Investigative Report of Drakes Bay Oyster Company Environmental Impact Statement

Report Date: February 7, 2013

This is a version of the report prepared for public release.

SYNOPSIS

On May 2, 2012, the Office of Inspector General (OIG) initiated an investigation based on allegations against unnamed employees from the National Park Service (NPS) and NPS contractor Vanasse Hangen Brustlin (VHB) of misconduct, scientific misconduct, and fraud, waste, and abuse. The complainant, an elected member of the National Academy of Sciences (NAS) and adjunct professor at a California university, alleged that either NPS or VHB altered, concealed, or unfavorably misrepresented soundscape data in a draft environmental impact statement (DEIS) that was prepared jointly by NPS and VHB to address environmental impacts for the potential issuance of a special use permit (SUP) to Drakes Bay Oyster Company (the Company). The data in question led to the assessment of the Company's oyster farming equipment as having a "major" impact on the soundscape within the Point Reyes National Seashore.

Included in the allegations of misrepresented data were claims that NPS and VHB failed to use the "best science available" when selecting proxy data to represent the Company's equipment and how NPS was required to collect actual noise emissions from Company equipment. The complainant claimed draft edits and revisions were performed with the intent to deceive the public, peer reviewers, and decisionmakers. The complainant also alleged that NPS and VHB staff engaged in misconduct and/or scientific misconduct. Specifically, the complainant alleged that NPS influenced decisions over where to place ambient sound level collection devices in Drakes Bay, influenced VHB to report unfavorable findings, and deviated from soundscape management regulations and policies. In addition, he alleged NPS and VHB staff failed to recuse themselves from the DEIS project, despite the appearance of conflicts of interest. Finally, the complainant alleged the deceptive information in the DEIS constituted fraud; the complainant, as well as the Company's owner, also claimed the institution of the EIS process in order to issue an SUP was unwarranted and therefore wasted taxpayer funds.

We found no evidence, documents, DEIS revisions, or witnesses that supported the complainant's allegations.

The results of this investigation were reported to the NPS Director.

BACKGROUND

Point Reyes National Seashore

The Point Reyes National Seashore (Point Reyes) Act was signed into law by President John F. Kennedy on September 13, 1962, making Point Reyes the third of 14 National seashores eventually added to the National Park System.[1] The intent of Congress in the passage of the Act was to preserve the diminishing coastal shoreline. As a National seashore, Point Reyes is managed by NPS and is considered to be one of the most geologically and ecologically diverse National parks in the NPS system.

[1] "Final Environmental Statement, Proposed Wilderness Point Reyes National Seashore," prepared by the Department of Interior, National Park Service, Western Regional Office, April 23, 1974.

Point Reyes National Seashore Wilderness Plan and Act

The National Wilderness Preservation System (NWPS), which was created subsequent to the Wilderness Act of 1964, establishes a process for congressional designation of future acreage of land within the National Parks and wildlife refuges.[2] The NWPS directs Federal land management agencies to survey their territory and submit their recommendations to Congress as to which land qualifies for consideration as wilderness designation. Congress maintains the power to bypass agency recommendations and make independent decisions.

In conformance with the NWPS, Stuart Udall, then Secretary of the Interior, directed NPS to evaluate "potential wilderness" designations of all suitable areas of 5,000 or more continuous acres in all existing NPS units.[3] Based on Secretary Udall's directive, NPS studied Point Reyes to determine the suitability of designating any of its land as wilderness. In 1973, NPS submitted its Wilderness Plan for Point Reyes to Congress with a recommendation to designate 10,600 acres within Point Reyes as wilderness under the NWPS. The plan states: "In terms of preserving and protecting marine life systems, Drakes Estero and Limantour Estero could well be considered the most significant ecological units within the [National] seashore."[4]

On October 20, 1976, the Point Reyes Wilderness Act (Public Law 94-567) was signed into law by President Jimmy Carter, which designated much of Point Reyes' coastal land and water as wilderness.[5] In addition, it expanded Point Reyes' boundaries to include an added 25,370 acres of designated wilderness, as well as identified an additional 8,003 acres as "potential wilderness."

Potential wilderness is defined as "lands that are surrounded by or adjacent to lands with the wilderness designation but that do not themselves qualify for immediate designation due to temporary, nonconforming, or incompatible conditions."[6] According to NPS 2006 Management Policies for Wilderness Preservation and Management § 6.3.1., potential wilderness areas are required to be managed under the same guidelines as wilderness areas to the extent that existing nonconforming conditions allow.

The potential wilderness designated lands within Point Reyes includes the waters of Drakes Estero and the adjoining intertidal land upon which the Company currently operates as a commercial oyster business.[7] While most of Drakes Estero has been designated or converted to

[2] Public Law 88-577, also known as the Wilderness Act, was signed into law by President Lyndon B. Johnson on September 3, 1964. This legislation not only protected over 9 million acres of Federal land throughout the United States, it also provided a legal definition for the term "wilderness" as "an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain." (House, "Point Reyes National Seashore Wilderness Act," 94th Congress, 1976, Public Law 94-544 (accessed March 21, 2008); available from Congressional Universe.)

[3] "Digest of Federal Resource Laws of Interest to the U.S. Fish and Wildlife Service" (accessed March 24, 2008); available from http://fws.gov/lawsdigest/WILDRNS.HTML.

[4] "Final Environmental Statement, Proposed Wilderness Point Reyes National Seashore," prepared by the Department of Interior, National Park Service, Western Regional Office, April 23, 1974.

[5] House Report (Interior and Insular Affairs Committee) "Point Reyes National Seashore Act" No. 94-1680, September 24, 1976 (To accompany H.R. 8002) and Public Law 94-544, http://www.nps.gov/pore/parkmgmt/upload/lawsandpolicies_publiclaw94_544.pdf.

[6] NPS Management Policies Manual, § 6.2.2.1, 2006.

[7] Field Solicitor, Office of the Solicitor, San Francisco, California, "Point Reyes Wilderness Act," to Superintendent, Point Reyes, February 26, 2004.

wilderness status, the acreage used by the Company remains potential wilderness because the cultivation of oysters for food was a nonconforming use of a wilderness area, which is allowed to operate in Point Reyes until its reservation of use and occupancy (RUO) agreement with NPS expires on November 30, 2012. The Department of Interior (DOI) Office of the Solicitor has expressed that according to the Wilderness Act, once the RUO expires, NPS must convert the Company and Estero tracts to wilderness as soon as possible.

History of the Drakes Bay Oyster Company and Point Reyes

Soon after Point Reyes was officially added to the National Park System, NPS officials began the task of acquiring tracts of lands designated as wilderness areas from private entities that owned land within Point Reyes' boundaries. The three primary methods by which NPS purchased this land included outright purchase, acquisition of titles with reservations for ranchers to continue working the land, and exchange of Federal lands of equal value elsewhere in California or an adjacent State.[8]

After a decade of negotiations, Charles W. Johnson, then the owner of the Johnson Oyster Company, sold 5 acres of onshore property located within Drakes Estero to NPS in 1972. As a condition of this sale, Johnson agreed to operate under an RUO. The agreement allowed him to retain the right to use and occupy 1.5 acres and to continue oyster-farming operations. The RUO would be in place for 40 years, expiring on November 30, 2012.[9] NPS RUOs are deeded interests in the real estate and by policy cannot be renewed beyond their expiration dates.[10] In 2005, Johnson assigned the right of the remaining years in this RUO agreement to Kevin Lunny, who purchased the oyster farm and renamed it Drakes Bay Oyster Company.[11]

Environmental Impact Statement Compliance

The National Environmental Policy Act (NEPA) (42 U.S.C. § 4321 et seq.) was signed into law on January 1, 1970. NEPA establishes National environmental policy and goals for the protection, maintenance, and enhancement of the environment and provides a process for Federal agencies to implement these goals. Title I of NEPA contains a "Declaration of National Environmental Policy," which requires the U.S. Government to use all practicable means to create and maintain conditions under which man and nature can exist in productive harmony. Section 102 requires Federal agencies to incorporate environmental considerations in their planning and decisionmaking. Specifically, all Federal agencies are to prepare detailed statements assessing the environmental impact of and alternatives to "major Federal actions" significantly affecting the environment. These statements are commonly referred to as environmental impact statements (EISs). According to the Council on Environmental Quality (CEQ), the primary purpose of an EIS is to serve as an action-forcing device to ensure that NEPA policies and goals are infused into the ongoing actions of the Government. An EIS provides full and fair discussion of significant environmental impacts and informs

[8] Paul Sadin, "Managing a Land in Motion: An Administrative History of Point Reyes National Seashore," NPS, October 2007, 129.
[9] NPS, "Tracts Conveyed Between 01/01/1950 and 05/20/2003 for Point Reyes NS," computer run date April 20, 2003, I, File L1425 Land Acquisition Priority List and LWC Fund Calls, Land Files, CCF, Point Reyes.
[10] NPS Director's Order No. 25: Land Protection, dated January 19, 2001.
[11] NPS Grant Deed with Johnson Oyster Company, dated November 9, 1972.

decisionmakers and the public of reasonable alternatives that would avoid or minimize adverse impacts or enhance the environment.[12]

Before NPS can issue a new special use permit (SUP) to the Company, which is viewed as a major Federal action by NEPA standards, NPS is required to comply with the NEPA process and conduct an EIS to assess environmental impacts of the Company's operations within Point Reyes.[13]

CEQ regulations address how NPS should collect information for the EIS. Specifically, the CEQ addresses issues of "Incomplete or Unavailable Information" in 40 C.F.R. § 1502.22, which states:

> When an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an environmental impact statement and there is incomplete or unavailable information, the agency shall always make clear that such information is lacking.
>
> (a) If the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the environmental impact statement.

In addition, NEPA guidance for the EIS process (40 C.F.R. §1502.24), regarding "Methodology and Scientific Accuracy," states: "Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements. They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement."

Consistent with NEPA, NPS Director's Order 12 mandates that every Federal agency prepare an in-depth study of the impacts of "major Federal actions having a significant effect on the environment" and propose alternatives to those actions. Order 12 further requires that each agency make the information an integral part of its decisions. In addition, Director's Order 12 defines purpose, need, and objectives to assist in the development of a range of alternatives, one of which becomes the "preferred" alternative or the environmentally preferred alternative at the conclusion of the analysis process. This "preferred alternative" is then identified in either an environmental assessment or EIS before it is released to the public for review and comment.[14]

In addition, NPS Director's Order 47 provides NPS with operational policies under NEPA that require the protection, maintenance, or restoration of the natural soundscape resource to a condition unimpaired by inappropriate or excessive noise sources. The order requires park planning efforts to—

[12] CEQ Regulations for Implementing NEPA for EISs.
[13] NEPA EIS Guidance, 40 C.F.R. Part 1500.
[14] NPS Director's Order No.12, Conservation Planning, Environmental Impact Analysis, and Decision-making.

1. describe the baseline natural ambient sound environment in qualitative and quantitative terms;
2. identify sound sources and sound levels consistent with park legislation and purposes;
3. identify the level, nature and origin of internal and external noise sources;
4. articulate desired future soundscape conditions; and
5. recommend the approaches or actions that will be taken to achieve those conditions or otherwise mitigate noise impacts.[15]

According to Order 47, ambient sounds attributable to human activities in National parks are defined as human-made sound. In a National park setting, these sounds may be associated with activities that are essential to the park's purpose, they may be a byproduct of park management activities, or they may come from outside the park. It is these sounds and sound levels that need to be measured and evaluated in park planning processes to determine whether they are consistent with or detrimental to soundscape management objectives.

The Drakes Bay Oyster Company Environmental Impact Statement

On February 26, 2004, the DOI Field Solicitor's letter expressed his interpretation of the Wilderness Act and the Point Reyes Wilderness Act regarding the designated potential wilderness areas of Drakes Estero. In the solicitor's opinion, NPS did not possess the authority to renew an RUO for continued oyster fishing operations within Point Reyes based on the intent of the aforementioned Acts. In addition, he felt NPS was required to "actively seek to remove from potential wilderness the temporary, nonconforming conditions that preclude wilderness designation."

In May 2009, the National Academy of Sciences (NAS) conducted a review of environmental reports for Point Reyes and concluded that there was no scientific evidence that the Company had major adverse ecological effects on Drakes Estero. The NAS review did not address soundscape or the impacts of sound in their report. In October 2009, Senator Diane Feinstein's (D-CA) rider in DOI's appropriations bill authorized the Secretary of the Interior to decide whether or not to issue a new SUP to the Company for a period of 10 years, with the same terms and conditions as the existing authorization, while taking into consideration NAS' 2009 recommendations.

In January 2010, NPS' Environmental Quality Division (EQD) began planning with NPS' Inter-disciplinary Team (IDT) at Point Reyes to determine the need and scope of the Company EIS. One of EQD's roles is to manage all of NPS' complex or controversial environmental issues. EQD and Point Reyes staff held internal scoping meetings in July 2010 to determine the need and scope of the EIS, while the General Schedule contract was advertised and contractors submitted bids for the project. No documentation from these scoping meetings suggests that sound or soundscape issues were predicted to be major impacts in the EIS, aside from sound being one of 30 general areas of consideration listed on NPS' Environmental Screening Form and addressed in the scoping meetings. In August 2010, VHB was awarded the Company EIS project. Immediately after the award, VHB, NPS, EQD, and Point Reyes staff began conducting

[15] NPS Director's Order No. 47, Soundscape Preservation and Noise Management.

additional internal scoping meetings. In addition to the scoping meetings, VHB attended site visits with Point Reyes staff members on October 2010 and February 2011, where VHB representatives made observations and solicited information from the Company pertinent to performing the EIS.

In October 2010, VHB assisted Point Reyes staff members present the EIS process in public scoping meetings and solicited input and feedback from the public in order to address all potential concerns pertaining to the SUP for the Company. Between January and May 2011, VHB began circulating internal copies of draft EIS chapters to the IDT and EQD members, where numerous comments, edits, and revisions were made. These chapter revisions were in preparation of circulating a complete internal draft EIS to cooperating agencies. In June 2011, the complete draft EIS was sent to all cooperating agencies as a non-public, internal draft for their review and edits. In September 2011, the first public version of the draft was circulated and public feedback was solicited; during the public review process, more than 52,000 comments were received from supporters as well as those who opposed issuing an SUP to the Company. The September 2011 draft identified two areas that were assessed as having major impacts on the Seashore using thresholds ranging from negligible, minor, moderate, to major; the two areas assessed as major were soundscape and socioeconomic.

From January to February 2012, NPS contractor Atkins North American, Inc. (Atkins), performed an independent peer review of DEIS's scientific/data driven chapters, specifically Chapter 3, "Affected Environment," and Chapter 4, "Environmental Consequences"; Atkins examined the "scientific and technical information and scholarly analysis presented in the document" to determine appropriateness and reasonability of the information. In March 2012, Atkins published its peer review report stating that the DEIS was "well-written with adequate analysis and use of best available scientific information." Atkins pointed out that the socioeconomic analysis did not reflect the best available science, but that in general, the DEIS as a whole contained appropriate analyses and there was "no fundamental flaw with the larger scientific underpinning of the DEIS." The discrepancies identified by Atkins were created by a lack of appropriate citations, and were "for the most part minor, and can be rectified if the NPS so wishes."

In March 2012, the complainant submitted his allegation of scientific misconduct and misconduct against NPS and VHB to DOI's Scientific Integrity Office (SIO). SIO and OIG agreed to conduct a joint investigation of the allegations, where OIG would focus on the misconduct aspects and SIO would assess the scientific misconduct claims. In accordance with the DOI Departmental Manual, part 305, the complainant was asked to provide additional biographical details as well as evidence supporting his allegations. In late April 2012, the complainant subsequently resubmitted an additional complaint in which he questioned SIO's integrity and claimed the SIOs had conflicts of interest. The departmental SIOs assigned to investigate the scientific misconduct allegations recused themselves and the scientific misconduct allegation was referred to OIG.

In its Consolidated Appropriations Act of 2012 (P.L. 112-74), Congress directed NAS to "assess the data, analysis, and conclusions in the DEIS in order to ensure there is a solid scientific

foundation for the Final Environmental Impact Statement expected in mid-2012."[16] In May 2012, NAS announced its initiation of a review of the DEIS as well as the peer review conducted by Atkins.

Previous Allegations and OIG Investigations

A 2007 OIG investigation[17] determined that Point Reyes staff published a report[18] on Drakes Estero containing several inaccuracies regarding the ecological impact of the non-native oyster's and their sedimentation's effect on the Estero's vegetation and fish species and how the Company's boat operations impacted the harbor seals. After receiving information from the complainants, NPS removed the report from its Web site and posted an "acknowledgement of errors" in its place. The 2007 investigation determined that a Point Reyes senior science advisor had misrepresented research regarding sedimentation and harm to the harbor seals in Drakes Estero.

Key Reference Material Pertinent to Assessing Drakes Estero Soundscape

During the course of this investigation, several key references were cited either within the DEIS by VHB or NPS, while others were noted in the complainant's allegations. Below is a summary of each of these key references and their relevance to this investigation.

Road Construction Noise Model

The U.S. Department of Transportation (DOT) - Federal Highway Administration's (FHWA), Road Construction Noise Model (RCNM) User Guide, dated January 2006,[19] was developed as FHWA's national model for the prediction of construction noise. Because construction is often conducted in close proximity to residences and businesses, construction noise must be monitored to avoid impacts on communities. FHWA developed the RCNM based on the noise prediction calculations and the equipment database used during the Central Artery Tunnel (CA/T) project in Boston, MA, in the 1990s. The RCNM provides a construction noise screening tool to predict construction noise levels and to determine compliance with noise limits for a variety of construction noise projects of varying complexity.

The coauthors of the RCNM collected the majority of sound levels illustrated in the RCNM from the CA/T project, where the equipment was measured under actual working conditions. Other sound level data in the RCNM was extracted from various other construction sites over a period of 8 to 10 years, where "thousands of individual equipment noise emission measurements" were captured. The RCNM sound levels are averages of the equipment researched, and none of the levels are specific to make, model, or capacity of the listed equipment. VHB and NPS used this report in the DEIS to select proxy equipment and associated noise levels to represent the Company's noise generators.

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[16] Public Law 112-74, Congressional Record Volume 157, Number 193, December 15, 2011, Conference Report on H.R. 2055, National Park Service, Operations of the National Park System.
[17] Refers to DOI OIG's 2007 investigation Case No. OI-CA-07-0297-I.
[18] Point Reyes' report titled "Drakes Estero: A Sheltered Wilderness Estuary, dated February 2007."
[19] U.S. Department of Transportation, "FHWA Roadway Construction Noise Model User's Guide," FWHA-HEP-05-054, DOT-VNTSC-FHWA-05-01, January 2006.

John A. Volpe National Transportation System Center

In 2009, DOT's Research and Special Programs Administration, John A. Volpe National Transportation System Center (Volpe Center) partnered with the Federal Aviation Administration (FAA) and NPS to conduct preliminary research for the future development of an Air Tour Management Plan (ATMP) for Point Reyes, which has commercial air tours. To develop an ATMP, Point Reyes was monitored to establish the lowest and highest baselines or ambient sound levels; the baseline is used for comparison purposes to determine the impacts of noise levels generated by air tours. The Volpe Center monitored four sites within Point Reyes in the summer and winter of 2009. In March 2011, the Volpe Center and FAA finalized their report, titled "Baseline Ambient Sound Levels in Point Reyes National Seashore," hereafter referred to as the Volpe 2011 report.

Noise Unlimited

Noise Unlimited, Inc. (NU) is an independent research consultant who authored the report, "Boat Noise test Using Static and Full-Throttle Measurement Methods," in November 1995. NU's report revealed their research was conducted for the State of New Jersey, Department of Law and Public Safety, Division of State Police, Marine Law Enforcement Bureau. The report unfortunately does not clarify the need or scope of the testing of the personal watercraft. The NU research focused its noise level measurements on personal watercraft vessels. VHB and NPS used this report in the DEIS as a source for representative sound data in which they selected proxy data to represent Company boats.

Environ International Corporation

The Company contracted Environ International Corporation (Environ) to review the DEIS and offer their comments on the document. On November 22, 2011, Environ staff recorded direct sound level measurements of the Company's noise generators, where Environ indicated their sound levels were significantly lower than cited by VHB in the DEIS, based on proxy or representative data extracted from the previously addressed NU and RCNM documents. Environ's comments report lower noise emissions, which subsequently reduces the estimated distances before the noise levels dissipate. Environ compiled its collective findings regarding all areas within the DEIS and published their "Comments on [the Company] Special Use Permit Environmental Impact Statement [Point Reyes]," dated December 9, 2011.

DETAILS OF INVESTIGATION

The complainant, an elected member of the National Academy of Sciences (NAS) and adjunct professor at a California university, alleged that the National Park Service (NPS) and its contractor, Vanasse Hangen Brustlin (VHB), falsified soundscape data in the Drakes Bay Oyster Company (the Company) Draft Environmental Impact Statement (DEIS) for the issuance of a special use permit (SUP) to continue oyster farming operations beyond November 30, 2012. The complainant alleged that NPS and VHB engaged in scientific misconduct and misconduct, and the deceptive information in the DEIS constituted fraud. The complainant, as well as the Company's owner, also claimed the institution of the EIS process to issue an SUP was

unwarranted and therefore wasted taxpayer funds.

Specifically, the complainant alleged that NPS and VHB presented falsified soundscape data in the DEIS for the Company. The complainant stated that the soundscape data did not originate from the Company's equipment and therefore the "data and metrics were distorted, invented, falsely represented, overestimated, underestimated, and exaggerated," which ultimately led to the Company's operations being assessed as having a "major" impact on Point Reyes soundscape. The complainant also alleged that either NPS or VHB failed to use the best available science in the DEIS and claimed that NPS and VHB made revisions "between the June 2011 non-public version of the DEIS and the September 2011 public version in such a way as to intentionally deceive the public and peer-reviewers." The complainant further alleged that the revised versions of the DEIS "deceived" the NPS contracted scientific peer reviewer of the DEIS.

In addition, the complainant alleged that either NPS or VHB engaged in scientific misconduct and misconduct based on the claim that NPS influenced VHB's collection of data and subsequent reporting, revealing a "bias" by the DEIS preparers to find "major impacts of environmental harm by [the Company]." The complainant alleged that NPS deviated from its own directives as well as National Environmental Protection Act (NEPA) policy for EISs by failing to "measure [the Company] noise generators and misrepresented ambient baseline conditions" collected by the John A. Volpe National Transportation System Center (Volpe Center). The complainant also claimed that several key individuals conducting the DEIS for NPS and VHB had a conflict of interest and failed to recuse themselves from the project.

In addition to the allegations of data misrepresentation and misconduct by members involved in the EIS process, the complainant and the Company owner alleged NPS committed fraud via deceptive reporting and a waste of taxpayer funds by unjustly implementing the EIS process for the issuance of an SUP.

Allegations of Misrepresentation of Scientific Soundscape Data

The complainant alleged that either NPS or VHB presented falsified scientific data, specifically within the soundscape sections of the DEIS, which led to unfavorable and false conclusions regarding the Company's impact on Point Reyes' soundscape and wilderness.

Allegations of the Over- and Underestimated Sound-Level Data to Represent Company Equipment

The complainant alleged that either NPS or VHB used acoustical data references in the DEIS that were not accurate or applicable. He claimed that the references and proxy data used did not accurately represent the Company's equipment and that NPS or VHB overestimated the Company's sound emissions. The complainant said that the Environ International Corporation (Environ) report declared lower noise emissions and reduced sound dissipation distances than those cited in the DEIS.

Our investigation and interviews of U.S Department of Transportation (DOT) acoustic experts revealed that VHB appeared to follow the industry standard of modeling and properly selected

proxy data to represent Company noise generators in an attempt to predict the noise levels emitted by the Company's commercial oyster farming equipment. The DOT developers of the Federal Highway Administration (FHWA) Road Construction Noise Model (RCNM) User Guide explained the proper use of the guide and how selections should be based on mechanical similarities and function, the same process that VHB appeared to follow. The surfacing of new relevant soundscape research suggested the sound levels selected by VHB to represent Company boats were likely underestimated; NPS' and VHB's acoustic experts plan to incorporate this new soundscape data, as well as the Environ report, once all the data have been vetted, which will better clarify the noise level ranges estimated for the Company's equipment. According to NEPA and Council on Environmental Quality (CEQ) regulations, the collection of new data for an EIS is not a requirement unless there is a clear data gap; otherwise, the guidance recommends the use of best available information and science at the time of the research, the classification of which is subjective. The VHB staff responsible for selecting representative data for Company noise generating equipment expressed that there was a limited amount of sound information available, but told us that their selections were reasonable and justified based on mechanical similarities. The aforementioned information was determined through the following investigative steps.

Our review of the September 2011 DEIS, Chapter 3, Table 3-3 (Figure 1), revealed a list of the Company's noise generators and the associated represented sound levels. The complainant alleged the sources of cited reference material did not accurately depict Company equipment, as the reference material was derived from sources dealing with road construction equipment or were from outdated personal watercraft noise levels from out of state. The estimated levels illustrated in the DEIS violate the NPS' standard impact thresholds of sound not to exceed 60 decibels (dBA)[20] within National parks.

TABLE 3-3. NOISE GENERATORS AT DBOC

Equipment	Description†	Frequency of Use (Weather Permitting)†	Representative Sound Level at 50 Feet (dBA)[a]
Motorboat	20 HP, 4-cycle engine	Up to 12 40-minute trips/day	71*
Motorboat	40 HP, 4-cycle engine	Up to 12 40-minute trips/day	71*
Forklift	60 HP diesel engine	2 to 4 hours/day	79**
Pneumatic drills	Handheld hydraulic drills	Approximately 2 hours/day	85**
Oyster tumbler	Tube for sorting oysters by size, run by electric motor	Approximately 2 hours/day	79**

Sources: †DBOC [Lunny], pers. comm., 2011h; *Noise Unlimited, Inc, 1995; **FHWA 2006.

[a] Hourly values

Figure 1. Table 3-3 from the September 2011 version of the DEIS. Figure 1 appears as here as it does in the September 2011 DEIS, based on the allegations that the shortened citations deceived the peer reviewer and public.

Our review of the DEIS' soundscape section (Chapter 3) identified references to distances for from how far away measurements were made by researchers; for instance, VHB reports: "At 50 feet from the receptors, [Company] operations contribute . . . noise to the natural soundscape

[20] dB(A) is an acoustic term that represents an A-weighted curve toward the midrange of sounds the human ear detects.

within the study area." VHB, however, did not collect actual measurements; this statement alludes to the collection methodology in the reference material. In addition, Table 3-3 (see Figure 1) shows that all predicted sound levels were, above water, hourly values and were "representative sound level at 50 feet," from the sound generator.

Noise Unlimited, Inc., Report

The personal watercraft chosen by VHB out of the 1995 Noise Unlimited, Inc., (NU) report to represent Company boats (see reference in Figure 1) was a Kawasaki Jet Ski 750 STS, which was recorded as having a "static" level dBA of 71 and the recorded sound level for the same Jet Ski increased by 10 dBA during a "passby" measurement (dBA of 81). The NU report on personal watercraft noise emissions clarifies their methodology used to collect the data as well as terminology in the report. NU defined a "static measurement" as a measurement "made with the engine at idle with the microphone located 4ft above the water line and 2ft behind the transom of the boat, in accordance with SAE J2005 Draft, 'Stationary Sound Level Measurement Procedure for Pleasure Motorboats.' dated 10/16/89." NU defined a "passby measurement" as a measurement "made with the boat operating at full throttle, passing by the microphone at a distance of 50ft, in accordance with NJAC 7:6-6.3." The NU report states the static level for the Jet Ski (71 dBA) was collected from 2 feet behind the watercraft and 4 feet above the water line, not at 50 feet as reported in the DEIS (reference Figure 1).

VHB's acoustics representative and director of Air Quality and Noise Services spoke with us regarding the sound-level data used in the DEIS. He informed us that he possessed more than 40 years of sound and acoustics experience and that he was the project technical advisor for the DEIS and reviewed its soundscape sections for accuracy. He stated that during his research for this project, he personally located the NU 1995 report on the Internet and subsequently selected the watercraft measurements from the NU report to represent Company boats, which was based on information collected by VHB staff members during Company site tours.

We asked VHB's acoustics representative to clarify the discrepancy between the Jet Ski's dBA measured at 50 feet as recorded in Table 3-3 (see Figure 1) and its actual dBA measurement at 50 feet. He explained that upon first review of the NU report, he selected the Jet Ski because it was the smallest motor- or watercraft tested and he believed 71 dBA was a passby measurement. He said that during his search for related reference material he discovered there was a limited amount of information for sound emissions on personal watercraft, but he felt the data he chose from the NU report was reliable and an accurate representative of Company boats.

After the first DEIS was circulated and he read the public comments, VHB's acoustics representative reread the NU report and confirmed that the sound level selected for the Jet Ski (71 dBA) was in fact a static measurement and not the passby measurement he had believed it to be. He told us that the verbiage and table headers regarding distances would be corrected in the later draft iterations and the final EIS if the represented sound levels changed to illustrate the 81 dBA passby level and explained that VHB was currently coordinating with NPS on the current round of revisions.

We also interviewed the senior acoustics scientist at NPS' Natural Sounds and Night Skies

Division (NSD), Ft. Collins, CO. He told us that he had more than 17 years in the acoustics field. He believed the proxy sound levels used to represent Company's equipment were "slightly underestimated" because the Jet Ski noise level from the NU report was a static measurement and not a passby measurement. He said that he understood why the Jet Ski was selected to represent Company boats, as it was the "smallest" and "lightest vehicle" measured in the report. He also told us that since the circulation of the DEIS in September 2011, new personal watercraft sound-level research reports had been located, originating from Missouri's Ozark National Scenic Riverway and the German Ministry of Environment. These new references contain a range of higher sound levels for motors similar in size and horsepower to those used by the Company. NSD's senior scientist told us that these new research reports, as well as the Environ report, were being vetted for merit before being incorporated in the later versions of the DEIS or the final EIS.

Karen Trevino, NPS' Chief of NSD, explained that onsite noise emissions' monitoring is the preferable scientific methodology by acoustic experts over that of modeling or using representative/proxy data. Onsite monitoring, however, is not always cost effective or feasible due to time and budgetary constraints. She explained that the use of scientific proxy data in this case, the data drawn from the NU report and the RCNM, and modeling is common practice for predicting noise levels and impacts for soundscape projects. Regarding VHB's selection of representative equipment presented in the DEIS, she felt the best available science at the time was used and that the proxy data selected was high quality and negated the need to collect new data.

Company Equipment and the Road Construction Noise Model

The DOT-FHWA noise team leader and coauthor of the 2006 RCNM, stated that the guide is a tool that provides users broad predictions and estimates in noise levels associated with road construction. He clarified that the RCNM provides only estimates and should not be used for definitive answers since the outputs of noise levels vary and were mainly isolated to the CA/T project. He advised us that there is no requirement to use the RCNM when predicting noise emissions.

The DOT-FHWA noise team leader also explained to us that the guide or model is generally used in pre-planning stages to predict the potential impacts of noise on future projects before construction began. If the RCNM is referenced, the citation should be clear that the data regarding impact and results are not definitive and that it is a generalized tool. To get actual results or dBAs for a given piece of machinery or a project, the user would need to develop a model to capture the data and record how the sampling was conducted so that the conditions and environment that yielded the results could be recreated by other researchers.

A member of the DOT-FHWA Environmental Technical Services Team spoke with us regarding the RCNM. He explained that there is not an industry standard for determining the impacts of sound on the environment; there are only default values and general community practices. He confirmed that the RCNM is a model used only to predict the potential impacts of sound on an environment and contains generalized sound information. He said that the RCNM does not factor in the "local noise budget," which he described as the variances in background noise, or how

these variances (e.g., wind, engine noise, human factors) of each environment can affect sound levels. There are research study protocols to guide soundscape collections, but he said it is the researchers' responsibility to use the best science available.

A senior acoustical noise engineer at Parsons Brinkerhoff coauthored the 2006 RCNM with the DOT-FHWA noise team leader and was contracted as the lead researcher for the user guide by DOT. He explained that the majority of sound levels were collected on the CA/T site under actual working conditions. He said that other data were extracted from other construction sites over a period of 8 to 10 years, and that he collected "thousands of individual equipment noise emission measurements." The senior acoustical noise engineer explained he never recorded make, model, or capacity data for any of the equipment he researched or surveyed. He said that the noise levels reflected in the RCNM were averages of the thousands of samples; for example, he surveyed approximately 500 cranes, averaged their DBA levels, and used this figure in the RCNM.

The senior acoustical noise engineer also stated that the RCNM was developed to be a flexible tool to provide users with rough estimates of emissions to predict noise levels during the course of a construction project, affording planners and developers the ability to determine potential impacts a construction project may have on the immediate environment. He told us that the RCNM explains the methodology used during their research in case future users wanted to incorporate additional items to the list of equipment in the RCNM. He emphasized that the RCNM remains the world's most comprehensive report for heavy construction equipment and has been used and referenced in scores of noise analysis internationally.

Table 3-3 from the DEIS lists the Company equipment in question and provides a represented sound level for each (see Figure 1). We met with Lunny, who advised us that the Company's oyster tumbler was developed and handcrafted onsite to meet the business' operational needs; he told us that the holes in the tumbler's barrels were hand drilled and demonstrated how hole size helps the his staff sift and sort the oysters by size for growing purposes.

We clarified VHB's selection process of equipment from the RCNM to represent Company equipment with the acoustics representative, who verified he chose to use the RCNM as a reference and reiterated how he personally selected the items various items of construction equipment from the RCNM to represent the Company equipment referenced in the DEIS' Table 3-3 (see Figure 1 and Attachments 4 and 5). He stated he selected the representative items and the associated estimated sound levels from the RCNM based on the mechanical similarities to and functionality of each item of Company equipment observed during VHB's onsite tour on February 16, 2011. For example, the RCNM category "pneumatic tools" was used to represent the Company's pneumatic hammer/drill. He told us the selection from the RCNM to represent the oyster tumbler was based on what he felt were similarities between the oyster tumbler's motors, operation, and function to that of a cement mixer, which was eventually selected to represent the oyster tumbler in the DEIS. VHB's acoustics representative said, however, the oyster tumbler was likely louder than his selection from the RCNM and what was reflected in the DEIS, based on the sound produced by the oyster shells colliding inside the drum, unlike liquid concrete. He confirmed his belief that all of his selections were reasonable and justifiable based on the information provided to him by the VHB staff members who attended the onsite tours of

the Company.

VHB's acoustics representative explained he has historically used the RCNM for similar projects at both the State and Federal levels. He felt his selections were reasonable based on the information provided to him by the VHB staff members who attended the Company's onsite tours and the limited amount of information relative to Company equipment. He said that he was never onsite with the Company and never personally observed or heard the equipment in use; VHB's Federal program manager provided a specifications sheet with the details of each Company operational noise generator and frequency of use to him, and VHB's EIS project manager drafted the soundscape section for VHB. Photos of the Company equipment, as well as a verbal account, accompanied the details sheet from VHB's Federal program manager regarding the mechanics of each item.

Environ Report

The complainant alleged that the DEIS "Exaggerated that [Company] equipment could be heard up to 3.3 miles from source, when [Environ's] actual measurements revealed the sounds dissipate in hundreds of feet" (See Attachment 1). He said that Environ's measurements of Company equipment noted a significant decrease in sound levels. He also said: "DEIS claimed that the [Company] oyster tumbler could be heard for 12,672 feet (2.4 miles). The [Environ] data shows that it can be heard for only 140 feet. . . . Nevertheless, [the peer reviewer] does not change his conclusions."

Our interviews of the NPS Environmental Quality Division (EQD) staff (see Attachment 6) and VHB staff responsible for the technical accuracy (see Attachments 4 and 5) of the DEIS revealed that the Environ report was still being reviewed for scientific methodology at the time the DEIS was undergoing its revisions. Until that review is complete, a decision cannot be made regarding whether the Environ data or report can be incorporated into the DEIS as a supporting document to establish the range of sound levels.

Allegations of Falsely Represented Percentage of Use by the Company/Availability of Key Information

The complainant and the Data Quality Act (DQA) complaint alleged the DEIS falsely represented the percentage of use of Drakes Estero by Company boats. The DQA complaint states that the Company recorded the frequency and duration of each boat trip via GPS trackers, and, while those data sets were made available to NPS, they were not used to determine the Company's percentage of use. The complainant and the DQA alleged: "The NPS staff and scientists are aware of these data. Lunny disclosed the existence of the GPS recordings at the February 2010 Marine Mammal Commission (MMC) panel . . . and he offered to make this data available to the MMC panel members and NPS scientists." The DQA complaint claimed the complainant was "the only scientist to have ever requested and obtained the [Company] GPS data." The DQA and the complainant also alleged that the Company's GPS boat data would "irrefutably demonstrate" that the percentage of use in the DEIS is "exaggerated and misleading," and the number of boat trips into Drakes Estero was overestimated, which led to an assessment of a major impact on the Point Reyes soundscape.

Our investigation revealed that based on NPS' Impact Thresholds manual, VHB was required to not only locate representative sound levels for the Company's noise generators, but to calculate the frequency and duration of Company boat trips into Drakes Estero to determine the percentage of use. Lunny provided VHB with a verbal estimated account of Company boat trips during a site tour. VHB then made several more requests for the Company's GPS records to vet Lunny's estimates. Those data, however, were never provided to VHB. Because of the limited information available to VHB to determine percentage of use, VHB based the percentage of use in the DEIS on Lunny's verbal statements, which led to an assessment of a major impact on Point Reyes' soundscape. This information was collected during the following investigative steps.

The sound-level thresholds for NPS derived from title 36 Code of Federal Regulations (C.F.R.), § 2.12: "Parks, Forests, and Public Property, Audio Disturbances" states:

> Operating motorized equipment or machinery such as an electric generating plant, motor vehicle, motorized toy, or an audio device, such as a radio, television set, tape deck or musical instrument, in a manner: (i) That exceeds a noise level of 60 decibels measured on the A-weighted scale at 50 feet; or, if below that level, nevertheless; (ii) makes noise which is unreasonable, considering the nature and purpose of the actor's conduct, location, time of day or night, purpose for which the area was established, impact on park users, and other factors that would govern the conduct of a reasonably prudent person under the circumstances.

According to NPS' manual for "Environmental Impact Methodologies and Thresholds 2006," soundscape impact thresholds are declared as negligible, minor, moderate, or major based on two criteria: first, the noise emissions exceeds the threshold set by the C.F.R. (60 dBA for Point Reyes); and second, the human-caused sound exceeds a predetermined percentage of use, or the percentage of time the Company boats operate within the designated wilderness area. For example, in areas deemed "Designated and Recommended Wilderness," as illustrated in Figure 2, an impact threshold can be declared as a major impact if the percentage of use exceeds 10 percent.

Management Zone	Impact Threshold	Percent of Time that All Human Caused Sounds, including those from a Proposed Action, are Audible	Percent of Zone Affected
Designated and Recommended Wilderness	Negligible	<5%	<5%
	Minor	<5%	<10%
	Moderate	<10%	<10%
	Major	>10%	>10%

Figure 2. NPS' Soundscape Impact Thresholds based on percent of time use. This table was re-created from NPS' manual for "Environmental Impact Methodologies and Thresholds 2006," to illustrate what constitutes negligible, minor, moderate, or major impacts for Designate and Recommended Wilderness regarding percentage of use.

We also asked VHB's EIS project manager, who drafted the soundscape section, about the NPS impact thresholds used in the DEIS. She stated the Company DEIS was initially supposed to be a pilot project in which VHB would explore the use of an "alternate methodology for assessing impacts," which did not use the minor, moderate, or major rating system. After review of the April 2011 draft, however, NPS requested that VHB use the existing threshold criteria from the NPS manual titled "Environmental Impact Methodologies and Thresholds." The EIS project manager explained that NPS asked that the existing thresholds be used to prevent future lawsuits and to display consistency in methodology. She explained that the impacts within the soundscape section went unchanged and only the methodology by which the impacts were assessed changed, which led to the Company's equipment being assessed as having a major impact on Point Reyes' soundscape.

The DQA complaint stated that NPS knew of and had access to three separate forms of data for Company boat trips that relate directly to the DEIS' analysis regarding the Company's percentage of use. These consist of Company boat trip logs, Company GPS records of boat trips, and NPS time and date stamped photos and observer logs of Company boat trips. The complainant and the DQA complaint claimed: "None of those records, which were collected over a several-year period, show 'up to 12 40-minute boat trips/day.'"

The DQA complaint states that:[21]

> Consciously ignoring detailed, highly reliable, accurate, timely data reflecting frequency and duration of [Company] boat trips is not a sound and accepted scientific practice and is contrary to NPS' obligation to use the best available science and data. . . . Kevin Lunny installed GPS equipment in his two oyster boats at his own expense, made NPS personnel aware of the existence of this data, and offered to provide it to NPS to allow them to accurately determine the frequency and duration of [Company] boat trips. NPS refused to evaluate this data and include it in the DEIS, thereby violating its information-quality guidelines.

During the course of our investigation, we reviewed numerous email communications between the Company, NPS, and VHB, as well as all scoping and meeting minutes documenting items discussed by the DEIS Interdisciplinary Team (NPS and VHB). Based on a review of the emails and documents spanning from September 1, 2010, and March 8, 2011, we observed several written requests from VHB and NPS to the Company for its GPS boat tracker data were made before, during, and after Company site tours. After the onsite tour in early October 2010, VHB requested information from the Company, and the Company responded by providing its vessel transit plan, which stated that the Company staff uses handheld GPS units on boat trips into Drakes Estero. The vessel transit plan was accompanied by a map of all offshore oyster beds and racks, as well as a map of the Company's GPS tracks illustrating its boat routes. Neither the vessel transit plan nor maps, however, make mention of the frequency of Company boat trips into Drakes Estero.

We reviewed an audio recording of VHB and NPS' onsite tour of the Company hosted by Lunny

[21] DQA Section 7.1.3.2, "Ignoring Detailed GPS Data Reflecting Frequency and Duration of DBOC Boat Trips is Not a Sound and Accepted Scientific Practice."

on February 16, 2011. Lunny can be heard on the recording explaining his operation to VHB's Federal program manager; VHB's biologist; and the Point Reyes Chief of Natural Resources, Natalie Gates. During the tour, Lunny listed the Company equipment (forklift, oyster tumbler, and pneumatic hammers) and provided the number of boats, size of the boat motors, and their associated horsepower ratings. Regarding the frequency of Company boat trips into Drakes Estero, Lunny told the tour participants that Company boats collectively made "up to a dozen trips into the bay," while "other days we'll have none." Lunny stated that Company staff keeps boat logs detailing each trip into the bay and that the Company also keeps GPS boat records accounting each trip into the bay/Drakes Estero. Lunny also told VHB that Company boats make "maybe 1,500 trips a year," and that each trip takes "20 minutes out and 20 minutes back"; otherwise, the boats were either docked or parked near the oyster racks and beds.

At the conclusion of the recorded tour, the VHB biologist asked Lunny to clarify the data illustrated on the GPS track maps on the vessel transit plan. Lunny explained that the GPS maps displayed only the Company boat routes into Drakes Estero, not frequency. The VHB biologist asks Lunny if the GPS boat records capture each trip and if the Company's GPS data would be made available to VHB. Lunny confirmed that his GPS software recorded the time, date, and miles per hour stamps for each trip and that the Company downloaded the GPS memory from each boat weekly. Lunny told VHB that releasing the Company's GPS records made him "a little uncomfortable" because the intended purpose of the GPS records were to help the Company defend against claims that its operations disturbed harbor seals. He said that the Company would be "happy to share things" as long as he knew where the information would be used. VHB's Federal program manager explained to Lunny that the EIS, once final, would be a public record. Lunny said that if there was a "reason" VHB needed all of the GPS data, then the data would be provided, but he expressed his fear that the data would be used against the Company regarding seal disturbances.

In addition, our review of requests by VHB and NPS revealed after the February 2011 onsite visit, VHB forwarded a follow-up request to the Company for more information. One of the items specifically requested was "all GPS boat transit data, as specific as possible (mentioned weekly GPS data downloads and potential GPS data for routes organized by rack/bed number)." In March 2011, Lunny responded to VHB's request in a written response on Company letterhead. He replied that the Company would not make the GPS information available unless it was necessary to prove the whereabouts of a Company boat. Lunny added that he was concerned about the safety of the data because certain Point Reyes staff members that were involved with the EIS process have made public claims of the Company causing environmental harm. Lunny was concerned these employees could use the data to further their own agenda.

We asked VHB's Federal program manager about the aforementioned requests for Company GPS data. She explained that after several requests for the data and after receiving the Company's formal response,

VHB considered the issue closed and notified NPS there was no need to make additional requests to the Company. Based on the limited amount of information to validate the Company's percentage of use (frequency and duration of Company boat trips into Drakes Estero), it was based on VHB's assessment of the available information, which were the verbal accounts

provided to VHB by Lunny during the February 2011 site tour, i.e., 1,500 trips per year, up to 12 trips per day.

The VHB biologist told us that when the issue of GPS data arose during the February 2011 site tour, Lunny informed VHB that he did not feel comfortable releasing that information. The VHB biologist said that the Company had sent GPS tracker maps displaying the points within Drakes Estero frequented by Company boats. The maps, however, lacked frequency, duration, speed, or date and time data needed to determine the percentage of use.

We asked Lunny about the frequency and duration of Company boat trips. He provided us with estimations that were approximately identical to those he verbally provided to VHB's Federal program manager and the biologist, and Gates during the February 2011 site tour: 1,500 trips per year and up to 12 trips per day, while other days the Company made no trips into Drakes Estero.

We clarified the aforementioned issues surrounding the availability of Company GPS data with the complainant, who said he was unaware of VHB's request for information and the Company's response. The complainant told us that aside from the GPS data, the frequency and duration of Company boat trips could be determined by reviewing the 280,000 photographs captured with "secret cameras" deployed by NPS in Drakes Estero to monitor the Company and harbor seals. The complainant explained that the cameras were "secret" because NPS camouflaged them, failed to notify the Company of them, and "suppressed" the photographs.

The complainant told us he reviewed the NPS photographs, observer logs, and calendars; by his calculations the Company boats made 0.7 trips per day into the Estero. The observer logs and calendars covered a 66-day observation period from March to May 2008. The complainant's review, which was also documented in the DQA complaint, estimated that, on average, Company boats traveled into Drakes Estero an "average of one trip per day (six days per week); at times, two trips in a single day; and, on very rare occasions, as many as three trips in a single week."

We reviewed the NPS observer logs and calendars associated with the 280,000 photographs that captured Company boat trips in Drakes Estero. We noted that several of the entries on the observer logs simply stated "boat" or "boat stopped" and failed to provide a location or direction. The logs primarily focused on the three specific sandbars harbor seals frequent within Drakes Estero: Oyster Bar (OB), Upper Estero Near (UEN) and Upper Estero Far (UEF);the Company's oyster racks and bags located in other areas of Drakes Estero, however, were not specifically documented. We compared the maps that detailed the NPS camera angles and fields of view associated with the photos to a map that illustrated all Company oyster bags and racks in the Estero. The comparison revealed that there were several oyster bags and racks beyond the field of view of the NPS cameras that were unaccounted for in the observer logs; therefore, the exact number of Company boat trips into Drakes Estero could not be determined. We clarified this issue with the complainant and he told us that in his estimation, he did not account for the Company trips to the oyster racks and beds beyond the field of view or those areas that are close to the onshore Company operation.

We asked VHB's NPS program manager about VHB's knowledge of the referenced NPS photos, and she told us that VHB was aware of the 280,000 photographs. VHB was informed, however,

that the images and data set was undergoing a peer review by the U.S. Geological Survey (USGS) to determine the methodology and applicability before possible insertion in the DEIS. The VHB NPS program manager referred us to Ray Sauvajot at NPS, who oversaw the coordination with USGS for peer review of the photos.

Sauvajot, NPS' Chief of Natural Resource Programs for the Pacific West Region, oversaw the coordination between NPS and USGS to peer review the 280,000 photos taken of Drakes Estero. He explained that in the early planning stages of the Company EIS, NPS management decided to incorporate only information into the DEIS that met the highest standard of quality. Before being incorporated, the photos needed to be vetted to determine their merit.

Sauvajot explained that a Point Reyes senior science advisor had set up camera systems on the bluffs of Drakes Estero to capture data on harbor seal disturbances within the habitat. The study occurred over a 3-to-4-year period during the seals' pupping season (March to May). He explained the photos offered only a superficial assessment, due to several issues with the camera system and how it was maintained. For instance, Sauvajot explained that the Point Reyes camera systems were maintained infrequently and the fields of view were changed often, making analysis difficult. These variables created holes in the data sets, which made it hard for reviewers to determine the value of the information. Based on these issues, NPS decided that the photos offered an unclear data set with questionable value. NPS then asked USGS to peer review the photos to determine what information could be gained by the photos and if the data could be used in the future.

Sauvajot explained to us that USGS performed its comprehensive review of the photos to determine their credibility by evaluating the methodology and techniques used to collect the data. Sauvajot told us that he was recently informed that USGS had concluded its review and that he was awaiting its report regarding the photos' suggested use in the final EIS.

Sauvajot also commented on the Point Reyes cameras that the media labeled "secret cameras." He explained that the camera systems are highly valuable to NPS, so they are often camouflaged for security purposes and to prevent theft. Sauvajot said that NPS as an agency has a 10-to-15-year history of deploying remote camera systems in National parks and that the use of cameras has become common practice with the advancement in associated technology.

We asked whether NPS had any obligation to notify park visitors of the deployment of camera systems. Sauvajot explained there was no reasonable expectation of privacy on National park lands, and therefore there was no requirement to notify park visitors of active data collections. He reiterated that notifying park visitors has affected outcomes and altered data in the past, since visitors tend to alter their behavior if they assume they are being monitored.

The complainant alleged the NPS photos offer an equally valuable data set to determine the percentage of use. The NPS photos, however, were collected only during harbor seal pupping season, and so a 9-month data gap exists for each year. These gaps would need to be filled to estimate the Company's number of boat trips per day and year (percentage of use). In addition, the NPS camera angles were set to a limited field of view; therefore, the photos cannot account for every area visited by Company boats beyond the cameras' view.

Allegations of False Representations of Key Acoustic Data

The complainant alleged that either NPS or VHB made "false representations of key acoustic data in Chapter 4 of the DEIS," which led to "exaggerated [Company] equipment sound levels & distances" required before the noise emissions dissipated. The complainant claimed that the ambient noise levels that NPS and VHB cited in the DEIS could not be found in the Volpe 2011 report. The complainant claimed that this falsely cited data was then used in Chapter 4's tables, which underestimated the ambient levels within Point Reyes and affected the Company's assessed impact on the soundscape. These claims, when coupled with the percentage of use addressed in the above section, allegedly led to an assessment of a major impact for the soundscape sections.

Our investigation of the alleged "false representations of key acoustic data" revealed no evidence to support the complainant's allegations, based on interviews of the authors of the DEIS, the baseline ambient acoustic levels, and tables illustrating dissipation rates and distances in the DEIS tables in Chapter 4 that were derived from the Volpe 2011 report. Our investigation revealed that NPS' senior acoustics scientist from NSD, provided the calculations and verbiage in the DEIS dissipation tables to VHB. His comments and suggestions offered to VHB illustrated the dissipation of sound through the entire recorded ambient range of 25 to 44 dBA. Regarding the term "lowest daily ambient level" used in the DEIS, we located similar verbiage present in the Volpe 2011 report to address median ambient sound levels. As for the "exaggerated" distances from which Company equipment could be heard, the calculations within Chapter 4's tables were based on the proxy data selected to represent Company equipment and were calculated as though the noise were traveling across a flat surface; the terrain present within Drakes Estero was not factored into dissipation calculations. The distances the noise levels could travel were mapped in the DEIS, and an illustration depicted the perimeter affected by each item of Company equipment. This information was collected during the following investigative steps.

During our initial interview of the complainant on May 16, 2012, he said that the September 2011 version of the DEIS had changed from the June 2011 version and noted that the latest version cited 24 dBA as the "lowest daily ambient level" which was referenced as originating from the Volpe 2011 report.[22] The complainant alleged that the 24 dBA was not a measurement he located in the Volpe 2011 report and the DEIS was unclear about the origin of the term "lowest ambient sound level." The complainant explained that his research of VHB revealed that the company routinely performed EISs for the Government and historically used L_{eq}[23] to report sound data. He alleged that VHB intentionally changed its reporting metric and use of L_{eq} to deceive the public.

We learned that prior to the initiation of the Company DEIS, NPS had identified noise generated by air tours passing over the park as having a potential impact. NPS, EQD, and Point Reyes staff solicited the Volpe Center's assistance to measure and establish baseline ambient sound levels within Point Reyes for future use in generating an Air Tour Management Plan (ATMP) to mitigate the level of noise generated by the air tours (see Attachment 34).

[22] "Baseline Ambient Sound Levels in Point Reyes National Seashore, 2011," coauthored by FAA and Volpe.
[23] L_{eq} is the equivalent sound level determined by the logarithmic average of sound levels of a specific period.

In the documents the complainant provided to us, he alleged that the tables in Chapter 4 of the DEIS exaggerate the distances for which Company equipment could travel based on the false representation of ambient levels. He claimed that these tables, which calculated the dissipation rates of sound from its origin or noise generator, used measurement metrics (L_{Aeq})[24] not identified or used in the Volpe 2011 report. He claimed that the measurement metric used in the DEIS has never appeared in any other EIS performed by NPS. The complainant alleged that the 24 dBA measurement used to establish the lowest sound levels recorded by the Volpe Center was a "measure . . . apparently cherry-picked from [Volpe 2011] Figure 57." Figure 57 of the Volpe 2011 report illustrates the "Daily sound levels and wind speeds for the [Point Reyes site 004] for summer season," ranging from July 15, 2009, to August 11, 2009, which plots the sound levels recorded during this period. Based on the symbols and colors selected to illustrate the sound levels, it is difficult to determine the exact levels being reported in the Volpe 2011 report.

The NPS' manual, "Environmental Impact Methodologies and Thresholds, 2006," defines the term "natural ambient sound environment" as follows:

> The background condition from which all comparisons are made relative to adverse impacts. As stated earlier, the natural soundscape in a park is defined as its mix of ambient acoustic conditions and sounds without the intrusion of inappropriate sounds. Where data exists, this level is computed by finding the median decibel value for all natural sounds recorded during the collection period.

In addition, the manual identifies metrics and explains how they are used to manage soundscapes:

> Metrics can be used in defining standards for management of soundscapes and for setting impact levels. Examples are: L_{eq} (constant sound energy level); L_{90} (sound level exceeded 90% of the time, approximating background); L_{50} (sound level exceeded 50% of the time); % time human-caused sound is audible/detectable; area or distance over which a sound source is audible/ detectible; noise frequency of occurrence and noise free intervals.

NSD's senior scientist, told us that during a review of an early draft of the EIS, he observed a reported 20 dBA range in ambient levels between the highest and lowest daily medians recorded and reported in the Volpe 2011 report. He attributed the range variance to the winds present at Point Reyes and explained that wind can be a major factor in determining baseline ambient levels. He stated that he reviewed the Volpe 2011 report and noted it presented the highest and lowest daily median levels Point Reyes using a metric of L_{50}, with 44 dBA being the highest and 24 dBA being the lowest. He justified presenting both measurements in the DEIS, because the intent of the NEPA process is to fully disclose all data showing the complete range or measurements collected.

NSD'S senior scientist also explained the uses of the various sound-level descriptors (L_{eq}, L_{50},

[24] L_{Aeq} refers to the equivalent continuous A-weighted sound pressure level having the same energy as a fluctuating sound over a specified time period.

and L_{max}[25]) for the highest and lowest daily averages that were reported in different versions of the DEIS. These different descriptors were used to represent the relationship between the baseline ambient levels and significant noise events. He explained that NPS uses L_{eq} not only because it is used in several published scholarly articles, but also because using L_{eq} was a common practice in the acoustics field. He commented that L_{eq} is a more scientifically sound measurement and is more commonly recognized as an international standard when representing data for passby assessments. In addition, L_{eq} is NPS' preferred descriptor for reporting noise level data.

We asked the VHB EIS project manager, who drafted the soundscape sections for VHB, about the origin of the 24 dBA reported in the DEIS as the lowest daily median ambient sound level. She stated that the actual sound levels and terminology used to compile the DEIS was derived from either the final Volpe 2011 report, the draft Volpe 2011 report, or DEIS reviewer comments/emails from NSD's senior scientist; she clarified that VHB was provided a preliminary draft of the Volpe 2011 report from NPS' EQD while waiting for the report to be finalized. She explained how the high and low L_{50} (median sound levels) were present in the Volpe 2011 report's figures 20 and 21 titled "Comparison of daily L_{50} sound levels for all sites for the summer season." In the Volpe 2011 figures, the low for the daily daytime L_{50} sound level, illustrated by a light blue line, indicates that the lowest recorded level (approximately 25 dBA) occurred between July 25 and 30, 2009. The highest recorded level (approximately 44 dBA) occurred between July 20 and July 25, 2009.

We asked the EIS project manager about the term "lowest daily median ambient sound level" that appears before the tables in Chapter 4 of the DEIS. She stated that the term came from the results section of the Volpe 2011 report, as well as comments received during the review process of the DEIS from NSD's senior scientist.

We asked the EIS project manager to clarify why sound dissipation rates depicted in tables 4-2, 4-3, and 4-4[26] were calculated down to the lowest number recorded (24 dBA) versus the median sound level recorded (34 dBA). She explained that those suggestions and calculations were received from NSD's senior scientist's comments, and that in Chapter 3's soundscapes section, VHB quoted the data from the Volpe 2011 report: "The daytime L_{50} for this site was 34 dBA, although daily L_{50} values varied between 44 dBA and 25 dBA."

A review of the Excel spreadsheet titled "Point Reyes National Seashore Drakes Bay Oyster Company Special Use Permit EIS, Internal Review Draft EIS," dated July 1, 2011, confirmed that NSD's senior scientist provided the feedback, calculations, and verbiage that VHB used verbatim to populate DEIS tables 4-2, 4-3, and 4-4. This included the sound dissipation rates calculated down to 24 dBA and used to represent the complete range of ambient levels reported in the Volpe 2011 report. Regarding the complainant's questioning of the origin of the term "lowest daily ambient level," the Excel table reveals that NSD's senior scientist provided the information to VHB, where he addresses dissipation rates and includes several footnotes, references, and caveats for each sound level as the distances increase and the sound levels decreased. Associated to the 24 dBA level, he entered the following explanation: "noise levels

[25] L_{max} represents the highest instantaneous noise level heard at a receiver site during a single event.
[26] Tables 4-2, 4-3, and 4-4 display the dissipation rates for the entire range of sound levels reported in the Volpe 2011 report.

equal the median ambient sound level from the lowest daily ambient level measured."

We interviewed the coauthor of the Volpe 2011 report and DOT's acoustics project manager for ATMP, about ATMPs and the Volpe Center's relationship with NSD. She told us the Volpe Center has worked on projects and shared information with NSD for several years, and that the methodologies for noise used by NSD were rigorous. In addition, she said, NSD has offered her researchers several cutting-edge scientific methodologies that have saved the Volpe Center time and funding. Regarding the protocol for reporting ambient levels back to NSD (use of L_{eq} and L_{50}), she explained the current protocol is based on 10 years of data collection. The Volpe Center provides NSD with all data sets (L_{50}, L_{90}, and L_{eq}) and NSD then selects the data that is used in the impacts section of the ATMP. She stated she reviewed the Company DEIS after the allegations against it became public to ensure VHB referenced her report properly. She verified that the

DEIS citation and data derived from the Volpe 2011 report and that they were cited and used correctly.

Allegations of Failure To Use Best Available Science Pertaining to Soundscape

The complainant alleged that either NPS or VHB failed to use the best available science when preparing the EIS. NPS or VHB allegedly did not use appropriate proxies or representative data for Company equipment, which led to the assessment that the Company had a major impact on the soundscape.

Our investigation revealed that the term "best available science" was subjective. CEQ regulations for NEPA and the EIS process, however, do address how EIS preparers are to identify, via footnote or caveat, when information is limited or unavailable, and to address whether or not the collection of new data would be cost effective. Regarding methodology, the CEQ regulations require the use of high quality data in EISs. The NSD and VHB acoustical experts involved in the EIS process vetted the reference material and deemed it to be high quality. VHB's acoustics representative emphasized there was limited information pertaining to commercial fishing operational equipment, as well as personal watercraft research, but stated his selections of representative data were reasonable and justifiable, which was echoed by NSD's senior scientist. This information was based on the following investigative steps.

Regarding NEPA compliance and the use of best available science, we interviewed Patrick Walsh, NPS' EQD Plans and Development Branch Chief. He said that when NPS decided not to collect any onsite measurements of Company equipment, it was following regulations specific to EIS compilation. Walsh explained that other sources of data had been identified and were available to make sound-level predictions for Company equipment. He said that NEPA standards, as set forth in the CEQ regulations, state it is not necessary to collect new data if information is unavailable or there a clear data gap, meaning no relevant information can be located. He further explained that NEPA guidance for drafting EISs and NPS Director's Orders require the use of best available data or best available science to produce the "highest quality" reports. Based on the available relevant information (RCNM, NU, and Volpe 2011), though limited, NPS made the decision not to collect new data.

Walsh stated the above practices are acceptable since EISs are not meant to be classified, nor viewed as a "scientific research paper." He told us that an EIS is a tool to identify impacts, recommend corrective actions, and disclose relevant information to the public and decisionmakers; he said it was not practical to attempt to gather every article of data and incorporate into the EIS. He clarified that NPS' requirement is to use the best available science that has been vetted and deemed to be of the highest quality.

The CEQ regulation for NEPA's EIS procedures (40 C.F.R. § 1500.1(b)) states:

> NEPA procedures must ensure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA. Most important, NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail.

In addition, the CEQ regulation for incomplete or unavailable information (40 C.F.R. § 1502.22) states:

> When an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an environmental impact statement and there is incomplete or unavailable information, the agency shall always make clear that such information is lacking.
>
> (a) If the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the environmental impact statement.
>
> (b) If the information relevant to reasonably foreseeable significant adverse impacts cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known, the agency shall include within the environmental impact statement:
>
> 1) a statement that such information is incomplete or unavailable; a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment;
> 2) a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment, and;
> 3) the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community. For the purposes of this section, "reasonably foreseeable" includes impacts, which have catastrophic consequences, even if their probability of occurrence is low,

> provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason.

CEQ's associate director for NEPA Oversight, addressed the CEQ regulation dealing with incomplete or unavailable information and the use of available data (40 C.F.R. § 1502.22). He explained that for this section of the CEQ guidance to apply, there has to be a clear data gap or the situation must be so unique that there is no information available. He expressed the opinion that the term "best available" data or science is highly debated and subjective, though the use of best available data is a recognized method. NEPA requires the data used to be vetted, properly cited, and relevant. In addition, each Federal agency has its own specific guidance on what is required and allowable when addressing environmental issues in an EIS.

Regarding the methodology used in an EIS, CEQ's associate director quoted the CEQ NEPA guidance for methodology and scientific accuracy (40 C.F.R. § 1502.24):

> Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements. They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement. An agency may place discussion of methodology in an appendix.

We then asked NSD's senior scientist if there was a standard for using representative information versus direct measurement. He commented that there was no policy per se guiding the use of one or the other, but that NEPA requirements recommend the use of the best available science and researchers are supposed to make a "reasonable effort to fill data gaps." He emphasized that it was an acceptable practice to use a "comparable source of the analysis" for noise generators, since researchers will "never" find a true or exact "equivalent" noise source when using representative information. NSD's senior scientist stated that based on his review of the available information, he felt VHB used the best available science in the DEIS and was compliant with NEPA guidance.

The Atkins-North American peer reviewer (peer reviewer) of the DEIS from the Bioacoustics Research Program at the Cornell Lab of Ornithology, Cornell University, said that the DEIS appeared to have used the best available data. As a scientist, he said, he would have preferred to have been presented with a richer data set representing the acoustic footprint for the Company, but the DEIS' sound level data appeared reasonable.

VHB's acoustics representative and director of Air Quality and Noise Services told us that he personally located the reference material in question (NU's 1995 report and DOT's RCNM) and selected items out of both reports to represent Company equipment and their associated sound levels. He said that there was a limited amount of information related to personal watercraft or commercial fishing equipment, but felt the NU report used the best available science. He felt his selections from these reports were reasonable and justified. He told us the scope of work (SOW) for the DEIS contract requested that VHB use readily available data and did not require the collection of new data. He explained that in his experience with EISs, approximately half of the projects used similar SOWs while the other half required the collection of new data once data

gaps were identified and a need was determined. He said VHB complied with the CEQ, NEPA, and NPS guidance regarding the management of EISs because they used readily available data and science.

A review of the contract awarded to VHB on August 5, 2010, for the scope of work, revealed that "available data" was addressed in the section titled "Task 8. Science Team":

> Using a list of contacts provided by NPS, the Contractor shall invite subject matter experts to be members of the Science Team. These contacts may include academic researchers, the USGS, NMFS, resource specialists within the NPS Natural Resource Program Center and state agencies. Using the alternatives developed by NPS, the Science Team will review available data, published literature, and provide insight regarding potential impacts of the alternatives on resources in Drakes Estero. The Science Team will also assist with identifying areas where information may be incomplete or unavailable.

We asked Trevino, NPS' Chief of NSD, about VHB's selection of representative equipment within the DEIS for Company equipment. She said that VHB used the best available science at that time and how she deemed the "proxy data" used (from the NU report and the RCNM) was high quality data, based on her knowledge of CEQ, NEPA, and NPS DO standards, thereby negating the need to collect new data. She said that NPS' decision not to collect new data at the Company complied with all guidance regarding the EIS process. Trevino explained that since the circulation of the public DEIS in September 2011, new scientific reports surfaced that are being evaluated for future use and possible incorporation into the final EIS. She said the Company DEIS was under a truncated timetable, and in her experiences with the EIS process, time can greatly impact the amount of research conducted.

Allegations That Draft Revisions Were Intended To Deceive the Public and Decisionmakers

The complainant alleged that overall, the revisions and edits to the DEIS that occurred between the June 2011 internal/non-public DEIS and the September 2011 public draft were intended to "further deceive the public, peer reviewers and decision makers." The complainant referred specifically to edits in Table 3-3 (see Figure 1) and tables in Chapter 4. He explained that a non-public copy of the DEIS was provided to him by a Government employee with direct access to the report and called the employee a "whistleblower." The complainant claimed that revisions between draft versions "should lead to clarity and consistency," but that the revisions to the DEIS led to inconsistencies and ultimately falsely produced a negative impact on the Company's operations.

Our investigation revealed that the aforementioned changes and revisions to Table 3-3 (see Figure 1) and tables in Chapter 4 were performed during peer reviews, as well as by contracted technical editors to better clarify the tables' content and to ensure the DEIS complied with NPS' "Denver Service Center Editing Reference Manual" and "The Chicago Manual of Style" for proper citation and style. Finally, revisions were made to correct a mathematical error discovered during the peer review process. Our review of the DEIS revisions revealed there were 12 internal drafts of the DEIS and its individual chapters were peer reviewed individually before the first

internal draft circulated to the cooperating agencies in June 2011. An additional three DEIS versions were developed before the public version was circulated in September 2011. Each of the aforementioned drafts underwent the revision and edit process by NPS, Point Reyes staff, EQD, technical editors, and cooperating agencies, and all comments and suggested edits were documented and tracked via Microsoft Excel spreadsheets, pen and ink comments, or Microsoft Word tracked changes.

We reviewed all of the tracked comments and proposed edits provided by Point Reyes and NPS staff members and found their input was limited to scope, policy, NEPA compliance, staff's specific area of expertise, or general comments about the readability and flow of the document. This information was gathered during the following investigative steps.

VHB's Federal program manager compiled the initial list of Company noise generators during NPS' and VHB's onsite Company tour on February 16, 2011, which was hosted by Lunny. During the tour, VHB's Federal program manager drafted a complete list of Company equipment based on personal observations and additional details provided by Lunny. VHB's Federal program manager's notes were later transcribed and provided to VHB's EIS project manager and VHB's acoustics representative, who together formulated the DEIS' Table 3-3 (see Figure 1).

VHB's EIS project manager told us that she was personally responsible for drafting the information within the soundscape sections of the DEIS and formulated Table 3-3(see Figure 1), which was created based on written and verbal information provided to her by VHB's Federal program manager from the February 16, 2011 Company tour. She explained that VHB's acoustics representative selected the representative sound-level values to depict Company equipment and she felt the proxy data selected was reasonable based on VHB's acoustics representative's literature research and selection of the NU report and RCNM.

Regarding the citations under Table 3-3 (see Figure 1), VHB's NPS program manager said that VHB typically fully lists all citations and reference material in the text of its internal documents and under tables until all reviews of the material have been conducted and it is being prepared to be finalized. She stated that the normal process when preparing to finalize the report is to reduce the full in-text citations to an author/date citation.

VHB's EIS project manager and acoustics representative and Point Reyes' EIS project manager all described a mathematical error by VHB's EIS project manager in Chapter 4's tables, which pertained to dissipation rates and distances, and changed the report to correct the issue.

NSD's senior scientist told us that during the review and editing process, he suggested that changing a header in Table 3-3 (see Figure 1) from "estimated" to "representative" would be a more accurate depiction of the information presented in the table because the term "estimated" implies that data was collected on Company equipment.

We interviewed the owner and operator of the technical editing firm "The Final Word." VHB subcontracted her to edit the DEIS and ensure the document complied with NPS editing standards. The owner of The Final Word, who has more than 14 years of experience editing NEPA documents, explained that she ensures editing complies with both the "NPS Denver

Service Center Editing Reference Manual" and "The Chicago Manual of Style." She said that she received only one draft version of the DEIS from VHB on June 16, 2011; she reviewed it and provided her comments and proposed edits to VHB on July 1, 2011. She stated that her edits to citations or sources in chapters 3 and 4, as well as Table 3-3 (see Figure 1) were in accordance with the "NPS Editing Reference Manual." She shortened the full citations and references listed under the tables and in the text and subsequently moved the full citations to the bibliography section or a footnote, which she explained is standard practice for environmental assessments and EISs. She ensured the author/date citation format was used in the body of the text or under tables, and she shortened in-text citations only for consistency. She added that she had no contact with NPS or Point Reyes staff members and worked only with VHB's NPS program manager.

Allegations That the DEIS Deceived the Peer Reviewers

The complainant alleged NPS and VHB presented information in the DEIS in such a way as to deceive the peer reviewers. Specifically, the revisions to the DEIS tables and citations ultimately deceived the peer reviewer for the soundscape sections into believing the acoustical data was derived from actual measurements collected from Company equipment. The complainant claimed: "These actions are consistent with a motivation to deceive the reader, and indeed one key reader, [from] (Cornell [University], the peer reviewer of this section) was deceived into believing that the NPS data were from [Company]." The complainant alleged there was a "scheme to deceive and distort the DEIS and the [Atkins] peer review came from unnamed individuals at NPS and/or VHB."

Our investigation of the allegations that NPS deceived the peer reviewer revealed that the peer reviewer had not been not under the impression that the sound data was derived from collections on Company equipment and he was aware the DEIS used proxy data to represent Company equipment. The allegations that revisions were made to the DEIS with the intent to deceive the public and decisionmakers were addressed in the aforementioned section, which revealed revisions and edits performed on the draft between versions were done to comply with NPS editing standards. This information was determined during the following investigative steps.

During our initial interview of the complainant on May 16, 2012, he stated that after reviewing the DEIS, NU report, and RCNM, he also reviewed the Atkins peer review report for the DEIS. He claimed the soundscape peer reviewer had been deceived into believing the sound data came from Company equipment. The complainant explained that in late March 2012, he contacted the soundscape peer reviewer from Cornell University who was contracted by Atkins to perform the DEIS peer review. The complainant informed the peer reviewer of his observations and claimed that the DEIS was deceptive due to false ambient noise levels and false equipment sound emissions. He explained to the peer reviewer the similarities between the current DEIS and historical issues between NPS and the Company regarding the harm of harbor seals and oyster sediment.[27]

According to the complainant, during his conversations with the peer reviewer it became evident that the peer reviewer was under the impression that all of the noise level measurements cited in the DEIS were collected onsite from the Company. The peer reviewer allegedly also believed

[27] Refers to DOI OIG's 2007 investigation into NPS' report about harbor seal disturbances, Case No. OI-CA-07-0297-I.

that the NU citation referred to previous Company measurements and not to an acoustics project conducted for the State of New Jersey. The complainant said that the peer reviewer told him he had not received or reviewed the Environ report, but if he had it would have changed his conclusions pertaining to the Company's impacts on the Point Reyes Soundscape. The complainant later provided his notes, transcribed minutes after his conversation with the peer reviewer, as well as emails exchanged between him and the peer reviewer, where he quoted the peer reviewer's responses to his questions about the DEIS.

The complainant provided us with copies of the emails he and the peer reviewer exchanged between March 20 and 22, 2012, in which the peer reviewer confirmed he received a copy of the Environ report. The peer reviewer wrote the following based on his review of the Environ report:

> Neither the DEIS nor the [Environ] material realistically deals with the actual sound fields experienced as a result of exposure to the different sources. In any case, to me this is really not about the science of absolute or even relative sound fields generated by various machines and things that humans do. . . . Rather, it's about whether or not and just how much society values wilderness. In this case, it really doesn't matter whether the DEIS incorrectly gives 79 dBA or 65 dBA as the sound value for a "Frontend Loader." The issue is really about whether we, or whomever, decide that there are places that should be left alone in every way possible.

The complainant responded:

> I think you're missing the point. The NPS clearly has a preferred alternative—A[28]—they just didn't say so. Everyone involved knows what it is. You've missed many of their press releases and work via their surrogates. You shouldn't have any doubt. They have been trying for six years to convince the community and elected officials that they have scientific data to show environmental harm to wildlife, when they don't.
>
> About the only so-called data in the EIS are the acoustic data, and now you see that those are not Drakes Estero data, but rather New Jersey and Washington DC data of little relevance. You have inadvertently become involved in what is a metaphor for a big political mess—NPS misuse of science. So you may think that this shouldn't be about scientific data, but in fact it is. They really don't have the legal basis to simply make the decision you think they can make—they have been instructed to make it according to measures of environmental harm. There are numerous mandates from the Senate on this one.
>
> Your peer-reviewed study is controversial because it is in place of the congressionally mandated NAS study. So welcome to the politics. My advice is that you should stay out of the politics, unless you want to learn more than you now know. It is complicated, and doesn't look good for NPS. Instead, to keep yourself

[28] Chapter 2 of the DEIS lists proposed alternatives (A-D) ranging from no action to the issuance of a new SUP. Alternative A refers to the alternative where an SUP is not issued and the Company's leased area is converted into Wilderness.

> clean, you should stick to the data. That is your expertise. That is what you were asked to review. You were deceived. You were shown data from other equipment and other places and told it was from Drakes Estero. The really numbers are apparently much lower. End of story. Of course, if asked, the acoustic numbers don't indicate any harm to wildlife.

We interviewed the peer reviewer, who told us he had 40 years of experience in the acoustics field and more than 20 years of experience peer reviewing EISs (see Attachment 40). The Company DEIS was his first peer review of an NPS EIS. The peer reviewer said he peer reviewed the soundscape sections (chapters 3 and 4) of the DEIS for Atkins, and he expressed to us that in his peer review comments that there were no discrepancies with the scientific methods, aside from the noted limited amount of scientific data available on the subject matter of sound levels for commercial fishing equipment and personal watercraft. The peer reviewer confirmed that he conversed and exchanged emails with the complainant in late March 2012 regarding his peer review comments. We asked the peer reviewer if he recalled informing the complainant that he (the peer reviewer) had been deceived by the DEIS or had been led to believe that the sound data originated from Company equipment. The peer reviewer did not recall making any such comments to the complainant. He told us that he knew some of the actual data in the DEIS were representative or proxy data for Company equipment, while other information was derived from the Company.

The complainant also alleged that he provided the peer reviewer a copy of the Environ report, which indicates significantly lower levels for Company equipment and reduced sound dissipation distance. He told us that the peer reviewer commented that if he had been given the Environ comments earlier, it would have changed the outcome of the peer review (see Attachment 33). We asked the peer reviewer for clarification about the Environ comments; the peer reviewer did not recall making the statement the complainant alleged, nor did he recall reviewing any material that would have changed the outcome of his peer review (see Attachment 40). The peer reviewer stated to the best of his knowledge, the Environ data was generated after Atkins began its peer review of the DEIS. The peer reviewer confirmed he reviewed the Environ report and noted that the research was conducted on a single day and that Environ did not address or factor in all of the environmental variables typically captured or considered over a longer period of collections. The peer reviewer stated that it is a luxury in the field of science to have all the available information, but reiterated the Environ data did not change his conclusions.

The peer reviewer told us his contact with the complainant began with an email from the complainant on March 20, 2012, titled "time sensitive request." The peer reviewer provided copies of his email exchange with the complainant and noted in the first email, the complainant identified himself as an adjunct professor at a California University and a managing partner of an alternative investment firm. The complainant indicated that he was interested in the peer reviewer's review of the soundscape in the DEIS, telling the peer reviewer that he found the peer reviewer's comments interesting and would like to better understand them.

The peer reviewer recalled that his conversation with the complainant began casually, with the complainant expressing his interest in the Company. He also informed the peer reviewer he was an NAS member and a fellow scientist; the peer reviewer told us he assumed their conversation

was a friendly exchange between colleagues. The complainant asked the peer reviewer if he was aware the information in Table 3-3 (see Figure 1) was "not up to date."

The peer reviewer explained to the complainant that his review of Table 3-3 (see Figure 1) revealed nothing unreasonable and clarified that his role was to focus on the DEIS scientific process, which he stated followed a "good process." The peer reviewer's initial review of the draft also addressed NPS guidance and policy and the proposed alternatives; the Atkins project manager, however, requested that the peer reviewer focus his review on the scientific process and methods related to sound.

We asked the peer reviewer to clarify one of the statements that the complainant quoted the peer reviewer as stating during their exchange:

> When I was working on my write-up, the Atkins folks told me to remove any hint of policy and leave it to science in my report. Somewhere in a phone call. I came to believe that the "Park wanted Alternative A" (even though it was not specified as such in the DEIS), and that Alternative A was the "likely outcome."

The peer reviewer explained to us that initially he misunderstood that Alternative A was not NPS' preferred alternative; he assumed the "A" represented the preferred alternative, rather than simply following a sequence titled either Alternative A, B, or C. He stated he concluded that the DEIS did not imply NPS had a preferred alternative, and he explained how most of the EISs he reviewed had an environmentally preferred alternative, which was categorized as the alternative with the fewest environmental impacts. The peer reviewer did not recall stating Alternative A was the "likely outcome" of the Company's EIS.

The peer reviewer stated that the Environ methods of collection were strong and that they followed the standard protocol of field collections and used certified equipment for sound sampling. He believed the Environ data was collected after the DEIS was formulated and felt it was limited in scope. He said he reviewed the references cited in the DEIS and felt the sound-level findings were factual and properly represented; he added that the use of representative or proxy data was common practice in the acoustics field.

We told the peer reviewer that the complainant quoted him as stating: "I am not in agreement with the National Park. Given what you've told me about the numbers in Table 3-3 and the [Environ] report, I would conclude that there is no biological impact of the oyster farm on wildlife." The peer reviewer was unable to recall making this statement to the complainant and said he did not agree with its conclusion.

According to the peer reviewer, the complainant took excerpts from the personal emails he and the complainant exchanged and used the peer reviewer's comments out of context in some form of public address that was circulated in the media, which the peer reviewer was then asked to comment on by several reporters. The peer reviewer said he and the complainant never discussed publicly releasing their exchanged comments or emails. Overall, the peer reviewer told us, the DEIS was well done, well organized, and complete. Chapter 4's scientific methods led him to believe the DEIS was "robust" and the acoustics data presented appeared to have been derived

using strong scientific methods. He denied being in contact with any NPS staff involved in the DEIS process or receiving any guidance alluding to a preferred outcome.

During the course of this investigation, we developed a timeline for the release of the DEIS versions as well as the major revisions through our interview. The Environ comments were published and made available to NPS on December 9, 2011, 90 days after the public DEIS was released for comments. NPS contracted Atkins to perform the peer review of the September 2011 version of the DEIS between January 27, 2012, and February 19, 2012; their review was based on the DEIS and no other supplemental material was provided. To date, the September 2011 draft EIS is the only public version to be released for review.

Allegations of Misconduct and Conflicts of Interest by NPS and VHB Staff

The complainant alleged that NPS staff engaged in misconduct because he believed them to have influenced the VHB staff who drafted the EIS as well as the Volpe Center researchers who performed baseline ambient research on Point Reyes in 2009. In addition, the complainant alleged that NPS used the Freedom of Information Act process to hinder his evaluation of the reference data within the EIS, specifically the Volpe 2011 raw data and recordings. Finally, he alleged that various NPS and VHB personnel involved in the EIS process had conflicts of interest and failed to recuse themselves.

Allegations That NPS Influenced Selection of Volpe Microphones Onsite and Data Collected on the Company

The complainant alleged that NPS influenced the selection sites used by Volpe to collect the ambient sound levels within Point Reyes in 2009. Specifically, he stated that NPS influenced the deployment of a data collection system targeted to collect data on Company boats and operations. The complainant alleged: "NPS intentionally picked this 'sound-sensitive area' on shore of Drakes Estero near [Company] oyster boats and workers." He said it was "no coincidence" that the site selected was near the NPS' "secret cameras along Drakes Estero" that recorded the harbor seals during pupping season.

Our investigation revealed that the coauthor of the Volpe 2011 report titled "Baseline Ambient Sound Levels in Point Reyes National Seashore," was the sole assessor and personally selected the data collection sites within Point Reyes for its air tour management plan (ATMP). Her trip proposal documents and witness interviews of the other members on the ATMP team confirmed that she selected the collection sites. According to those involved in the site selection process, neither the presence of Company operations nor harbor seals were factors when selecting Point Reyes sites, as the focus was the collection of ambient sound levels. Regarding the close proximity of a site to NPS' "secret cameras," Volpe Center's lead researcher was unaware of the camera's deployment and the Point Reyes staff member assigned to the ATMP team assumed that Volpe Center had deployed the camera. We collected this information through the following investigative steps.

A review of the National Parks Air Tour Management Act of 2000[29] revealed that the act was

[29] National Parks Air Tour Management Act of 2000. P.L.06-181, 114 Stat. 61, Title VIII, Section 801, April 2000.

created to regulate commercial air tour operations over National park units. FAA and NPS develop ATMPs for all National parks with commercial air tours. The Volpe Center supported FAA, NPS, and NPS' NSD in the development of ATMPs for approximately 85 park units, including Point Reyes. In 2009, the Volpe Center and FAA partnered with the NPS to conduct preliminary research for the future development of an ATMP for Point Reyes, based on the presence of commercial air tours. In order to develop an ATMP, Point Reyes was monitored to establish the lowest and highest baselines or ambient sound levels; the baselines are then used for comparison purposes to determine the potential impacts of noise levels generated by air tours. The Volpe Center monitored four sites within Point Reyes during the summer and winter of 2009.

We interviewed the Volpe Center's ATMP acoustics project manager and coauthor of the Volpe 2011 report, which was used by VHB and referenced in the DEIS, regarding her team's research to establish the ambient sound levels in Point Reyes. She explained that the Volpe Center research for ATMPs focuses on two types of generated sounds: natural and non-natural. She defined natural sounds as noise produced by the wind, surf, and wildlife, whereas non-natural sound is generated by aircraft, vehicles, and people. She also explained that National parks are cataloged into ecosystem zones, which are characterized by unique traits (e.g., vegetation, shoreline, visitor areas). The size and number of zones identified in each park helped the Volpe Center to determine the minimal number of data collections systems (microphones) to be deployed in each zone.

The ATMP acoustics project manager stated that she generated a trip proposal for site selection in 2009 and personally developed a list of proposed Point Reyes sites at which to collect data. She selected sites based on areas that were accessible by the research team and that provided an acceptable level of concealment and security for the Volpe Center's equipment. She also ensured the sites were away from roads, paths, or non-natural generators of sound. She explained that one of the larger zones present in Seashore was water, but said that her past experiences using microphones in stationary research boats to collect data were unsuccessful due to sound generated by surf crashing against the side of the boat.

We asked the ATMP acoustics project manager what influence Company operations had on site selections. She explained that she would not have selected a site near the Company's operation because the non-natural producers of sound affects the characterization of ambient sound levels and would have negated her team's research. She denied being influenced or instructed to select the site[30] near Drakes Head Estero to monitor the Company's operation. She said that if she had become aware that a site was located near Company operations, she would have moved the equipment to collect the ambient levels needed for the ATMP. She stated she was unaware of any fixed camera system near the Drakes Head Estero site and clarified that the Volpe Center would not have deployed a fixed camera as part of its collection system. She related that Volpe Center staff recorded site conditions and equipment setup with photos, but was unaware of any other cameras being used at any Point Reyes site she selected.

We asked the ATMP acoustics project manager to explain how the Volpe Center deployed its data collections systems within Point Reyes for the ATMP. She explained that to capture

[30] PORE004 refers to the abbreviated Volpe Collection system for Point Reyes #004.

ambient sound levels, the Volpe Center positions its microphones upward or into areas she called "free field," which she described as being free from bounding surfaces. The microphones deployed for Point Reyes' ATMP were non-directional and recorded data for sound levels and atmospheric conditions at intervals of every second of every day during the observation periods in 2009. Regarding the microphone's accuracy of capturing Company boats noise levels in the Estero, she explained that to record accurate data and determine how much noise was generated by Company boats, the microphone would have to be pointed at the boats from approximately 50 feet away. In addition, the Company boat would have to make several passes at various speeds near the microphone to accurately determine the sound levels produced by that boat. The ATMP acoustics project manager said that her Point Reyes staff point of contact for the research related to the Volpe 2011 report was the former chief of natural resources and NSD's Vicki McCusker, Director of Natural Resources Stewardship and Science.

The ATMP acoustics project manager told us that she reviewed the Company DEIS after the allegations became public to ensure her report was referenced appropriately. She verified the citation and data in the DEIS derived from the Volpe 2011 report for ambient sound data for Point Reyes was cited and used correctly. She offered her opinion on the DEIS after her review, saying she felt both Environ and VHB "exaggerated" their findings and impacts. For example, she explained the Volpe Center microphones were approximately 3,000 feet from Company boat routes and that both her observers and microphones detected operational boat noise. According to the ATMP acoustics project manager, Environ's report said the sound dissipated at 400 feet, whereas VHB's assessment of proxy data estimated the boat noise could be heard at 5,000 feet. She said the sound levels did not dissipate at 400 feet because her equipment detected the Company's boat noise at 3,000 feet. She was unable to attest to the total distance at which the sound levels could have been heard beyond the 3,000-foot mark. She explained that researching the noise levels generated by the Company's boats and equipment could not be accurately conducted in a single day as was reported by Environ, because there are countless environmental variations that would more likely be noted over a longer collection period.

A 30-year NPS employee, who retired from the position of Point Reyes' chief of natural resources in 2011, told us that Point Reyes did not employ a physical scientist or soundscape specialist, and that his duties often included soundscape tasks. In 2009, the former chief of natural resources assisted FAA and the Volpe Center in collecting data at Point Reyes to establish ambient sound baseline for a future ATMP. He explained the Volpe Center staff researched and selected the sites to deploy their microphones and data collection kits. Volpe Center, NPS, and FAA staff discussed site selections as a group. He explained that he provided no input or guidance as to what sites to select. He did voice concern, however, about the potential placement of data collection systems in areas designated as wilderness because any non-conforming use of wilderness, such as setting up data collection equipment, as specified in the Wilderness Act, requires NPS management approval and any use of wilderness area has to be monitored.

We asked the former chief of natural resources how the ecological zones were used to select sites for microphone deployment; he explained that NPS developed the zones as part of Point Reyes' General Management Plan[31] of 1980. He explained that the Drakes Estero Head, where the

[31] A General Management Plan is a strategic planning document outlining the future management of a NPS site for 15 to 20

Volpe Center placed microphones[32] during the study, covered two ecological zones and was near a popular visitors' walking trail as well as approximately 80 yards from the water's edge. We asked the former chief of natural resources if the Volpe Center selected the site due its close proximity to the harbor seals' pupping grounds. He told us that when the Volpe Center analyzes sites for selection, harbor seals were not considered as a factor in establishing ambient sound levels. He denied that anyone from Point Reyes or NPS recommended or requested that the Volpe Center staff place data collection systems in specific areas. He reiterated to us that the ATMP team did not discuss Company operations and that each zone was selected based on its own significance. Regarding the deployment of a camera near the Estero, the former chief of natural resources was under the impression the Volpe Center staff had deployed the camera system, but did not know the specifics of the cameras' operation or angles.

Vicki McCusker has more than 14 years of experience ensuring NEPA compliance regarding soundscapes. She confirmed that in 2009, she helped to manage a joint project between NPS and the Volpe Center to establish ambient sound levels for an ATMP within Point Reyes and that the former chief of natural resources was her Point Reyes point of contact for the project. She recalled that it was the Volpe Center staff who selected the sites to deploy the data collection systems. She said that the ATMP acoustics project manager led the team of researchers. McCusker confirmed that the Volpe Center considered neither Company operations nor the presence of harbor seals when selecting the sites to deploy the data collection systems.

Allegations That NPS Influenced VHB To Report Negatively Against the Company

The complainant alleged that NPS influenced VHB to report unfavorable findings about the Company in the DEIS. He claimed that the Company gave VHB and NPS staff a tour during which they would have personally observed the noise emitting from the Company equipment in question. The complainant claimed the same staff members who attended the tour later reviewed the DEIS and failed to correct the report when they observed overestimated sound levels representing Company noise levels and the distance for which the equipment traveled within the Estero.

Our investigation found no evidence that NPS influenced VHB to report negative findings against the Company. We did not find any information to suggest the DEIS preparers or reviewers failed to ensure the DEIS was accurate. According to those NPS and VHB staff members who were in attendance at the onsite tours of the Company, the information presented in the DEIS appeared reasonable. Each tour attendee who later reviewed the DEIS for accuracy, however, admitted they lacked the acoustics background to question the proxy levels selected when compared to their personal observations. This information was collected during the following investigative steps.

During our initial interview of the complainant in May 2012, he stated that in February 2011, Lunny provided a Company tour to the NPS and VHB employees conducting the DEIS. The Company tour was recorded by VHB. Lunny was later given a copy of the audio recording. The

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years, The plan sets the basic philosophy and broad guidance for management decisions that affect the park's resources and the visitor's experience.

[32] Point Reyes #004 (PORE004).

complainant said he reviewed the recording and that the quality was generally poor due to wind noise. At times, however, he claimed conversations could be heard and the tour attendees appeared to use normal speaking voices that could be heard over the wind and boat engine noise. The complainant alleged that if the noise measurements in the DEIS for the boats were accurate, the conversations he listened to on the recording could not have taken place, because he claimed the sound levels would have been too loud for the tour attendees to hold a normal conversation. Based on this information, he claimed the NPS and VHB staff on the tour must have been "following someone's orders" and that they did not question or revise the DEIS to reflect their personal observations.

In the complaint forwarded to OIG, the complainant alleged that NPS and VHB employees "knew (or should have known) as they were writing and revising the DEIS that the soundscape impact was based upon false representations of imported data. Some of them knew (or should have known) that the data from the [Point Reyes site 004] microphone contradicted the DEIS."

During this investigation, we interviewed several of the VHB and NPS staff members who attended the September 1, 2010 onshore tour hosted by Lunny. Specifically, we spoke with VHB's EIS project manager; VHB's NPS program manager; VHB's market leader; and Point Reyes' EIS project manager. The VHB EIS project manager, VHB's NPS program manager, and VHB's market leader all recalled that the hand-held air hammers used by the Company were loud. The VHB EIS project manager could not recall whether the noise from the hammers overpowered conversations, nor could she recall the distance between her and the hammers. VHB's NPS program manager remembered having to stop her conversation with others while she was near the hammers. VHB's market leader remembered that a small "hand-held jackhammer" was in use, but could not, however, recall any specific details about the tool other than the fact that it was loud. The Point Reyes EIS project manager did not recall whether the Company was in operation during this visit, but had heard hammers operating from the site in the past.

On February 16, 2011, VHB's Federal program manager VHB's biologist, and Gates were provided an on- and offshore tour of the Company's operations. VHB's Federal program manager told us that during the tour she could hear the pneumatic hammers from the boats during the offshore tour. She described the oyster tumbler as being a prominent noise source during the tour, stating that it generated a "tremendous amount of noise." Regarding her recollection of the noise generated by the Company boats during the tour, VHB's Federal program manager explained the tour attendees all sat close to each other on the boat. She recalled it being windy while on the water in Drakes Estero, but neither the wind or boat motor noise required the attendees to talk loudly. Gates recalled that the site visit was tape recorded, but explained the quality of the recording was "somewhat useless" because of the noise of the boat and the wind.

The VHB Biologist's overall impression of the Company noise generators onsite was that the prominent noise source for the day was the wind. He felt the Company boat motor during the offshore tour was noisy and recalled having to raise his voice to communicate with others on the boat. He recalled seeing the oyster tumbler and pneumatic hammers, but did not remember them operating in his presence; he occasionally separated from the tour to document details on

Company structures.

During our interview of the VHB and Point Reyes tour attendees (VHB's Federal program manager, VHB's biologist, VHB's EIS project manager, Point Reyes' EIS project manager, and Gates), we asked each of them if they had received training or were well versed in determining acoustic levels. None of the interviewees who attended any of the tours admitted to being acoustic experts or to possessing the knowledge to translate personal observations into approximate noise levels. We also asked each of the interviewees if, upon review of the DEIS, the represented levels selected for the Company appeared to be over- or underestimated. None of VHB's or NPS' staff questioned the represented levels due to their lack of an acoustics background; they each felt the levels appeared reasonable.

VHB's acoustics representative, who personally selected the proxy data to represent the Company boats and equipment, did not attend either tour the Company hosted and made proxy selections based on the information and photos provided to his fellow VHB members who did attend the tours.

Allegations That NPS Failed To Follow Management Policies

The complainant alleged that NPS deviated from its own 2006 management policy, as well as NPS' Director's Order 47, "Soundscape Preservation and Noise Management." The complainant based these allegations on VHB and NPS' alleged failure to "measure [Company] noise generators." The complainant claimed that NPS was "directed by these policies to identify noise-generating human activities, measure human-generated sounds, [and] measure baseline conditions. . . . [Company] noise sources had an unknown impact until proxies were selected & analyzed using NPS' thresholds." Lastly, he alleged that NPS or VHB produced "soundscape analysis in DEIS that is different from other NPS EIS reports in that it did not measure human-generated sounds and did not follow NPS policies."

Our investigation found no evidence to suggest that NPS violated Director's Order 47 or that it deviated from NPS policy regarding soundscape management or the EIS process. CEQ, NEPA, and NPS EIS regulations and guidance did not require NPS to measure Company noise generators since Company noise emissions had never been named as having a potential impact on the environment or wildlife. Neither NPS nor VHB staff predicted that Company equipment would have been assessed as having a major impact, and they were unaware of the totality of the impacts until the proxies were selected and NPS thresholds were applied. According to the NPS staff members we interviewed, the Company operating within a potential wilderness area created a unique management circumstance, and the Company DEIS resembled no other NPS EIS. We were informed that the EIS is essentially NPS' only tool available to assess the Company's impacts on the environment and generate its findings for the decision authorities. This information was collected through the following investigative steps.

As described in the background section of this report, Director's Order 47 defines what NPS categorized as "man-made sound levels," provides NPS guidance on how to manage soundscapes, and gives specifics on how to address "excessive/inappropriate levels of noise" from known noise sources.

The complainant and the owner of the Company claimed that prior to this DEIS the potential impacts of noise from Company equipment to affect the environment had never been addressed.

We interviewed Point Reyes' outreach coordinator. She recalled other members of Point Reyes staff receiving complaints from visitors, claiming that Company machinery, specifically the pneumatic tools, were "loud" and affected Point Reyes' visitors' experience. When asked what Point Reyes' protocol was for referring these complaints to the Company, she stated that the Company operates under a lease agreement and as long as the Company's reported actions fell within the parameters of its lease and were deemed not to violate the terms of the lease agreement, then those complaints deemed to fall within the lease agreement would never be referred to Company owners.

A review of NPS' and VHB's initial internal scoping meeting minutes document from September 2 and 3, 2010, revealed that NPS' "Environmental Screening Form" was used as a guide and checklist to address all of the potential areas that needed to be addressed and assessed in the EIS to determine if the Company had impacts on any of the 30 categories on the screening form. The meeting minutes noted that NPS and VHB covered a broad array of topics and considerations to prepare the EIS. There was no special consideration or footnotes for soundscape to suggest that the group predicted the category would produce any major impacts on the environment.

A review of Director's Order 47's requirement to measure man-made noise generators would have been applicable if the Point Reyes staff had previously identified Company noise generators as being problematic, directly impacting the environment, or in direct violation of the terms of the Company's lease. Our investigation, however, uncovered no evidence to support that Point Reyes staff had previously identified noise as an issue, unlike the noise generated by air tours flying over the park, which was measured by the Volpe Center in 2009 in preparation of an ATMP, which generated the Volpe 2011 report.

During our investigation, we interviewed several NPS and VHB staff members who attended the scoping meetings and well as the teleconferences (see Attachment 58). No one we interviewed recalled predicting or being forewarned that soundscapes would have produced an assessment of "major" for impacts.

We asked NSD's senior scientist about the increased attention soundscapes have received in all National parks. He explained that sound has become a growing area of consideration in EISs since the 1970s because of an increase in evidence showing the direct impacts noise has on wildlife and park visitor experiences.

We interviewed Karen Trevino, NPS' Chief of the NSD, and presented her with similar questions regarding soundscapes. She stated that sound levels within National parks have become a major topic addressed in EISs and are monitored more closely now. She referred to the Organic Act and told us that it states National parks are for the enjoyment of the public and therefore all park resources have to be protected. Trevino said that each year National parks receive a high percentage of visitors who visit the parks specifically for the tranquility and quiet.

The complainant claimed that Company noise generators had an unknown impact until VHB's proxies were selected and analyzed using NPS' thresholds. We previously addressed the complainant's allegations that inappropriate proxies were selected to represent Company equipment and that the NPS thresholds were based on erroneous ambient sound-level information. Our interviews of the VHB staff responsible for compiling the soundscape data and sections, mainly the EIS project manager and the acoustics representative, revealed they were unaware of the assessed impacts from Company equipment until all the represented selections and thresholds were applied. VHB stated that there was a limited amount of reference material to select from for representative data in the fields of commercial fishing equipment and personal watercraft measurements, and the selections were based on mechanical similarities and the percentage of use was based off of Lunny's verbal estimates of use.

The complainant also alleged that the Company DEIS did not resemble any other EIS performed by NPS, and therefore the NPS policy was not followed.

During the course of this investigation, we interviewed CEQ and NEPA experts, all of which declared the Company DEIS was a unique situation because there was a commercial fishing venture operating within a potential wilderness area. None of the witnesses we interviewed were able to provide examples of other commercial businesses operating within a protected area, and the majority of EISs that were at all similar addressed seasonal concessionaire businesses operating under short-term leases with parks.

Our review of NPS Director's Order 12 regarding EISs refers to NEPA (sec. 102(2)(C)), which requires an EIS whenever a park proposes or approves an action whose impacts on the human environment may be significant. Federal approvals of permits for private applicants are also considered actions that trigger the need for NPS NEPA analysis (1508.18).

Allegations of Conflict of Interest

The complainant and Lunny claimed that several key NPS and VHB employees involved in the DEIS process failed to recuse themselves from the project due to conflicts of interest. The complainant alleged that a VHB employee was a retired NPS employee who allegedly provided VHB with the 1995 NU report that was used in an unknown NPS project regarding Jet Skis (no further information). Lunny alleged a key Point Reyes staff member and project manager for this EIS had made public statements to a media outlet claiming the Company had a negative impact on the environment and called for its removal from Drakes Estero.

Our investigation revealed that the allegations against VHB's market leader and retired NPS employee were unfounded. VHB's acoustics representative declared he personally researched and located the NU report and subsequently made the selections of representative data (see Attachment 4). NPS and VHB staff confirmed the market leader's limited involvement and that he recused himself from the project after he saw he believed he had a conflict of interest.

Moreover, the conflict-of-interest allegations against Point Reyes' Natalie Gates had no direct impact on the EIS and were based on a highly contested news article. Our investigation produced no evidence to support that Gates was involved in any of the questioned portions of the EIS

presented by the complainant. All of these questioned revisions and data were identified as being contributed by NSD or VHB staff. This information was collected through the following investigative steps.

VHB's market leader has been employed by VHB for 3 years, where he helps to propose and execute projects contracted by NPS. Prior to working for VHB, he was a career NPS employee. His last position was as the Chief of EQD, Washington, DC, where in which he oversaw NPS' compliance with NEPA. He retired in August 2008 and joined VHB approximately 60 to 90 days later. He explained that he had no oversight or involvement with any prospective EIS planning pertaining to the Company's special use permit while he was an NPS employee.

VHB's market leader told us that he helped VHB prepare the proposal for the EIS project, and upon award of the contract to VHB, he acted as a facilitator at the internal scoping "kickoff" meetings with NPS staff. He recalled that after the internal scoping meetings with NPS, he attended a site tour of the Company with NPS and Point Reyes staff in which Lunny provided an overview of the Company's operations.

VHB's market leader said he ceased to be involved with the Company EIS almost immediately after the internal scoping meetings due to a self-perceived conflict of interest. At that time, he was on the Board of Directors of an organization called the Coalition of National Park Service Retirees (CNPSR). He explained that after NPS announced its intention to write an EIS regarding the Company's special use permit, a CNPSR executive wrote a letter to NPS declaring an official position on whether the permit should or should not be granted to the Company. He stated that although he was not involved in writing the letter, as a Board member his name appeared on the organization's letterhead. He believed that this presented a conflict of interest, and so he recused himself from any further involvement with the EIS. He was replaced by VHB's NPS program manager. He stated he also withdrew from CNPSR.

When asked about the NU reference used in the DEIS, VHB's market leader declared he did not recognize the report. He stated that he provided no sources of information to VHB staff for this EIS, and he was not involved in decisions on what data to use. He recalled giving VHB the name of a technical editor at The Final Word who had assisted him on similar projects while he was with NPS and had produced quality work. He stated that he never felt any pressure from NPS staff to ensure negative findings were reported within the EIS, and emphasized that if he had felt pressure at any time, he would have terminated the contract and reported the issue to NPS leaders. He said that he would not work with anyone that could cause damage to either VHB or himself.

During our Company tour and meeting, Lunny explained that when he was notified by Point Reyes management that Natalie Gates would be the project manager for the DEIS, he requested and attended a meeting with Point Reyes Superintendent Cicely Muldoon and Gates about a possible conflict of interest. Lunny claimed Gates had made statements to the local ABC News channel for San Francisco that the Company had a negative impact on the environment and that the business "must go." Lunny claimed he addressed this issue with Muldoon and Gates and was told that no conflict existed; he said that Muldoon asked Gates, in Lunny's presence, if she felt conflicted and Gates said no.

An online article by ABC 7 News San Francisco, dated May 21, 2010, quoted Gates as saying: "The oysters are actually extracting a lot of nutrients that a lot of other species depend on." The article adds: "Natalie Gates says research done by and on behalf of the park shows the oyster farm is having an impact on the Estero and needs to go."

We interviewed Gates, who told us she served as the coordinator at the onset of the EIS project between Point Reyes and EQD for approximately 3 months; Point Reyes management then assigned someone to be the full-time EIS coordinator. Gates said that the EIS required a great deal of her time, which she could not afford to dedicate due to managing several other major programs for Point Reyes; she did, however, remain as one of many Point Reyes staff members on the NPS' Interdisciplinary Team. Gates stated there was no "collusion" or effort by Point Reyes staff to find that the Company had negative impacts on the environment and that the EIS process was an honest effort to compile the best information and publish it to get a reaction from the public. She denied hearing or being a part of any conversations about NPS' intent to terminate the Company's lease.

Regarding her interview with ABC 7 news and the alleged quote that the Company "needs to go," she explained she was interviewed by Ken Miguel of ABC and once the story went public, she noted she had been misquoted. She said that she never made the "needs to go" comment. Gates said the story was riddled with misquotes and typos, which NPS brought to ABC's attention; she told us that ABC corrected some of the information, but not her misquote. She claimed that ABC refused to provide copies of the video or audio where she supposedly made the statement and that NPS and ABC have been unable to resolve the matter.

EQD's environmental protection specialist told us that her division managed the Company EIS because the EQD handles all complex or controversial environmental issues within the NPS system. The environmental protection specialist explained that she personally acted as the liaison between NPS and VHB throughout the project. She said that she also solicited the assistance of the NPS acoustic experts at NSD to ensure the EIS process complied with NEPA and acoustics methodology.

Allegations of Fraud, Waste, and Abuse

The complainant alleged that his claim "involves false representations and concealment of data and deception, key elements of the definition of fraud." The complainant alleged that, based on the deception and fraud in the DEIS, the document and the EIS process were a "waste and abuse of taxpayer money." The complainant claimed that the core issue of the DEIS is deception, a term that is not present in the DOI Scientific Integrity Policy. He, therefore, refers to § 3.8A of the policy, which states: "Cases of fraud, waste, and abuse should be directly referred to the Office of Inspector General." The complainant, as well as the Company's owner, also claimed the institution of the EIS process to issue an SUP was unwarranted and therefore wasted taxpayer funds.

The complainant quoted Senator Feinstein, in her March 29, 2012 letter to Secretary Salazar: "It is my belief that the case against [the Company] is deceptive and potentially fraudulent." Senator Feinstein was quoted within the complainant's allegation as stating that using the NU report's

17-year-old data for New Jersey Jet Skis as documentation of noise emissions from oyster boat engines was “incomprehensible” and “potentially fraudulent.”

Our investigation revealed no intent to deceive the public through the concealment of information as alleged. Because the issuance of an SUP is considered a major Federal action, conducting an EIS was required in accordance with NEPA guidance before an SUP could be issued. This information was collected through the following investigative steps.

According to NEPA, 43 U.S.C. § 4332, NPS is required to conduct an EIS to assess all environmental impacts before the issuance of a new SUP to the Company. CEQ’s associate director for NEPA Oversight confirmed EISs must be performed any time a Federal action is projected for all major projects, policies, and plans that may affect the environment. Land leases and SUPs fall into this category based on the potential to impact these contractual agreements may have on National parks or land on which these commercial businesses operate.

SUBJECT(S)

National Park Service
Point Reyes National Seashore
Point Reyes Station, CA

Vanasse Hangen Brustlin
351 McLaws Circle, Suite 3
Williamsburg, VA

DISPOSITION

This information was provided to the NPS Director.