserved to see the NPS answers to those questions, but Dr. Ragen refused to require NPS to do so.

Some of Mr. Lunny's questions were very similar to questions asked of Dr. Ragen a few days later on September 15, 2011 in the Senate Department of Commerce Appropriations Bill, 2012 (112-78). The Congressional language stated:

The Committee appreciates the Marine Mammal Commission's willingness to assess the 2011 statistical analysis prepared by the National Park Service [NPS] regarding the potential displacement of breeding and pupping harbor seals by shellfish aquaculture at Point Reyes National Seashore. As part of this on-going review, the Committee urges the Commission to thoroughly examine the reviews and analyses prepared by other statisticians on the NPS study to ensure a comprehensive assessment of all viewpoints. This should include a response to criticisms that the study: (1) should not have used data points for 1982–1983; (2) did not account fully for the impact of an aggressive elephant seal in the Double Point area on 2003 and 2004 harbor seal populations in Drake's Estero; and (3) did not accurately interpret aerial photographs and public health records when converting oyster harvest records to high/low values for further analysis. It also should include an analysis of the study's statistical significance if the 1982–1983 and/or 2003–2004 data are removed.

By both phone and in writing, Mr. Weiman was persistent in asking Dr. Ragen to send the questions to NPS Dr. Becker, and to ask for specific answers.

On September 16, Mr. Weiman wrote to Dr. Ragen:

Do you have a response from Ben yet?

On September 26, Mr. Weiman wrote to Dr. Ragen:

Do you have a response from Ben yet?

On September 28, Mr. Weiman wrote to Dr. Ragen:

We have not received Ben's analysis yet.

On September 28, Dr. Ragen responded to Mr. Weiman:

I haven't submitted it to them yet.

Mr. Weiman asked Dr. Ragen this same question by phone several times during October. For example, on October 24, Mr. Weiman asked Dr. Ragen by phone if he had submitted Mr. Lunny's questions to Dr. Becker, and Dr. Ragen responded 'no.'

On November 17 (6:09 am), Mr. Weiman wrote to Dr. Ragen:

Tim. You indicated that the MMC requested that Becker address the Lunny questions and that Becker had completed the analysis as requested. When we spoke on Tuesday, you stated that the NPS Becker response would be forwarded to us following the call. Please send the MMC request to Becker and the response from NPS. Thank you. Dave W.

On November 17, over two months after Mr. Lunny submitted the questions to Dr. Ragen, and just 5 days before the MMC Report was publicly released, Dr. Ragen sent answers to Mr. Lunny – answers written by Dr. Ragen and not by Dr. Becker.

Dr. Ragen let NPS Dr. Becker off the hook for many of Mr. Lunny's questions. When Mr. Lunny asked Dr. Ragen to ask NPS Dr. Becker:

Do you still believe that your best model is robust in that it best predicts the variation in the proportion of pups at Drakes Estero?

Over two months later, Dr. Ragen replied:

I believe the Park Service should be allowed to see the results of the Commission's analysis before it forms its conclusions.

In other words, the authors of the NPS paper were not asked to publicly respond to Dr. Goodman's critique and models, and would not be asked to evaluate the relative strengths of the different models. Instead, Dr. Ragen asserted, NPS "should be allowed to see the results of the Commission's analysis," an analysis that Dr. Ragen – and NPS – knew was secretly staffed by NPS. NPS was secretly helping Dr. Ragen review itself, but Dr. Ragen protected the NPS scientists from having to provide public answers to key questions.

Nothing about Dr. Ragen's process was open or transparent. Rather, his process was secretive and biased towards allowing NPS to control the assessment of its own faulty science. Dr. Ragen allowed the NPS to review the NPS.

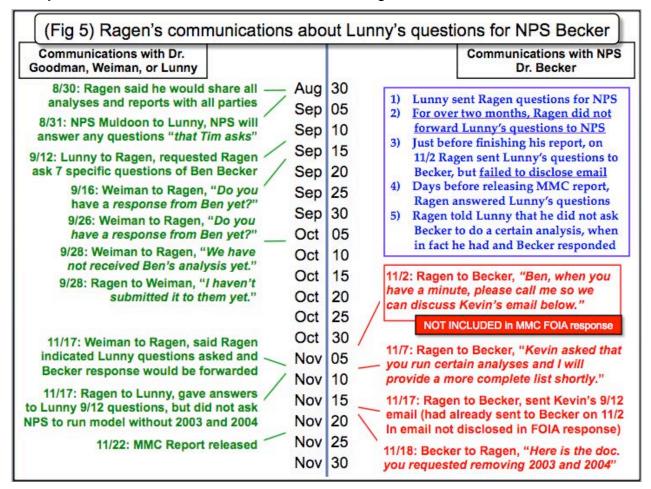
Interestingly, in Dr. Ragen's November 17 response to Mr. Lunny's September 12 questions, Dr. Ragen cites certain analyses done by NPS Dr. Becker in response to Dr. Harwood. However, Dr. Ragen did not provide some of those analyses, analyses in one case done by Dr. Becker on September 18 and submitted to Dr. Ragen on September 19. None of this was ever shared with Mr. Lunny or Dr. Goodman. In other words, analysis done by Dr. Becker and submitted to Dr. Ragen on September 19 was still not shared with Mr. Lunny on November 17.

Private communications in secret with only NPS

Concerning Mr. Lunny's seven questions from September 12, Dr. Ragen was carrying on a secret communication with NPS Dr. Becker. We do not know what was discussed by phone, but we get a glimpse of the Ragen-Becker interactions by the emails provided by

the parallel FOIA requests to MMC and NPS.

Below in Figure 5 is a timeline of communications with Dr. Ragen concerning Mr. Lunny's seven questions, showing the communications with Dr. Goodman, Mr. Weiman, and Mr. Lunny on the left, and with NPS Dr. Becker on the right.



In response to the FOIA request to MMC, Dr. Ragen included an email to NPS Dr. Becker on November 7 in which Dr. Ragen wrote to Dr. Becker:

Kevin asked that you run certain analyses and I will provide a more complete list shortly.

Keep in mind that Dr. Ragen told Mr. Weiman that the draft MMC Report was being sent out for review on the next day, November 8, so clearly, Dr. Ragen did not take either Mr. Lunny's questions, or the parallel Congressional questions, very seriously.

MMC neglected, however, to provide a key email from Dr. Ragen to Dr. Becker five days earlier, on November 2. We obtained this email from a parallel FOIA request to NPS. No reason was given as to why this email was withheld by Dr. Ragen. By withholding this key email, Dr. Ragen appears to have violated the Federal FOIA law. Dr. Ragen wrote to Dr. Becker:

Ben, when you have a minute, please call me so we can discuss Kevin's email

By "Kevin's email below," Dr. Ragen was citing Mr. Lunny's September 12 email with the seven questions for Dr. Becker. Clearly, before Dr. Ragen was going to ask those seven questions of Dr. Becker, he was going to give Dr. Becker – secretly – the right to decide

which ones to answer, and how to answer them. This email reveals that the MMC was not functioning independently, openly, without bias, and treating all parties equally and fairly. Rather, Dr. Ragen was secretly collaborating with NPS. Dr. Ragen did not provide this email in his FOIA response.

At 6:09 am on November 17, as described above, Mr. Weiman wrote to Dr. Ragen:

You indicated that the MMC requested that Becker address the Lunny questions and that Becker had completed the analysis as requested. When we spoke on Tuesday [November 15], you stated that the NPS Becker response would be forwarded to us following the call. Please send the MMC request to Becker and the response from NPS.

As best as we can tell from the email record, Dr. Ragen was not truthful with Mr. Weiman. As of November 15 (when Dr. Ragen and Mr. Weiman spoke by phone), Dr. Ragen had neither requested that Dr. Becker address the Lunny questions, nor had Dr. Becker completed the analysis requested by Mr. Lunny. The record shows that on November 2, Dr. Ragen had sent the questions to Dr. Becker and asked that he call him so they could "discuss Kevin's email ..." This is the secret email that Dr. Ragen failed to disclose in violation of the Federal FOIA law. We do not know what transpired in that phone conversation. We were given no analysis or written answers from Dr. Becker to Mr. Lunny's requests prior to November 17.

At 1:44 pm on November 17, Dr. Ragen once again sent Dr. Becker the September 12 email from Mr. Lunny with the seven questions. This email was included in response to the FOIA request to the MMC. We do not know why Dr. Ragen sent them for a second time. Four and one half hours later, Dr. Ragen sent his response to the questions to Mr. Lunny (questions asked nearly two months previously), largely letting Dr. Becker ignore Mr. Lunny requests.

On November 17, in response to Lunny's question #3 from September 12, Dr. Ragen wrote:

Lunny question #3: (3) Is your best model (OYST and Double Point seal counts), when run against the proportion of pups in Drakes Estero, still statistically significant when you exclude the years 1982 and 1983? When you exclude 2003 and 2004?

Ragen answer #3: I did not ask the Park Service to run this model because I do not see a basis for removing 2003 and 2004 when it can be explicitly modeled as per Dr. Harwood's suggestion. [bold added for emphasis]

Dr. Ragen did not tell the truth to Mr. Lunny. As obtained under FOIA, the next day, on November 18, Dr. Becker sent just this requested analysis (i.e., excluding 2003 and 2004) to Dr. Ragen with the note:

"Here is the document you requested removing 2003 and 2004."

Dr. Becker's requested analysis (i.e., excluding 2003 and 2004) did not support Dr. Becker's 2011 paper, Dr. Becker's models, and the conclusions in the upcoming MMC Report. Dr. Ragen suppressed Dr. Becker's analysis. Dr. Ragen told Mr. Lunny that he had not asked Dr. Becker to conduct the analysis, when in fact he had done so.

In summary:

• Dr. Ragen refused to let Dr. Goodman and Dr. Harwood directly communicate with one another to discuss their critiques and the analysis of the data (August 31).

- NPS refused to publicly respond to Dr. Goodman's critique of the Becker 2011 paper, refused to participate in a public meeting to discuss the paper and critiques, but said it would respond to questions sent to it from Dr. Ragen (August 31).
- As a result, Mr. Lunny submitted seven questions for NPS Dr. Becker to Dr. Ragen (September 12). At the time, little did Mr. Lunny know that Dr. Ragen would not submit the questions to Dr. Becker in a timely fashion (i.e., while the MMC Report was being written during September and October) and would allow Dr. Becker to avoid responding altogether.
- The Senate, in the Department of Commerce Appropriations Committee Report, asked similar questions of Dr. Ragen, which, to my knowledge, were also not answered.
- Mr. Weiman asked over and over again for Dr. Ragen to submit the questions to Dr. Becker (September to November).
- For nearly two months, Dr. Ragen did not ask Dr. Becker the questions submitted by Mr. Lunny (September 12 to November 2).
- Dr. Ragen secretly sent Mr. Lunny's questions to Dr. Becker and asked to discuss them with him (November 2). He gave Dr. Becker the opportunity to decide how MMC should handle Mr. Lunny's questions for NPS.
- Dr. Ragen apparently violated the Federal FOIA law by withholding this email an email that shows Dr. Ragen's undisclosed communications with Dr. Becker.
- Dr. Ragen told Dr. Becker that he would send Mr. Lunny's questions (November 7) on the even of sending his draft MMC Report out for review (November 8).
- Dr. Ragen sent his own answers, not Dr. Becker's answers, to Mr. Lunny's questions on November 17, just six days before public release of the MMC Report.
- Dr. Ragen said he had not asked Dr. Becker to run his analysis without 2003 and 2004 (November 17). On the very next day (November 18), Dr. Becker sent just such an analysis to Dr. Ragen, writing "here is the document you requested removing 2003 and 2004." Clearly the analysis had been requested. That document was hidden and Dr. Ragen told Mr. Lunny that he had not requested it because it did not support Dr. Becker's analysis or the MMC Report conclusions. Dr. Ragen suppressed the results of this analysis, results that did not support the NPS correlation and the MMC Report support of that correlation.

These examples show how Dr. Ragen made sure that Dr. Becker either was not asked to answer Mr. Lunny's questions (and parallel questions from Congress), or suppressed Dr. Becker's answers that did not support either Dr. Becker or the MMC Report. This example further supports the complaint that there were two faces to Dr. Ragen, one public and the other private.

In public Dr. Ragen espoused his fairness, independence, and lack of bias, while in private he had a secret back channel of communications with NPS Dr. Becker. Dr. Ragen protected NPS Dr. Becker from publicly answering Dr. Goodman's questions, Mr. Lunny's questions, or Congressional questions.

This is yet another example of Dr. Ragen's misconduct and deception. Below are further examples of Dr. Ragen's misconduct.

1C. Dr. Ragen Assured Elected Officials That He would be Fair and Would Discuss Substantive Issues with Dr. Goodman and Mr. Lewis

Throughout August, September, and October, members of Senator Feinstein's staff told me that Dr. Ragen had assured them that he would be fair, unbiased, independent, and would discuss all substantive issues with Dr. Goodman and Mr. Lewis. Just the opposite happened. Below are some excerpts of what Dr. Goodman wrote to members of the Senator's staff on October 27:

September 6: [the Senator's staff] assured me that Ragen promised them that he would be fair, would read my review and ask me questions, would ask for clarification, would share any criticisms of my review and let me respond, and would reach out to both me and David Lewis (Director of U.C. Cooperative Extension Marin, the scientist who had independently -- at the request of Supervisor Steve Kinsey -- reviewed and supported my analysis and conclusions). At the time, I told you that I was concerned that Ragen didn't understand the statistics, didn't read what I sent to him, was intimidated by me, and appeared to be talking with NPS Dr. Ben Becker and the NPS supporters but not to me. With regret, that concern was correct and Ragen's promises to you were broken (see below).

The rest of September: I never heard from Ragen. Ragen never asked a single question. ...

September 12: David Lewis told me that Ragen had called him, that they had a pleasant, short conversation, but that Ragen had avoided all discussion of science, statistics, data, and conclusions. Ragen told Lewis that if he had any questions, he would call Lewis back. He never did. Lewis told me he was concerned that Ragen was avoiding the science and substance.

October 6: at around 5 pm that day, I met with Tim Ragen at his office, along with Dave Weiman and his assistant Melissa Cichantek. Ragen told me that he received an email with an enclosure earlier that day from Gordon Bennett and that is was likely to be a new version of Richard's review, but Ragen had not yet read the email or opened the enclosure. I ask Ragen if he had any questions about my analysis. He says that he did not. I asked him if he would have any questions. He was non-committal. Ragen declined to engage on the science. Ragen asked no questions about my analysis. He said he had another statistician looking at it, but refused to say who or how. He said that his final report would likely be critical of both my review and Becker 2011, but he refused to say how it would be critical of my review, what was wrong with my review, and he refused to commit to allowing me to respond to any criticisms on my review. As we were standing up to shake hands and say goodbye, Ragen said in passing that he was struggling with trying to resolve the difference between the AIC analysis done by Becker and the adjusted R squared analysis done by me (two different methods of analyzing a set of variables). I said that my two consultants -- the Stanford statistician [name withheld to protect privacy] and the UC Davis statistician [name withheld to protect privacy] -- had both told me, given the simple data set, that multiple linear regression (MLR) was fine for this analysis and would give the same result as AIC. Regardless, I reminded Ragen that we had done both

analyses -- that David Lewis had done the GLM analysis using AIC (just as the Becker 2011 paper) and that it gave rise to the same conclusions as my MLR analysis using adjusted R squared. Ragen asked no questions. He mentioned he had talked to David Lewis. What he didn't mention was that he had avoided all science and substance when he talked with David Lewis. It was clear to me that Ragen did not understand the statistics, and that someone had planted a seed with him that I had done the wrong analysis (I had not, of course). I couldn't engage Ragen in the science and substance. He asked no questions.

October 24: David Lewis wrote to Tim Ragen and offered to talk to him by phone about our response and analyses, even though Lewis was traveling all week. Ragen responded by thanking Lewis and saying he would wait until the following week. Interestingly, on the same day, Tim Ragen told Dave Weiman that he planned on submitted his report to his panel on Friday October 28, before he had even talked with David Lewis. In other words, it became clear to David Lewis and me that Tim Ragen had no intention of talking with either one of us about the science and substance.

October 24: Dave Weiman talked to Tim Ragen by phone. ... Ragen had no questions or comments about my analysis, the rebuttal to it, or my response with David Lewis. He told Weiman that he had not read most of what had been sent to him. Nevertheless, he planned on filing his report on Friday October 28 with his panel. He once again told Weiman that everyone was at fault, and everyone was wrong in one way or another. Finally, when Weiman asked him whether he had submitted Kevin Lunny's September 12 question to Dr. Becker, Ragen said he had not.

Dr. Ragen made similar assurances to Marin County Supervisor Steve Kinsey during September. Rather than share any of the emails from the Senator's staff or Supervisor's staff in this public document, I encourage the DOC OIG to interview both offices to learn what Dr. Ragen told them about his process, and what assurances he gave them.

1D. Dr. Ragen Did Not Treat All Parties Equally While Having Biased Interactions with NPS

This assertion is supported by the five examples in 1B1-5 above. Further examples will be provided during interviews and fact-finding.

1E. Dr. Ragen Did Not Conduct an Independent Review of NPS Data and Analysis

This assertion is supported by the five examples in 1B1-5 above. Further examples will be provided during interviews and fact-finding.

2. Dr. Ragen Changed MMC Terms of Reference Without Disclosure or Discussion

2A. Changed Scope, Title, and Purpose of MMC Report

After the MMC agreed to conduct an investigation of the marine mammals in Drakes Estero, it's first tasks were to assemble a panel and prepare a Term of Reference (scope of work). The Terms of Reference (TOR) was circulated to all parties, including NPS, the NPS supporters (i.e., the petitioners), and Mr. Lunny, and went through several iterations.

On July 21, 2010, the MMC circulated its proposed Terms of Reference and stated:

"Although we plan to "finalize" the terms of reference document in the next two weeks, it will remain a working document and may require modification as the review proceeds. However, as we are doing now, we intend to consult with you about any changes that are made throughout the process."

Dr. Ragen distributed the final MMC Drakes Estero Report Terms of Reference for the MMC review on Drakes Estero on January 19, 2010, a month in advance of the four-day MMC panel meeting. Dr. Ragen established specific procedures for review developed with input from all parties, backed by the promise to consult with all parties if a modification was required.

Dr. Ragen held a MMC panel meeting (February 21-24, 2010) and solicited panel reports (spring 2010) in accord with MMC policies and Terms of Reference.

Dr. Ragen and his staff promised all parties that any changes to the Terms of Reference or the scope of the MMC process would be discussed and reviewed with all parties. Nevertheless, at the conclusion of the process, Dr. Ragen made significant changes to the overall scope of the MMC process without disclosure.

In January, 2010, after extensive discussions with all parties – NPS, DBOC, Dr. Goodman, NPCA's Neal Desai and then Sierra Club Representative, Gordon Bennett – the MMC approved the title for their investigation and review:

"Review of Harbor Seal and Human Interactions, Drakes Estero, California."

On November 22, 2011, the MMC released its report, but the title was changed to:

"Mariculture and Harbor Seals in Drakes Estero in California."

The term "human interaction" was deleted and "mariculture" was added. In so doing, MMC altered the entire framework of this report. All parties were never consulted about this change in the title of the review.

MMC also altered the scope of the work in the review. The MMC Report, on the very first page, stated:

"The present report by the Marine Mammal Commission addresses the first issue only, and only as it pertains to potential mariculture effects on harbor seals. Other human activities in the estuary affect harbor seals, and those activities also warrant review and appropriate management. In fact, the terms of reference for this review (Appendix A) indicate that the Commission's original intent was to conduct a broader review. However, as the review proceeded, it became clear that the primary question, strongly contended, is whether mariculture has affected or

is affecting the seals. The Commission therefore sharpened the focus of its review on the potential effects of mariculture on harbor seals."

The MMC decision to alter the title and change the entire scope of the study was not disclosed to DBOC or Dr. Goodman.

On November 10, 2009, the MMC sent a letter to all parties (NPCA's Neal Desai, Sierra Club's Gordon Bennett, DBOC, Marin County Supervisors Kinsey and Adams, and others that stated:

Dear All, As you are aware the Marine Mammal Commission is moving ahead with its review of harbor seal interactions with aquaculture and other human activities in Drake's Estero, California. Since the Executive Director and Assistant Scientific Program Director visited Point Reyes National Seashore in August, we have formed a steering committee, drafted terms of reference for the review, and selected a review panel. Please find attached the DRAFT terms of reference that outlines the scope and planned execution of the review.

Although we plan to "finalize" the terms of reference document in the next two weeks, it will remain a working document and may require modification as the review proceeds. However, as we are doing now, we intend to consult with you about any changes that are made throughout the process.

MMC pledged to consult with the parties if changes were made to the "Terms of Reference" (scope of work). The scope was changed, but the promised disclosure was not forthcoming.

The change in the Title and Scope of the MMC review was profound and substantive. As a practical matter, this meant that MMC excluded more than 99% of the known disturbances as set forth in the NPS Inventory and Monitoring Harbor Seal Database and elected to study less than 1% of the NPS "claims" of disturbances.

The narrow scope was initially requested by NPCA, the Sierra Club and NPS. After significant discussion during the Fall, 2009, the scope was broadened to include all human interactions with the harbor seals. MMC panel members, in their statements (MMC Report, Appendix F) repeatedly referenced other impacts to marine mammals. The MMC Report does not fulfill its obligations pursuant to its original Terms of Reference. In the end, Dr. Ragen did exactly what the NPS and their supporters had wanted from the outset – he narrowed the title and scope – but he did so without the promised disclosure and discussion.

Dr. Ragen changed the formal Terms of Reference (TOR) without disclosure, in violation of MMC rules, including changing the name, scope, and structure of the MMC Report, and how he used the reports from the panel members (June 2010 to November 2011).

2B. Accepted Lack of Disclosure of Key Data and Paper by NPS

The MMC Terms of Reference and policies established for the MMC review by Dr. Ragen included the agreement that NPS would provide all data and analysis to MMC. NPS violated that MMC policy on multiple occasions, but Dr. Ragen did not address these violations in the final MMC Report.

Dr. Ragen accepted the discovery of the undisclosed NPS secret cameras, 271,000 photographs, and the details NPS logs of those photos without participation of his MMC

panel members (June 7, 2010 to November 2011). Dr. Ragen did not actively request full disclosure, and did not question why NPS had not disclosed the cameras and photos to MMC, given that the MMC had asked for all of the data, was told in writing NPS had given MMC all the data, and panel members had specifically suggested such a camera during the public panel meeting (February 2010). The final MMC Report (November 22, 2011) made no mention of the fact that the NPS had failed to disclose the cameras and photos to the MMC, even though Dr. Ragen made use of the photos in his MMC Report.

Dr. Ragen also accepted the lack of disclosure by NPS of the submission and ultimate publication of the NPS Becker, Press, and Allen 2011 paper. When an earlier version of the paper – Becker et al. 2010 – was presented to the panel members at the MMC panel meeting in February 2010, both Dr. Ragen and panel members told NPS that their analysis was flawed, and recommended that NPS not publish the paper.

On June 28, 2010, Mr. Weiman wrote to Dr. Becker, Mr. Press, and Dr. Allen, and copied Superintendent Muldoon, and asked:

All. Several weeks prior to the four days of MMC meetings last Fall, David Graber submitted your new report, Becker III [Becker et al. 2010]. It was peer reviewed. Has this paper or report been submitted to a professional journal, or do you plan to do so? If so, please identify that journal. Thank you. dave w.

On the same day (June 28, 2010), Dr. Becker (copying Mr. Press, Dr. Allen, and Ms. Muldoon) responded:

Hi Dave W., Assuming you mean the Becker et al. 2010 report, no, we haven't submitted it to a journal and don't plan to until we hear back from the Marine Mammal Commission's peer review process. Best, -Ben

Dr. Ragen reported to Mr. Weiman that he had told NPS again over the summer of 2010 not to submit the Becker et al. paper for publication. As the email above shows, NPS Dr. Becker told Mr. Weiman on June 28, 2010 that they would not submit the paper until after the end of the MMC review process.

Nevertheless, without telling either the MMC or Mr. Lunny, the NPS scientists submitted their paper for publication on October 14, 2010. Revisions to the paper were submitted on February 15, 2011. The paper was accepted for publication on February 28, 2011. Dr. Ragen and the MMC were not told. DOI Field Solicitor Gavin Frost (conducting an investigation of NPS science at the time) was not told. Mr. Lunny was not told.

Although the data and analysis remained largely identical between the 2010 version of the paper (Becker et al. 2010) and the 2011 publication (Becker et al. 2011), the title changed from suggesting a correlation to claiming causation.

The original title of this paper, as submitted to Dr. Tim Ragen, Executive Director, Marine Mammal Commission (MMC), on February 6, 2010 by NPS Dr. Dave Graber, in preparation for the February 21-24 MMC panel meeting, was:

"Spatial use of Drakes Estero, California, by harbor seals correlated to anthropogenic disturbance and natural variation during 1982-2009"

The title as submitted on October 14, 2010 and published online on April 4, 2011 in *Aquatic Conservation: Marine and Freshwater Ecosystems* journal:

"Evidence for long-term spatial displacement of breeding and pupping harbour seals by shellfish aquaculture over three decades"

The same data that were presented as a correlation in February 2010 became a causation when submitted for publication in October 2010. The title started as a correlation of spatial use and then was changed to "evidence for long-term spatial displacement" by mariculture activity.

When these data were first presented by Dr. Ben Becker to the Marine Mammal Commission panel at their February 21, 2010 meeting, there was much discussion by MMC panel members concerning why the NPS scientists should be careful to not conclude causation from their multi-variant correlative statistics. The NPS scientists were cautioned not to jump to conclusions about causation. The NPS scientists were cautioned not to publish the paper. But they did so without telling Dr. Ragen and the MMC, or Field Solicitor Gavin Frost.

We learned of the publication of the NPS Becker et al. 2011 paper by reading about it in The West Marin Citizen newspaper on April 7, 2011. Amy Trainer, Executive Director of the Environmental Action Committee of West Marin (EAC), disclosed the publication of the Becker et al. 2011 paper in a guest column in the newspaper.

Mr. Weiman notified Dr. Ragen of the publication the next day – on April 8, 2011. Dr. Ragen said he was surprised, and admitted to Mr. Weiman that he knew nothing about the paper having been either submitted, accepted, or published. Dr. Ragen repeated to Mr. Weiman that he had cautioned NPS against publishing the paper.

Dr. Goodman notified Field Solicitor Gavin Frost about the publication of the Becker et al. 2011 paper. Mr. Frost acknowledged that he knew nothing about the paper. Mr. Frost said he asked for all data, reports, and publication when he interview the NPS scientists in early December 2010, and they had failed to give him a copy of the Becker et al. 2011 paper which was already out being reviewed. NPS, Mr. Frost told Dr. Goodman, had not been honest with him, and had failed to disclose this paper.

3. Dr. Ragen Violated the Federal Freedom of Information Act (FOIA)

3A. Failed to Disclose and Release Key Communications and

3B. Failed to Provide Basis for Failing to Disclose & Release Key Communications

On February 13, 2012, Cause of Action, an independent 501(c)(3) public interest group based in Washington, DC, with assistance from Dr. Corey Goodman, submitted parallel FOIA requests to both the MMC and the NPS asking for all communications between MMC Dr. Ragen and NPS Dr. Becker from June 1, 2011 to the present (February 2012). On March 19, 2012, the MMC responded to that FOIA request. The NPS responded to the parallel FOIA request around the same time.

Most of the emails and documents provided by MMC and NPS concerning communications between MMC Dr. Ragen and NPS Dr. Becker over the same time period were identical. Several key communications, however, from Dr. Ragen to Dr.

Becker were provided by NPS, but were withheld, without disclosure or explanation, by MMC, in apparent violation of the Federal FOIA law.

As described in detail in section 1B1 above, Dr. Ragen failed to provide several key transmittals from Dr. Ragen to Dr. Becker on Monday, August 29, 2011. These were not random communications. They did not represent a trivial oversight. Rather, these key communications revealed that Dr. Ragen was violating his own policies, and was conducting a second, secret line of communication with NPS Dr. Becker.

Dr. Ragen provided some – but not all – of the emails and communications and communications between himself and NPS Dr. Becker. In violation of the Federal FOIA and the President's policy on transparency (January 21, 2009), Dr. Ragen failed to provide certain key communications by withholding and not disclosing documents that revealed his double standard. We only learned about these communications from the NPS response to a parallel FOIA request.

The MMC neither acknowledged the existence of these communications nor provided a reason for withholding them. Disclosure that documents were being denied was not provided as required by FOIA. The MMC response was omission by silence. Dr. Ragen failed to provide or disclose the following.

At 7:27 pm ET on Monday August 29, Dr. Ragen sent to Dr. Becker via YouSendIt Dr. Goodman's file entitled "analysis of Becker 2011.CSG.part1.pdf" with the note (not disclosed in Dr. Ragen's response to the FOIA request):

"Ben, these two files from Corey are the last of the three reviews"

At 7:31 pm ET, Dr. Ragen sent Dr. Becker part 2 of Dr. Goodman's analysis with the note (not disclosed in Dr. Ragen's response to the FOIA request):

"Ben, second part of Corey's analysis"

At 7:36 pm ET, Dr. Ragen sent Dr. Becker the following with subject "Corey's analysis" (not disclosed in Dr. Ragen's response to the FOIA request):

"Ben, I sent you two files using YOUSENDIT. Let me know if you don't get them. Thanks"

Then finally, at 7:40 pm ET, Dr. Ragen sent a note to all parties telling us (this note was disclosed in Dr. Ragen's response to the FOIA request):

Hi All, Thanks, All, for getting me your analyses. I will send you a plan for our next steps tomorrow morning. Best, Tim

What is most remarkable about this timeline is that it reveals that around 7:30 pm on Monday evening, August 29, 2011, Dr. Ragen was conducting two simultaneous email conversations – the two faces of Dr. Ragen were communicating nearly simultaneously:

- the first openly with all parties (consistent with the rules Dr. Ragen had established for the review, and
- the second secretly with NPS Dr. Becker (inconsistent with his MMC rules and policies).

Dr. Ragen appears to have violated FOIA by withholding key documents and failing to disclose specific key emails and communications documenting his secret communications with Dr. Becker, namely, his inappropriate release of Dr. Goodman's

analysis to NPS Dr. Ben Becker on August 29, 2011.

Dr. Ragen failed to provide or disclose another key email sent by him to NPS Dr. Becker. On September 12, 2011, Mr. Lunny had sent a series of seven questions to Dr. Ragen, and asked Dr. Ragen to forward them to Dr. Becker and request answers to all seven. For over six weeks, Dr. Ragen failed to do so.

Finally, on November 17, just six days before the public release of the MMC Report, Dr. Ragen sent Mr. Lunny answers to his questions – written by Dr. Ragen and not Dr. Becker. Many of his answers were simply reasons why he never asked the questions of Dr. Becker.

It winds up that Dr. Ragen did send the questions to Dr. Becker on November 2, and asked him to give Dr. Ragen a call to discuss them. This is another example of Dr. Ragen was secretly working with Dr. Becker.

MMC neglected to provide that key email from Dr. Ragen to Dr. Becker on November 2. We obtained this email from a parallel FOIA request to NPS. No reason was given as to why this email was withheld by Dr. Ragen. By withholding this key email, Dr. Ragen appears to have violated the Federal FOIA law. Dr. Ragen wrote to Dr. Becker:

Ben, when you have a minute, please call me so we can discuss Kevin's email below.

By "Kevin's email below," Dr. Ragen was citing Mr. Lunny's September 12 email with the seven questions for Dr. Becker. Clearly, before Dr. Ragen was going to ask those seven questions of Dr. Becker, he was going to give Dr. Becker – secretly – the right to decide which ones to answer, and how to answer them. This email reveals that the MMC was not functioning independently, openly, without bias, and treating all parties equally and fairly. Rather, Dr. Ragen was secretly collaborating with NPS. Dr. Ragen withheld this email and knowledge of its existence.

In summary, Dr. Ragen withheld key communications from both August 29, 2011 and November 2, 2011. The emails and transmittals withheld by Dr. Ragen – and not disclosed by him – were discovered in a response from NPS to a parallel FOIA request.

These were not random emails or transmittals. They were central communications in which Dr. Ragen violated the very policies he and the MMC established for this review.

In withholding these emails and transmittals, Dr. Ragen appears to have violated the Federal FOIA law, and to have broken the President's policy on openness and transparency in government.

4. Dr. Ragen Violated MMC Scientific Integrity Policy

4A. Did Not Follow Open Discussion, Open Dialogue, Open Exchange

This assertion is supported by the five examples in 1B1-5 above. Further examples will be provided during interviews and fact-finding.

4B. Undermined and Avoided Meetings to Discuss Data and Analysis

This assertion is supported by the five examples in 1B1-5 above. Further examples will

5. Dr. Ragen Failed to Properly Disclose Reversal of Key Conclusion of MMC Report

5A. Reversed MMC Support of Key NPS Paper In a 'Private' Letter and

5B. Concealed Reversal Within Claim that Key MMC Conclusion Was Unchanged

Dr. Ragen's MMC Report was released on November 22, 2011. Dr. Goodman and Mr. Lewis were excluded, contrary to MMC policy, from the announced MMC process for several months leading up to the release of the report, neither being asked questions nor being part of any open scientific discussions.

When the MMC Report was released, Dr. Goodman and Mr. Lewis immediately recognized that it was full of errors, omissions, and misrepresentations. At the request of Marin County Supervisor Kinsey (who originally asked both Dr. Goodman and Mr. Lewis to get involved in this issue), Dr. Goodman and Mr. Lewis wrote two detailed critiques, and submitted them to Dr. Ragen one week later on November 29, 2011. Dr. Goodman's third critique was dated January 6, 2012.

On December 14, 2011, Dr. Ragen wrote and agreed to meet with Dr. Goodman and Mr. Lewis to discuss their comments on the MMC Report. Dr. Goodman and Mr. Lewis immediately responded and asked to make sure that NPS Dr. Becker was also present at the meeting, since Dr. Becker prepared most if not all of the statistical analysis for Dr. Ragen.

Dr. Goodman and Mr. Lewis had limited discussions with Dr. Ragen over the next few months, and those discussions were limited strictly to process and not substance. Dr. Ragen never engaged them in a single substantive discussion about the science, the analysis of the NPS data, or their critiques of Dr. Ragen's MMC Report. The promised meeting with Dr. Ragen and Dr. Becker never took place. Dr. Ragen once again allowed NPS to veto a MMC-sponsored meeting for open discussion of the science.

Dr. Ragen told Dr. Goodman and Mr. Lewis that NPS refused to meet with them. Without Dr. Becker, Dr. Ragen would not meet with them alone. Why couldn't Dr. Ragen meet alone and defend his own MMC Report? Why did he need NPS Dr. Becker to be present?

By February, Dr. Ragen said he would not meet with Dr. Goodman and Mr. Lewis, but rather would send them a written response. Before the release of Dr. Ragen's June 17, 2012 letter, the last they had heard from Dr. Ragen was on March 20 (a three-month gap in communication). It is now clear that Dr. Ragen's ultimate written response relied heavily on further analysis and input from Dr. Becker.

On Sunday June 17, 2012, six months after Dr. Goodman and Mr. Lewis submitted their critiques to him, Dr. Ragen sent what he called a 'private' letter to Dr. Goodman (not Mr. Lewis), undated and not on letterhead, in response to the Goodman-Lewis critiques

(November 29, 2011 and January 6, 2012) of Dr. Ragen's MMC Report on Drakes Estero (November 22, 2011).

In his June 17 'private' letter to Dr. Goodman, Dr. Ragen acknowledged – in a disguised and all but invisible fashion – that new analysis by NPS Dr. Becker led him to reverse the major conclusion of his November 22, 2011 MMC Report and thus refute the major conclusion of the NPS Becker, Press, and Allen 2011 paper.

In a 20-page 'privte' letter to Dr. Goodman, Dr. Ragen acknowledged that there was not sufficient evidence to support the NPS correlation claimed in the Becker et al. 2011 paper that mariculture activities are spatially displacing harbor seals out of Drakes Estero.

In a dramatic reversal, Dr. Ragen agreed with what Dr. Goodman and David Lewis (Director, U.C. Cooperative Extension) told him for nearly one year in their critique of the Becker paper – namely, that NPS does not have evidence to support the NPS conclusion in their peer-reviewed paper published in a scientific journal.

It would be very difficult if not impossible for anyone not familiar with the data, analysis, and context to recognize Dr. Ragen's reversal in his June 17, 2012 letter, but it is there on page 2 and in Table 2 on page 4. The Appendix attached here describes that reversal in detail.

In brief, the NPS Becker, Press, and Allen 2011 paper claimed to have conclusive "evidence" to prove that as oyster farm activity increased, harbor seals were spatially displaced out of Drakes Estero. The paper not only claimed strong evidence for this correlation, but also concluded evidence for causation as well.

For the previous year, Dr. Goodman and Mr. Lewis contended that there was insufficient evidence to conclude that oyster farm activity had displaced seals. The Goodman-Lewis analysis of the NPS data compelled them to conclude that there was insufficient evidence to prove causation, and insufficient evidence to prove a meaningful correlation of oyster activity with seal distribution.

Rather, the NPS data revealed that the transient increase in the total regional seal population and a random, lethal event at Double Point had transiently displaced seals into Drakes Estero. Dr. Goodman and Mr. Lewis showed that statistical models relying on these forces of nature were superior to Becker's best models relying on an artificial and inaccurate categorical designation of oyster farm activity called OYST Hi/Low in the Becker paper.

In simple terms, acts of nature caused the harbor seals to increase in Drakes Estero in 2003 and 2004, and then return to baseline in 2005 and thereafter. NPS decided to 'blame' the oyster farm for the return to baseline in 2005. Given their open opposition to the oyster farm, NPS used 'science' to advance their political and policy agenda that was otherwise unsupportable.

In the MMC Report, although acknowledging that the data were "scant and have been stretched to their limit," Dr. Ragen nevertheless accepted that the NPS data provide support for the NPS correlation.

In his June 17, 2012 'private' letter, six months after Dr. Goodman and Mr. Lewis submitted a critique challenging that main conclusions from Dr. Ragen's November 22, 2011 MMC Report, Dr. Ragen reversed himself (something the reader would only know if

they read the text carefully, examined the tables in detail, and understood the implications).

For the first time, on page 2 and in Table 2 on page 4, Dr. Ragen acknowledged that:

- a model relying on total regional seal population and the lethal event at Double Point is better than models relying on oyster farm activity (without acknowledging that this is not our best model, but rather our 7th best model in statistical ranking);
- "the Double Point event and regional population size may have had a significant influence on harbor seals in Drakes Estero,"
- the OYST Hi/Low categorical variable may have had "a potential influence," and
- "the results are not proof of a correlation."

Concluding that "the results are not proof of a correlation," that the regional population size and Double Point event (i.e., the forces of nature) "may have had a significant influence," and that the OYST Hi/Low variable may have had "a potential influence" is a far cry from concluding, as he did in the MMC Report, that the NPS data provide support for the OYST Hi/Low NPS correlation.

If the NPS "evidence" is that weak, then the Becker 2011 paper – which went beyond proof of correlation to claim causation – should never have been published (and should now be retracted) and the MMC Report should have simply concluded that the data are too scant and thin to draw any meaningful conclusions concerning the oyster farm activity.

Moreover, had Dr. Ragen properly tested and ranked the Goodman-Lewis six best models, rather than the Goodman-Lewis 7th best model as was done in Table 2, his conclusions would have been stronger and less ambiguous – the ranking would have shown seven models that were superior to any of Becker's OYST Hi/Low models.

These data and further analysis should have led Dr. Ragen to conclude that the evidence provides support for regional seal population and the lethal event at Double Point having had a significant influence on harbor seals in Drakes Estero, and moreover, that it is impossible to ascertain whether oyster activity does or does not have any additional influence on the distribution of harbor seals in Drakes Estero.

In December 2011, Congress directed the National Academy of Sciences (NAS) to review the NPS science as presented in the DEIS. Dr. Ragen was invited and participated in the July 11, 2012 NAS panel meeting, but he failed to disclose the MMC reversal sent to Dr. Goodman only a few weeks prior. Numerous NPS staff participated in the NAS meeting as well, and they too failed to disclose the analysis by NPS Dr. Becker that led to the reversal in Dr. Ragen's letter.

In light of these revelations, we must now consider the November 22, 2011 MMC Report on Drakes Estero to be fatally flawed, and the main conclusion to be incorrect. Dr. Ragen reversed himself based upon NPS Dr. Becker's analysis of the Goodman-Lewis models. Both he and NPS know that the MMC Report is fatally flawed.

Dr. Ragen's letter was written in such a way that the lay public would not be expected to ferret out the scientific truth – namely, that Dr. Ragen reversed the major conclusion of his MMC Report.

Dr. Ragen's June 17, 2012 'private' letter contained significant errors, omissions, and misrepresentations, as well as gratuitous, unsubstantiated, and personal criticisms aimed at discrediting his major critic – Dr. Goodman. This was unbecoming behavior for the Executive Director of the Marine Mammal Commission.

Most importantly, Dr. Ragen's June 17, 2012 letter contained a reversal of the major conclusion in his MMC Report.

Dr. Ragen's June 17, 2012 letter, although disguised as a criticism (of the Goodman-Lewis critiques of the MMC Report), was actually in agreement with the Goodman-Lewis critiques and their models, and contained a reversal of the major conclusion from Dr. Ragen's MMC Report and the NPS Becker et al. 2011 paper concerning the evidence that oyster farm activity led to a spatial displacement of harbor seals in Drakes Estero.

Dr. Ragen's June 17, 2012 letter offered new NPS analysis in Table 2 on page 4 (and described in a paragraph in the middle of page 2). This new analysis effectively nullified any notion of evidence or proof of the correlation between oyster farm activity and harbor seals in Drakes Estero as concluded in the NPS Becker 2011 paper, and the acceptance of that correlation by Dr. Ragen in the MMC Report.

Causation was gone. Strong support for the NPS correlation was similarly gone. While selecting his words carefully, Dr. Ragen essentially said so in the middle of page 2 of his letter.

5C. Dr. Ragen's June 17, 2012 'Private' Letter Belied the MMC Scientific Integrity Policy

In hindsight, the timing of Dr. Ragen's letter (six months after the Goodman-Lewis critiques) coincided with the announcement of the NAS panel and panel meeting – designed to review the NAS science in the DEIS.

Dr. Ragen said his letter was 'private', not for public distribution, and not to be shared with others. He told Mr. Weiman, DBOC consultant, that he "wanted to keep it contained" and would not send it to Mr. Weiman or Mr. Lunny. He indicated that, once sent, he would not further correspond on this issue, but would turn to other matters and signaled that this was his last word on the subject.

Dr. Ragen's assertion about the privacy of his June 17, 2012 letter – and his admonishment that Dr. Goodman not respond – was inconsistent with his actions. Without disclosure to Dr. Goodman, less than 21 hours after sending his private letter to Dr. Goodman, at 8 am the next morning (Monday June 18, 2012), Dr. Ragen sent the letter to NPS Superintendent Cicely Muldoon. History tells us that sending it to Ms. Muldoon was tantamount to a public release of the letter less than one day after sending it to Dr. Goodman as a 'private' letter.

One day later, on June 19, Neal Desai (National Parks Conservation Association or NPCA) submitted a FOIA for documents including Dr. Ragen's private letter. Whereas MMC responses to FOIA requests, in our experience, take more than one month and are transmitted by MMC's General Counsel, the MMC response to Mr. Desai's FOIA was transmitted by Dr. Ragen himself the following week.

You can imagine Dr. Goodman's surprise to discover that Dr. Ragen's 'private' letter was

public within less than one day and, within a few weeks, NPCA's Mr. Desai submitted it to the NAS panel. Mr. Desai submitted Dr. Ragen's letter at the very end of their panel's public comment period, ensuring that Dr. Goodman and Mr. Lewis would be denied an opportunity to respond. Regardless of intent, this constituted a manipulation of the scientific record and a distortion of the 'scientific information' available to the NAS panel.

Although Dr. Ragen said he would neither discuss the private letter with Dr. Goodman nor respond to correspondence from him, Dr. Ragen's behavior was quite different in regard to the press. While not discussing the science with Dr. Goodman, he gave interviews to the press about his letter – interviews with people who did not understand statistics and certainly would not be prepared to ferret out deceptions or misrepresentations, if such existed.

Given the technical nature of many of the issues raised in Dr. Ragen's letter, and the difficulty of critically analyzing his letter in isolation without the context of the key papers, reviews, reports, and critiques that came before the letter, it has been nearly impossible for laypeople to see through the strong, assertive language and to ferret out the deceptions and misrepresentations – and major reversal – in his letter.

Given the misleading nature of Dr. Ragen's letter, and the manner in which the 'private' letter was immediately circulated, we are compelled to ask: for whom was it written, and was it truly intended to be a 'private' letter? The manner in which Dr. Ragen publicly released it – a letter he told Mr. Weiman was 'private' and not to be distributed – is inappropriate for the Executive Director of a federal science-based agency.

Although Dr. Ragen has claimed repeatedly since 2009 that the MMC under his leadership is science-based, and that the MMC conducted an independent analysis, his actions (and reliance upon NPS Dr. Becker for much of his analysis) reflect a bias and preoccupation with protecting the NPS scientists – and his relationship with NPS – at the expense of good science, and at the expense of truth.

Since last August 25, 2011, Dr. Ragen refused over and over again to talk with Dr. Goodman or Mr. Lewis about the science, notwithstanding repeated written requests to meet, review, evaluate, and analyze the issues raised in our critiques. Dr. Ragen certainly did not talk with Dr. Goodman or Mr. Lewis about their original August 29, 2011 reviews, their October 23 or November 4 supplemental reviews, or their November 29 critiques of Dr. Ragen's MMC Report. Most recently Dr. Ragen announced he would not speak with them about his June 17, 2012 letter. Throughout this same period of time, he talked to NPS and their supporters repeatedly, as documented in this complaint. And he talked to the press.

Dr. Ragen's conduct undermined his MMC Scientific Integrity Policy that promised open discussion, open dialogue, and open exchange. Dr. Ragen's scientific integrity policy assured the White House of "honest investigation, open discussion, refined understanding, and a firm commitment to evidence." Dr. Ragen wrote: "the Commission actively seeks input from and open dialogue among all parties engaged in all issues ..." Furthermore, Dr. Ragen wrote that the MMC seeks "open exchange of information and viewpoints ..." Dr. Ragen's actions belied the MMC scientific integrity policy that he filed with the White House OSTP.

5D. Role of NPS Becker 2011 paper and MMC Report on NPS EIS

The NPS Drakes Estero Draft Environmental Impact Statement (DEIS) was released in September 2011 and was over 700 pages in length. It addressed fourteen areas of potential environmental impact. It had very scant data demonstrating actual impacts. Two of the few places in which the DEIS claimed to have data or evidence for impacts are the soundscape and the harbor seal sections. The soundscape section of the DEIS has come under intense scrutiny and criticism in both the August 2012 NAS Report and in an ongoing DOI OIG investigation.

The harbor seal analysis in the DEIS cited and depended upon the validity of the conclusion in the NPS Becker 2011 paper (i.e., the correlation of oyster activity with harbor seal distribution). The NPS has announced that the final EIS will rely on the MMC Report acceptance of the correlation in that paper as its peer review and validation.

We now know that the central issue of the harbor seal analysis – the evidence for a correlation between oyster activity and harbor seal distribution, is incorrect, in that, based upon new analysis by NPS Dr. Becker, Dr. Ragen concluded in his June 17, 2012 'private' letter that there is no proof of a correlation. Dr. Ragen overturned the NPS correlation and the MMC Report's support of that correlation. These new revelations are central to the NPS EIS, and the NPS reliance upon the MMC Report to validate their conclusion.

Concerning harbor seals, the NPS DEIS stated:

"In a recent review of the long term data at Drakes Estero, Becker, Press, and Allen (2011) used a model-based approach to show that harbor seals preferentially use haul-out sites less when located near active oyster mariculture sites during years of high vs. low oyster harvest."

The Becker 2011 paper asserted NPS had "evidence" showing the oyster farm caused a spatial displacement of harbor seals out of Drakes Estero. The paper was entitled:

Evidence for long-term spatial displacement of breeding and pupping harbour seals by shellfish aquaculture over three decades

The NPS Becker 2011 paper is cited in the DEIS as the basis for claiming that the oyster farm has a moderate negative impact on the harbor seals in Drakes Estero.

Since the release of the MMC Report, the NPS announced that it plans to attach the MMC Report to the final EIS and to cite it in the EIS. The NPS did not ask Atkins to review the harbor seal section of the DEIS because it claimed that the MMC Report served as that peer review. The MMC Report is thus part of the NAS review of the DEIS.

The November 22, 2011 MMC Report concluded:

"The Marine Mammal Commission believes that the data supporting the above analyses are scant and have been stretched to their limit. Nevertheless, the analyses in Becker et al. (2011) provide some support for the conclusion that harbor seal habitat-use patterns and mariculture activities in Drakes Estero are at least correlated."

This was Dr. Ragen's key conclusion in his report. Dr. Ragen accepted the NPS correlation that increased oyster activity led to a displacement of harbor seals out of Drakes Estero.

In Dr. Ragen's June 17, 2012 letter, he reverses this conclusion and states:

"The results (Table 2) indicate that the Double Point event and regional population size may have had a significant influence on harbor seals in Drakes Estero. The results also identify the oyster low/high variable as a potential influence. Given the uncertainty associated with the analyses, the results are not proof of a correlation, but they also do not provide a basis for dismissing such a relationship."

As described in detail in the Appendix attached here, this carefully worded statement from Dr. Ragen reverses the major conclusion of his MMC Report. More background and context is required to understand the reversal. The Appendix describes how this statement, and Table 2, in Dr. Ragen's letter reversed the major conclusion of the MMC Report and refuted the conclusion of both correlation and causation in the NPS Becker paper.

One final note about the NPS data and metrics. The data and metrics keep changing in various NPS and MMC reports and letters. The only data in their entirety that are publicly available are those that were used in the NPS Becker 2011 paper. At the very end of the MMC Report, and now in Dr. Ragen's June 17, 2012 letter, the NPS switched from maximum counts over the three-month pupping season to mean counts over a one-month period, and have included an additional year, and made other adjustments.

These changes are not trivial, and led to significant shifts in the ranking and relative strengths of the various NPS models. Since we (i) do not have those data, (ii) were asked to review the Becker paper, and (iii) it is the Becker paper that is cited in both the MMC Report and the DEIS, we have continued to use that NPS dataset (provided to us by Dr. Becker) as the basis for our analysis.

5E. Conclusions From Dr. Ragen's June 17, 2011 'Private' Letter

The attached appendix offers a detailed analysis of Dr. Ragen's June 17, 2012 'private' letter to Dr. Goodman, along with its implications for the MMC Report and the pending NPS EIS. Ten conclusions follow from this analysis of Dr. Ragen's letter.

- 1) The NPS Becker, Press, and Allen 2011 paper claimed to have conclusive evidence to prove that as oyster farm activity increased, harbor seals were spatially displaced <u>out</u> of Drakes Estero. The paper not only claimed strong evidence for this correlation, but it went so far as to conclude evidence for causation as well.
- 2) Since August 2011, Dr. Goodman and Mr. Lewis contended that there was insufficient evidence to conclude that oyster farm activity had displaced seals. Rather, they concluded that the transient increase in the total regional seal population and a random, lethal event at Double Point had transiently displaced seals into Drakes Estero. They showed that statistical models relying on these forces of nature were superior to Becker's best models relying on an artificial, categorical designation of oyster farm activity called OYST Hi/Low.
- 3) In the MMC Report, although acknowledging that the data were "scant and have been stretched to their limit," Dr. Ragen nevertheless accepted that the NPS data provided support for the NPS correlation.
- 4) In Dr. Ragen's June 17 'private' letter to Dr. Goodman, Dr. Ragen reversed his

major conclusion in the MMC Report. For the first time, on page 2 and in Table 2 on page 4, he acknowledges that:

- a model relying on total regional seal population and the lethal event at Double Point is better than models relying on oyster farm activity (without acknowledging that this is not our best model, but rather our 7th best model in statistical ranking);
- b. "the Double Point event and regional population size may have had a significant influence on harbor seals in Drakes Estero,"
- c. the OYST Hi/Low categorical variable may have had "a potential influence," and
- d. "the results are not proof of a correlation."
- 5) Concluding that "the results are not proof of a correlation," that the regional population size and Double Point event (i.e., the forces of nature) "may have had a significant influence," and that the OYST Hi/Low variable may have had "a potential influence" is a far cry from concluding, as he did in the MMC Report, that the NPS data provide support for the OYST Hi/Low NPS correlation.
- 6) If the evidence is that weak, then the NPS Becker 2011 paper which went beyond proof of correlation to claim causation – should never have been published (and should now be retracted) and the MMC Report should have simply concluded that the data are too scant and thin to draw any meaningful conclusions concerning the oyster farm activity. The MMC Report should be revised and rereleased.
- 7) Had Dr. Ragen properly tested and ranked the Goodman-Lewis six best models, rather than the Goodman-Lewis 7th best as was done in Table 2 of his June 17 letter, his conclusions would have been stronger and less ambiguous the ranking would have shown seven models that were superior to any of Becker's OYST Hi/Low models.
 - a. These data and further analysis should have led Dr. Ragen to conclude that the evidence provides support for regional seal population and the lethal event at Double Point having had a significant influence on harbor seals in Drakes Estero, and
 - that it is impossible to ascertain whether oyster activity does or does not have any additional influence on the distribution of harbor seals in Drakes Estero.
- 8) Dr. Ragen participated in the July 11 NAS panel meeting, but he failed to disclose the MMC reversal. Numerous NPS staff participated in the NAS meeting as well, and they too failed to disclose NPS Dr. Becker's analysis and reversal.
- In light of these revelations in Dr. Ragen's June 17, 2012 'private' letter to Dr. Goodman, the November 22, 2011 MMC Report should be retracted, revised, re-reviewed, and re-released.
- 10) In light of these revelations in Dr. Ragen's June 17, 2012 'private' letter to Dr. Goodman, the NPS Becker et al. 2011 paper should be retracted. Moreover, the harbor seal section of the NPS EIS should not cite either the Becker et al. 2011

paper or the MMC Report. There is no scientific evidence for an environmental impact of the oyster farm on the harbor seals in Drakes Estero. This should be clearly stated in the NPS EIS.