

**National Park Service
Used Falsified Acoustic Data
to Intentionally Deceive the Public and the ATKINS Review
of the NPS Draft Environmental Impact Statement
on Drakes Bay Oyster Company**



By Dr. Corey S. Goodman

**1995 noise measurement of a Kawasaki 750 cc 2-stroke 70 HP Jet Ski in New Jersey was used by NPS to falsely represent as a noise measurement of a 20 HP 4-stroke oyster boat in Drakes Estero:
NPS intentionally misrepresented data to claim negative impact on wildlife**

**NPS DEIS used data from this ...
New Jersey State Police 1995 Jet Ski
Kawasaki 750 cc, 2-stroke, 70 HP at 2 ft
71 dBA**

19X overstated



**... to misrepresent this:
oyster farm 20 HP motorboat at 50 ft
58 dBA**

**NPS DEIS used 1995 Kawasaki
750 cc 2-stroke 70 HP Jet Ski
data and falsely represented it
as DBOC 20 HP motorboat data**



**NPS DEIS used data from this ...
Federal highway construction forklift
79 dBA**

25X overstated

**... to misrepresent this:
oyster farm forklift
64-65 dBA**



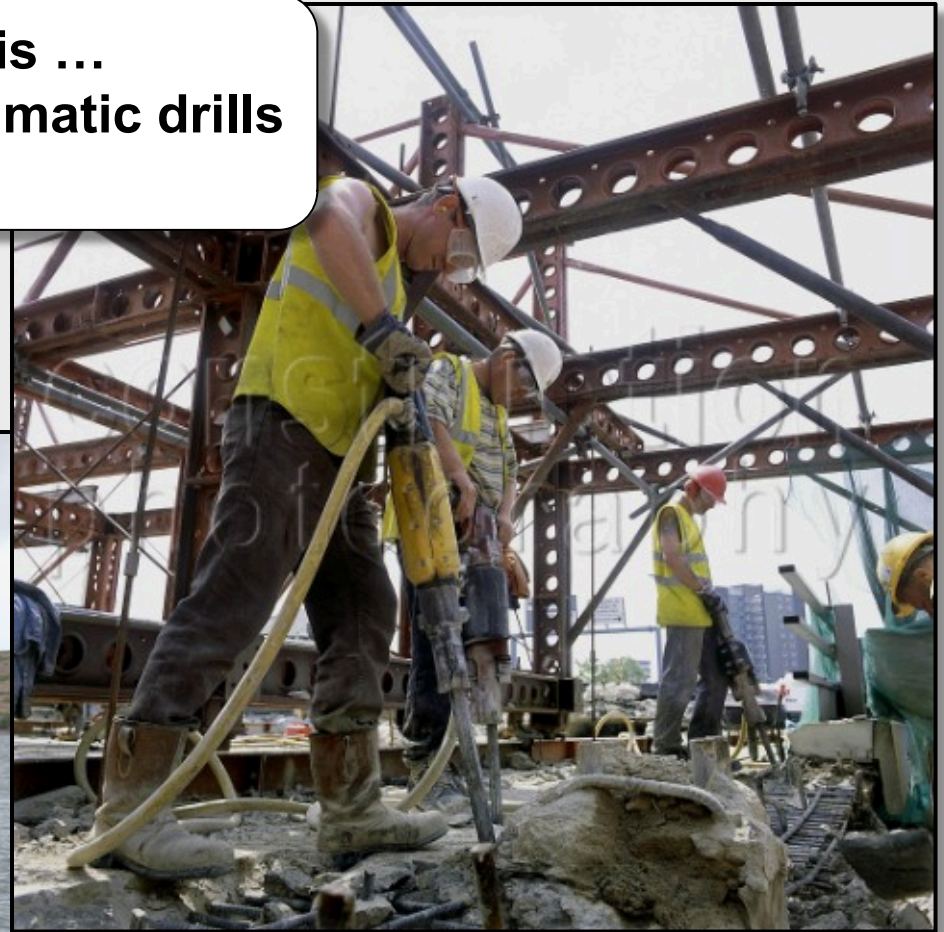
NPS DEIS used Federal highway heavy construction equipment data and falsely represented it as DBOC equipment data

**NPS DEIS used data from this ...
Federal highway construction pneumatic drills
85 dBA**

29X overstated



**... to misrepresent this:
oyster farm pneumatic tool
70 dBA**



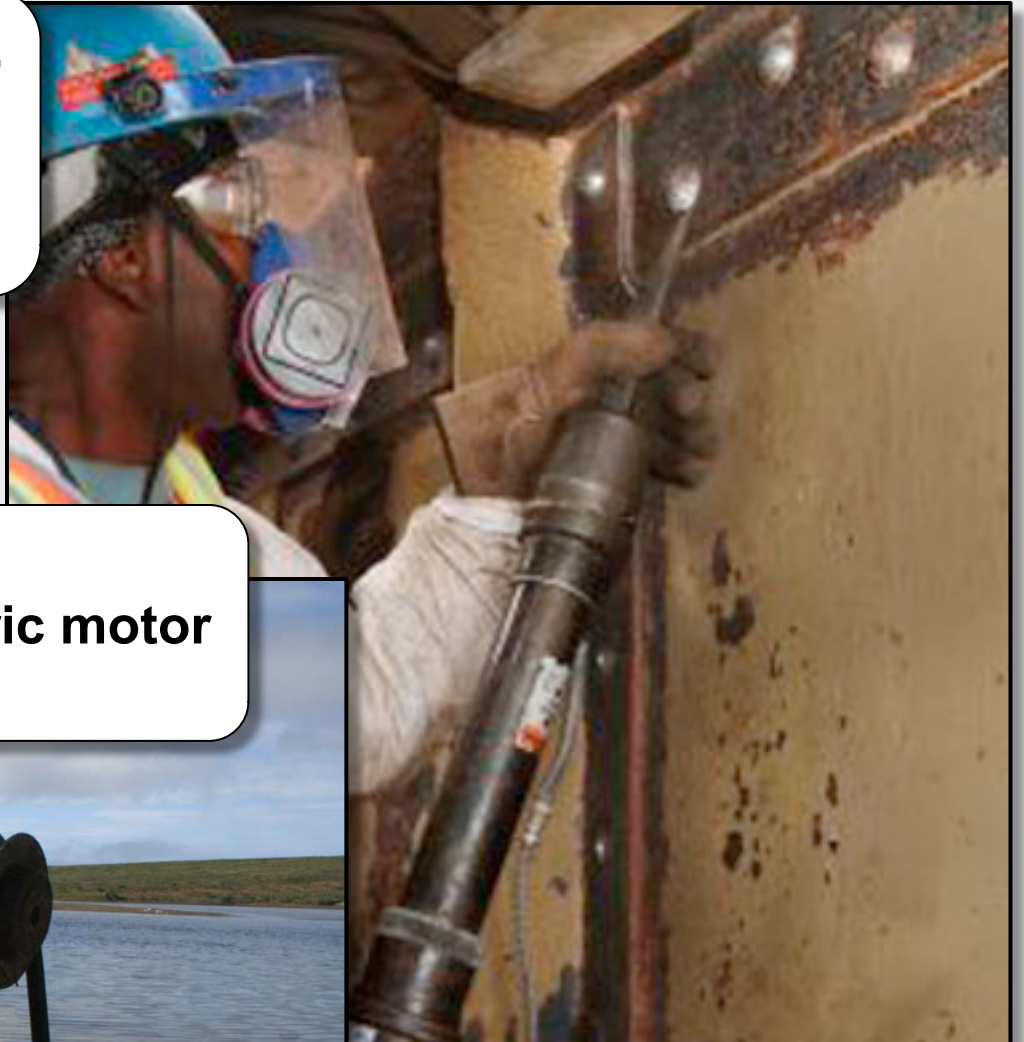
**NPS DEIS used Federal highway
heavy construction equipment
data and falsely represented it as
DBOC equipment data**

**NPS DEIS used data from this ...
Federal highway construction
rivet buster
79 dBA**

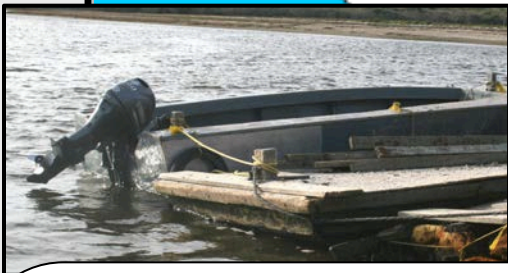
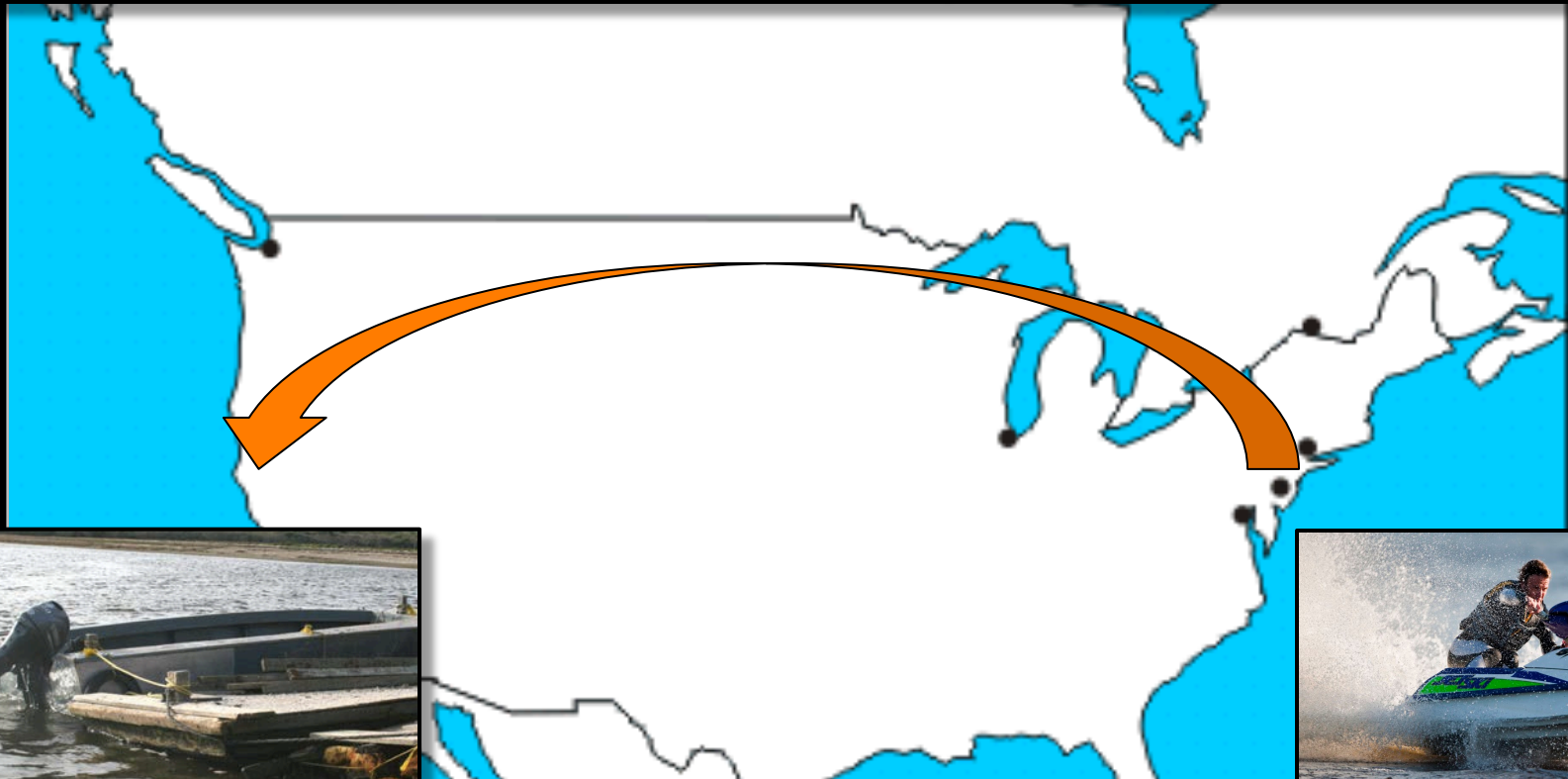
825X overstated

**... to misrepresent this:
oyster tumbler with 12 volt electric motor
50 dBA**

**NPS DEIS used Federal highway
heavy construction equipment
data and falsely represented it as
DBOC equipment data**



NPS pattern of deception: data from far away used as if from Drakes Estero



In 2011, NPS DEIS claimed acoustic measurements of a 70 HP 4-stroke oyster farm boat at 50 feet showed a negative impact on wildlife. Winds up the data were from New Jersey State Police measurements of a Kawasaki 750 cc 2-stroke Jet Ski at 2 feet from 1995. Other DBOC equipment were falsely represented when the data came from Federal Highway Administration road heavy construction equipment from 2006. False data were used to intentionally deceive.

NPS deceived people using data from **3,000 miles away** and 16 years earlier.

NPS draft EIS claimed negative impact of noise from DBOC oyster boats on wildlife in Drakes Estero: DBOC motorboats exceeded NPS regulations

*“Noise sources at DBOC are summarized in table 3-3. At 50 feet from the receptors, **DBOC operations contribute between 71 and 85 dBA of noise** to the natural soundscape within the study area. These dBA levels can be expressed in terms of NPS regulations regarding audio disturbances. **The limit specified by NPS regulation is 60 dBA at 50 feet (36 CFR 2.12).**”*

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

Dr. Ralph Morgenweck, Interior's Scientific Integrity Officer, commissioned independent peer review *"in recognition of high interest in the science ..."*

ATKINS

Final Report on Peer Review of the Science Used in the National Park Service's Draft Environmental Impact Statement Drakes Bay Oyster Company Special Use Permit

March 2012

Dr. Morgenweck stated: *"The peer-review accomplished exactly what we were seeking – that is, specific recommendations on how to improve the final EIS to make it a better science product."*

ATKINS asked Dr. Christopher Clark to review the DBOC acoustic data

- One of the scientists who peer-reviewed the NPS DEIS science was Dr. Christopher Clark from Cornell, a bio-acoustic expert.
- Dr. Clark reviewed the soundscape analysis – the acoustic data from the oyster farm motorboats and other equipment.
- He concluded “*that there is **ample acoustic scientific evidence** by which the DEIS can determine that DBOC [Drakes Bay Oyster Company] noise-generating activities have **negative impacts** on both the human visitor experience and the seashore’s wildlife.*”
- He found the NPS data “**compelling.**”
- He concluded: “*The scientific evidence presented leads me to conclude that this DEIS is **robust**, and that its recommendation for Alternative A is substantial and justifiable.*”
- But Dr. Clark was **intentionally deceived** by the NPS with data from boats and equipment 3,000 miles away and 16 years ago.
- 1995 data from a **Kawasaki 750 cc 2-stroke 70 HP Jet Ski** were presented as if 2011 data from a DBOC 20 HP oyster boat.

Dr. Clark's primary conclusion in response to the DEIS soundscape data

In Dr. Clark's review of the acoustic data in the DEIS, as found in Table 3-3, he concluded:

“... that there is ample acoustic scientific evidence by which the DEIS can determine that DBOC noise-generating activities have negative impacts on ... the seashore's wildlife.”

He further concluded:

“The scientific evidence presented leads me to conclude that this DEIS is robust, and that its recommendation for Alternative A is substantial and justifiable.”

What was the impact of the deceptive data in the EIS presented by NPS?

Dr. Clark believed that the NPS data in Table 3-3 in the DEIS came from DBOC boats and equipment at Drakes Estero. Dr. Clark did not know that NPS DEIS data were from 3,000 miles away from a Jet Ski and highway construction equipment. After learning the true source of the data, and the real measurements of DBOC equipment made by ENVIRON, Dr. Clark changed his view on March 21, 2012. He said he was “*deceived.*” He wrote that he does:

“... *not believe that these activities have a biologically significant impact on wildlife ...*”

Dr. Clark reviewed the DEIS. After seeing the truth, he changed his primary conclusion from a finding of negative impact to one of no significant impact on wildlife.

**Review of Draft Environmental Impact Statement
Drakes Bay Oyster Company
Special Use Permit**

**Christopher W. Clark, Cornell University
February 23, 2012**

The scientific evidence presented leads me to conclude that this DEIS is robust, and that its recommendation for Alternative A is substantial and justifiable.

Overall, I found that the Soundscape section provided compelling support for its conclusion that “low-frequency, high-amplitude, nearly omnipresent sound produced by roads, vehicles, airports, and mechanical equipment” can, degrade the acoustic habitat in a way that is similar to the physical degradation of the physical habitat caused by development or other human activities.

Soundscapes

The soundscape reviewer (Clark) found the scientific interpretations and analyses in the DEIS to be reasonable and adherent to standard techniques and metrics. The reviewer noted several aspects that may require further examination, such as whether human noise footprints from DBOC activities have increased since 1995 when one of the two cited data sets was collected, as well as a working assumption related to nighttime versus daytime background sound levels and propagation that does not include supporting information.

This Chapter 3 Soundscape section:

- a. Provides a well-written presentation of basic acoustic metrics and concepts (e.g., decibels, L_{50} , soundscape, community noise).
- b. Provides some sound level data for Drakes Estero using standard techniques and metrics. Two sets of data are presented. Data (considered “best available and reasonable measurement”) were collected in 2009 (Volpe 2011) from a site two miles from the onshore DBOC operations. They use A-weighted L_{50} values, in dBA units, as the acoustic metric. As stated in the report: “These measured levels included noise from DBOC operations and other human activities, and they included natural sound energy from portions of the audio spectrum well above the noise energy generated by DBOC.” Table 3-3 shows noise level values within close proximity to specific DBOC noise sources. According to this table these data were collected by Noise Unlimited, Inc. (1995) and represent two types of relatively small motorboat engines (20 horse power [HP] and 40 HP), a diesel forklift, pneumatic drills and an oyster tumbler. Noise level values in dBA are given relative to 50 feet from each of these sources. The document concludes that these measures are reasonable representations of the existing acoustic environment by which to make comparisons. It could be argued that the human noise footprints from DBOC activities could have increased since 1995, but this is never discussed.

Christopher W. Clark, Cornell University
February 23, 2012

Dr. Clark assumed the NPS data came from DBOC boats and equipment

specific DBOC noise sources. According to this table these data were collected by Noise Unlimited, Inc. (1995) and represent two types of relatively small motorboat engines (20 horse power [HP] and 40 HP), a diesel forklift, pneumatic drills and an oyster tumbler. Noise level values in dBA are given relative to 50 feet from each of these sources. The measurements are reasonable representations of the noise levels to make comparisons. It could be argued that noise levels from these activities could have increased since 1995, but this is not discussed.

This is what Dr. Clark was shown:
 Table 3-3 in the September DEIS

TABLE 3-3. NOISE GENERATORS AT DBOC

September 2011 version NPS DEIS

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

^a Hourly values

June 2011 version NPS DEIS

Table 3-3. Noise Generators at DBOC

Equipment	Description	Frequency of Use (weather permitting)	Estimated dBA at 50 feet (Hourly Value)
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Source for equipment, descriptions, and frequency: DBOC, Lunny, pers. comm. 2011k

Source for sound estimates:

*Noise Unlimited, Inc, Boat Noise Tests Using Static and Full Throttle Measurement Methods for the New Jersey State Police (1995)

**FHWA Construction Noise User's Guide (2006)

This is what Dr. Clark was NOT shown:
Table 3-3 in the earlier June DEIS

Table 3-3 "Noise Generators at DBOC" from June 2011 administrative (not for public distribution) version of NPS draft EIS for Drakes Bay Oyster Company

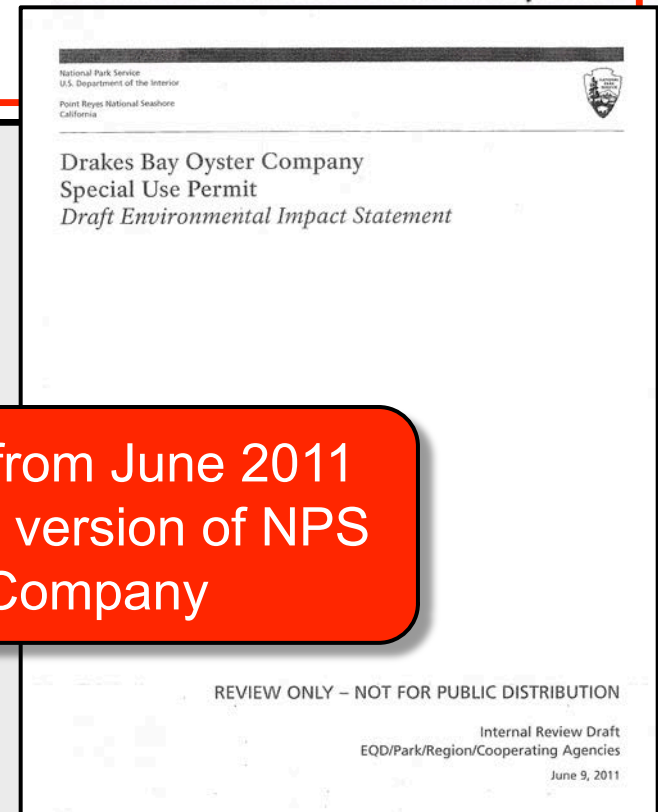


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- "Estimated" became "Representative"
- Full citations to sources disappeared
- Sources appeared to be of DBOC

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

^a Hourly values

June 2011 version NPS DEIS

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*Noise Unlimited, Inc, Boat Noise Tests Using Static and Full Throttle Measurement Methods for the New Jersey State Police (1995)

**FHWA Construction Noise User's Guide (2006)



Personal Watercraft Industry Association

This is what Dr. Clark was NOT shown:
Table 3-3 in the earlier June DEIS

How we found the Noise Unlimited 1995 study

* A-Scale Sound level (dBA) measurements at a distance of 50 feet. A-Scale approximates the sensitivity of the human ear and is used to note the intensity or annoyance level of sounds. Data from NUI Report No. 8077.1, New Jersey State Police-Marine Division. Nov. 1, 1995.

See the full study conducted for the New Jersey State Police by Noise Unlimited, Inc. Boat Noise Tests Using Static and Full-Throttle Measurement Methods (1995). Please keep in mind that this test was conducted in 1995, and personal watercraft manufacturers have achieved a 70% reduction in sound levels since 1998.

This is the document NPS used for noise measurements for DBOC boats in dEIS



**NOISE
UNLIMITED
INC.**

312 Old Allerton Road, Annandale, NJ 08801 (908) 713-9300 Fax:-9001

November 1, 1995

NUI Report No. 8077.1

**State of New Jersey, Department of Law and Public Safety
Division of State Police, Marine Law Enforcement Bureau
P.O. Box 7068
West Trenton, NJ 08628-0068**

Attention: Lt. Edward R. DeVane

Subject: Boat Noise Tests Using Static and Full-Throttle Measurement Methods

Reference: Purchase Order No. 3610126

This is the document NPS used for noise measurements for DBOC boats in dEIS



**NOISE
UNLIMITED
INC.**

312 Old Allertons Road, Annandale, NJ 08801 (908) 713-9300 Fax:-9001

November 1, 1995

NUI Report No. 8077.1

Pursuant to your request, the Subject tests were conducted on September 26, 1995, and October 3, 1995.

1. MEASUREMENTS

Two measurements were made for each type of boat, as follows:

1.1 Static Measurement

These measurements were made with the engine at idle with the microphone located 4 ft above the water line and 2 ft behind the transom of the boat, in accordance with SAE J2005 Draft, "Stationary Sound Level Measurement Procedure for Pleasure Motorboats," dated 10/16/89.

1.2 Passby Measurement

These measurements were made with the boat operating at full throttle, passing by the microphone at a distance of 50 ft, in accordance with NJAC 7:6-6.3.

This is the document NPS used for noise measurements for DBOC boats in dEIS

TABLE 1 - DATA RESULTS

Type of Boat	Static Level dBA	Passby Level dBA
Classic Inboard 1930 Chris Craft, Wooden Boat, Inboard Motor, Exhaust Outlet above the Water Line	86	72
Single Outboard Engine Police Patrol Boat with Single 175 Johnson Outboard Motor	74	81
Twin Outboard Engine Police 23 ft Poul Weather Patrol Boat with Two 155 Evinrude Outboard Motors	85	82
Personal Watercraft No. 1 Kawasaki Jet Ski 750 STS	71	81
Personal Watercraft No. 2 Kawasaki Jet Ski 900, High Performance 3 Cylinder 100 hp	70	76
Inboard/Outboard with Exhaust Below Water Line Advantage 21 ft, 350 ft ³ Chevrolet Engine with Outboard Drive	69	85
Inboard/Outboard with Exhaust Above Water Line Wellcraft Nova, 352 ft ³ Engine with Outboard Drive	90	90
Racing Boat No. 1 Jersey Speed Skiff Runabout, 233 Chevrolet Engine, Exhaust Below Water Line	95	105 at 77 mph
Racing Boat No. 2 Five Liter Hydroplane, 305 Chevrolet Engine	99	109 at 107 mph

This is the document NPS used for noise measurements for DBOC boats in dEIS

TABLE 1 - DATA RESULTS

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Classic Inboard 1930 Chris Craft, Wooden Boat, Inboard Motor, Exhaust Outlet above the Water Line	86	72
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Twin Outboard Engine Police 23 ft Foul Weather Patrol Boat with Two 155 Evinrude Outboard Motors	85	
Personal Watercraft No. 1 Kawasaki Jet Ski 750 STS	71	81
Personal Watercraft No. 2 Kawasaki Jet Ski 900, High Performance 3 Cylinder 100 hp	70	76
Inboard/Outboard with Exhaust Below Water Line Advantage 21		
Inboard/Outboard Wellcraft Nova		
Racing Boat No. 1 Jerzey Speed Skiff Runabout, 233 Chevrolet Engine, Exhaust Below Water Line		
Racing Boat No. 2 Five Liter Hydroplane, 305 Chevrolet Engine		

DBOC motorboat ?

1995 Kawasaki Jet Ski
750 cc, 2-stroke, 70 HP



This is the document NPS used for noise measurements for DBOC equipment



U.S. Department
of Transportation

Federal Highway
Administration

FHWA-HEP-05-054
DOT-VNTSC-FHWA-05-01

FHWA Roadway Construction Noise Model User's Guide

Final Report
January 2006



DBOC equipment ?

Prepared for
U.S. Department of Transportation
Federal Highway Administration
Office of Natural and Human Environment
Washington, DC 20590

Prepared by
U.S. Department of Transportation
Research and Innovative Technology Administration
John A. Volpe National Transportation Systems Center
Acoustics Facility
Cambridge, MA 02142

Table 1. CA/T equipment noise emissions and acoustical usage factors database.

CA/T Noise Emission Reference Levels and Usage Factors					
filename: EQUIPLST.xls					
revised: 7/26/05		Acoustical	Spec 721.560	Actual Measured	No. of Actual
	Impact	Use Factor	Lmax @ 50ft	Lmax @ 50ft	Data Samples
Equipment Description	Device ?	(%)	(dBA, slow)	(dBA, slow)	(Count)
				(samples averaged)	
All Other Equipment > 5 HP	No	50	85	-- N/A --	0
Auger Drill Rig	No	20	85	84	36
Backhoe	No	40	80	78	372
Bar Bender	No	20	80	-- N/A --	0
Blasting	Yes	-- N/A --	94	-- N/A --	0
Boring Jack Power Unit	No	50	80	83	1
Chain Saw	No	20	85	84	46
Clam Shovel (dropping)	Yes	20	93	87	4
Compactor (ground)	No	20	80	83	57
Compressor (air)	No	40	80	78	18
Concrete Batch Plant	No	15	83	-- N/A --	0
Concrete Mixer Truck	No	40	85	79	40
Concrete Pump Truck	No	20	82	81	30
Concrete Saw	No	20	90	90	55
Crane	No	16	85	81	405
Dozer	No	40	85	82	55
Drill Rig Truck	No	20	84	79	22
Drum Mixer	No	50	80	80	1
Dump Truck	No	40	84	76	31
Excavator	No	40	85	81	170
Flat Bed Truck	No	40	84	74	4
Front End Loader	No	40	80	79	96
Generator	No	50	82	81	19
Generator (<25KVA, VMS signs)	No	50	70	73	74

Generator	No	50	82	81	19
Generator (<25KVA, VMS signs)	No	50	70	73	74
Gradall	No	40	85	83	70
Grader	No	40	85	-- N/A --	0
Grapple (on backhoe)	No	40	85	87	1
Horizontal Boring Hydr. Jack	No	25	80	82	6
Hydra Break Ram	Yes	10	90	-- N/A --	0
Impact Pile Driver	Yes	20	95	101	11
Jackhammer	Yes	20	85	89	133
Man Lift	No	20	85	75	23
Mounted Impact Hammer (hoe ram)	Yes	20	90	90	212
Pavement Scarafier	No	20	85	90	2
Paver	No	50	85	77	9
Pickup Truck	No	40	55	75	1
Pneumatic Tools	No	50	85	85	90
Pumps	No	50	77	81	17
Refrigerator Unit	No	100	82	73	3
Rivit Buster/chipping gun	Yes	20	85	79	19
Rock Drill	No	20	85	81	3
Roller	No	20	85	80	16
Sand Blasting (Single Nozzle)	No	20	85	96	9
Scraper	No	40	85	84	12
Shears (on backhoe)	No	40	85	96	5
Slurry Plant	No	100	78	78	1
Slurry Trenching Machine	No	50	82	80	75
Soil Mix Drill Rig	No	50	80	-- N/A --	0
Tractor	No	40	84	-- N/A --	0
Vacuum Excavator (Vac-truck)	No	40	85	85	149
Vacuum Street Sweeper	No	10	80	82	19
Ventilation Fan	No	100	85	79	13
Vibrating Hopper	No	50	85	87	1
Vibratory Concrete Mixer	No	20	80	80	1
Vibratory Pile Driver	No	20	95	101	44
Warning Horn	No	5	85	83	12
Welder / Torch	No	40	73	74	5

Table 3-3. Noise Generators at DBOC

June 2011 version NPS DEIS

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Source for equipment, descriptions, and frequency: DBOC, Lunny, pers. comm. 2011k

Source for sound estimates:

*Noise Unlimited, Inc, Boat Noise Tests Using Static and Full Throttle Measurement Methods for the New Jersey State Police (1995)

**FHWA Construction Noise User's Guide (2006)

DBOC's Fork Lift at 79 dBA was presumably FHWA's Front End Loader at 79 dBA

DBOC's Pneumatic Drills at 85 dBA were presumably FHWA's Pneumatic Tools at 85 dBA

DBOC's Oyster Tumbler with 12 volt electric motor at 79 dBA, was it:

- Concrete Mixer Truck at 79 dBA?
- Drill Rig Truck at 79 dBA?
- Front End Loader at 79 dBA?
- Rivet Buster/chipping gun at 79 dBA?
- Ventilation Fan at 79 dBA?

Equipment	Description	NPS Reported Sound Level	Actual Sound Level***	NPS Overstated Factor
Motorboat	20 HP, 4-cycle	71* dBA	58 dBA	X 19
Motorboat	40 HP, 4-cycle	71* dBA	60 dBA	X 12
Forklift	60 HP diesel	79** dBA	64-65 dBA	X 25
Pneumatic drills	handheld	85** dBA	70 dBA	X 29
Oyster tumbler	Electric motor	79** dBA	50 dBA	X 825

Source for NPS sound estimates from other locations:

* Noise Unlimited, Inc, Boat Noise Tests Using Static and Full Throttle Measurement Methods for the New Jersey State Police (1995)

** Federal Highway Administration Construction Noise User's Guide (2006)

ENVIRON sound measurements from DBOC equipment in Drakes Estero:

*** Dr. Richard Steffel's measurements of DBOC motorboats and equipment at Drakes Estero as reported by ENVIRON Corp report (2011)

In response to draft EIS, DBOC commissioned ENVIRON to do acoustic analysis

ENVIRON

Acoustic study done by:
Dr. Richard Steffel of
ENVIRON of oyster boats
and oyster farm equipment

NPS had this study on December 9,
2011, before NPS sent the draft EIS out
for peer-review by Atkins.

NPS was told the DEIS does not
constitute "*best science available*" as
required by Director's Order #47.

Prof. Chris Clark from Cornell, the
scientist who peer-reviewed these data,
was not given the ENVIRON study.

**Comments on Drakes Bay Oyster
Company Special Use Permit
Environmental Impact Statement
Point Reyes National Seashore**

Prepared for:
**Draft EIS DBOC SUP c/o Superintendent
Point Reyes National Seashore
1 Bear Valley Road
Point Reyes Station, CA 94956**

On behalf of:
Drakes Bay Oyster Company

Prepared by:
**ENVIRON International Corporation
Seattle, Washington**

Date:
December 9, 2011

In response to draft EIS, DBOC commissioned ENVIRON to do acoustic analysis

H5. Inadequate DBOC Noise Impact Assessment – The noise impact assessment presented in the DEIS does not constitute use of "best science available to determine impacts" as required by Director's Order #47 (No. 7 Defining Impacts on Park Soundscapes)

("Soundscape Preservation and Noise Management," Director's Order #47, Washington, DC: National Park Service, December 2000; cited in Volpe, 2011 to define soundscape).

Comments on DBOC EIS
Point Reyes National Seashore

H4. The DEIS Noise Analysis Substantially Exaggerates Noise from all DBOC-Related Sources, Invalidating Conclusions Based on This Analysis – The DEIS noise analysis relied on estimates from a library of sound level data to represent DBOC sources of concern. But there is a very small population of equipment involved that could have been easily and specifically quantified to provide more accurate results. As documented below, the sound source estimates used in the DEIS grossly overstated noise levels from DBOC equipment, thereby discrediting the conclusions derived from this flawed analysis.

On November 22, 2011 ENVIRON staff visited the DBOC facility and took direct sound level measurements of the noise sources identified in the DEIS and one that was not. ENVIRON used a B&K 2250 Type 1 sound level meter to both measure the sound levels and to record audio samples of the sources of interest during the measurements. These data were subsequently downloaded to a computer for aural and numeric analysis. The results of these measurements are summarized in Table H-1. Photos of the noise sources and graphic summaries of the measurement data are presented in the Noise Attachment (Attachment B).

Table H-1. DBOC Source Noise Sound Levels Reported in DEIS and Actual (dBA)

Equipment	NPS Reported Sound Level ^a	Measured Source Noise Levels			Overstated Factor ^b
		Duration	Fast L _{max}	Leq	
Motorboat #1	71	15 seconds	63.4	60.1	12
Motorboat #2	71	30 seconds	61.7	58.2	19
Frontend Loader ^c	79	4, 30-seconds	67 - 68	64 - 65	25
Pneumatic Drills ^d	85	≈ 1 minute	77.5 / 79.7	70.4 ^e	29
Oyster Tumbler	79	2 minutes	59.4	49.8	825
Air Compressor ^f	Not considered	72 seconds	N/A ^g	58.0	

- ^a Levels reported in the DEIS and used in the noise impact assessment. No metrics or time intervals for the source noise levels were reported. But because these levels were used to estimate exposure over time and because it would not make sense to use the L_{max} for this purpose (because the fast L_{max} is a 1/8-second sound level), ENVIRON interprets these levels as source noise Leqs.
- ^b The "overstated factor" is the number of sound sources emitting an Leq as measured that it would take to generate the sound level used to represent this source in the DEIS noise analysis. For example, it would take 12 boats like DBOC boat #1 all operating in the same location and emitting a passby Leq of 60.1 dBA to generate the 71 dBA Leq that was used in the noise assessment reported in the DEIS.
- ^c The small frontend loader, which is used to move empty shells into piles, was reported in the DEIS as a "forklift." The levels reported here are for four passby event SLMs.
- ^d Due to space constraints, only one of the two pneumatic drills used at the facility was measured, twice. The other drill is identical and used in the same fashion, so the sound levels would be the same.
- ^e The measured Leq for a single pneumatic drill was 67.4; assuming two drills were working at the same location simultaneously results in an Leq 3 dBA higher, as reported here.
- ^f The air compressor that provides air to power the pneumatic drills was not considered in the DEIS. The compressor is housed inside a building, so except for openings within the building, noise from this source is already partially controlled and could be even more effectively quieted with a more complete enclosure.
- ^g The compressor runs only occasionally, and when it does, produces a constant sound level. The L_{max} metric is therefore not pertinent to this source.

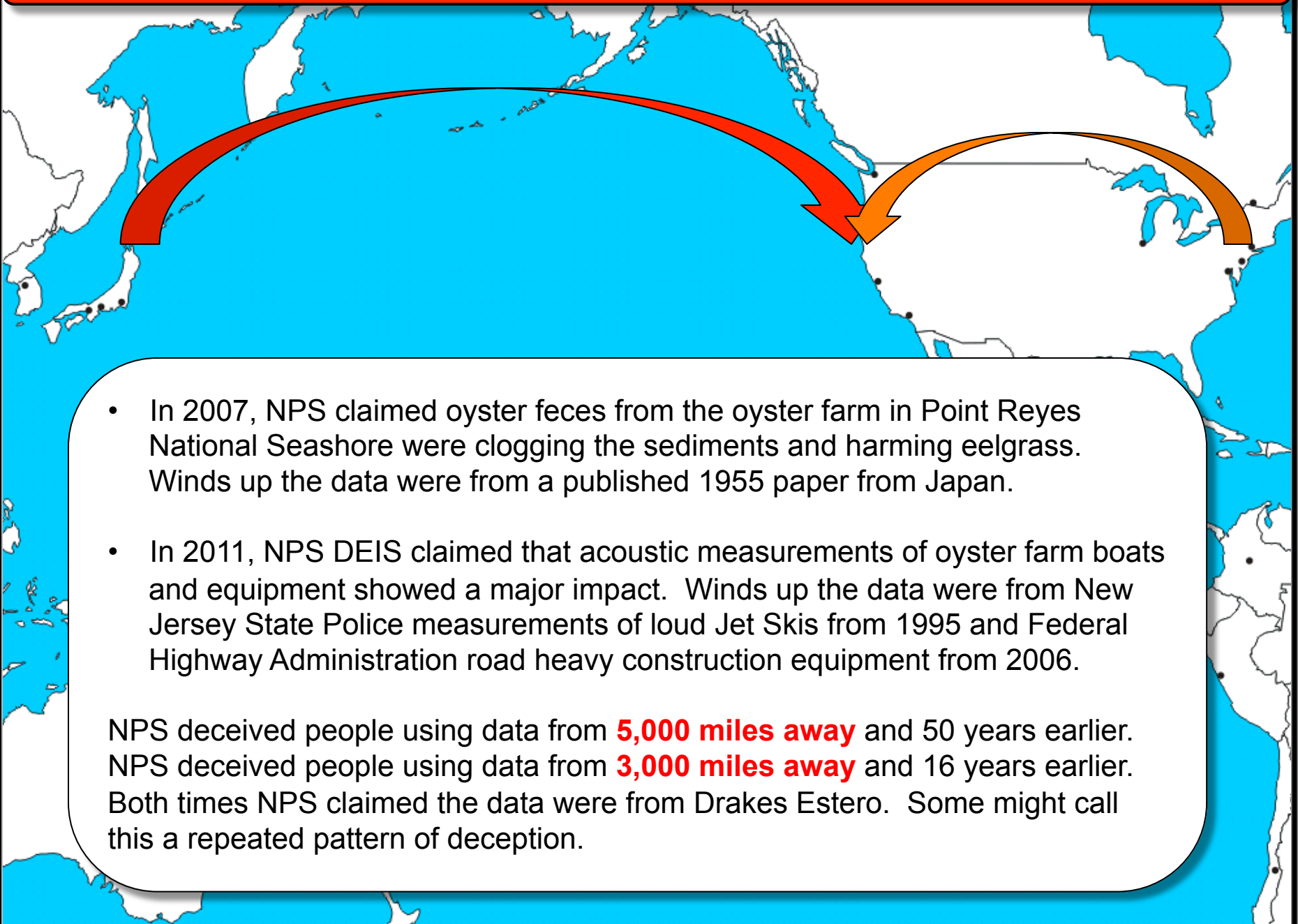
Source: Sound level measurements by ENVIRON International Corporation, 2011

Dr. Clark's responses when he learned the NPS data were not from Drakes Estero

On March 21, 2012, Dr. Chris Clark acknowledged that:

- (1) When he said NPS data were “**robust**” and “**compelling**,” he believed the numbers were from oyster farm boats and equipment at Drakes Estero;
- (2) He did not know the numbers for oyster boats came from New Jersey State Police 1995 measurement of **Kawasaki 750 cc, 2-stroke, 70 HP Jet Ski**;
- (3) He did not know the numbers of oyster equipment came from Federal highway administration measurements of **construction equipment**;
- (4) He believes the use of the measurements from other places was “**inappropriate**” and “**misleading**”;
- (5) As a scientific reviewer of the dEIS, he believes that he was “**deceived**”;
- (6) The numbers in Table 3.3 are significantly higher noise levels that what would probably be found at Drakes Estero;
- (7) He **was unaware of the ENVIRON report** with acoustic measurements taken of oyster boats and equipment at Drakes Estero;
- (8) Scientifically, his opinion would change “*in the sense that acoustic footprints of individual anthropogenic activities would be significantly smaller than assessed from the values in Table 3.3 ...*”
- (9) He does “**not believe that these activities have a biologically significant impact on wildlife ...**”
- (10) He believes “*...DBOC activities do have a measurable acoustic influence on the acoustic scene in Drakes Estero*” just as do airplanes or cars.

NPS pattern of deception: data from far away used as if from Drakes Estero

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- In 2007, NPS claimed oyster feces from the oyster farm in Point Reyes National Seashore were clogging the sediments and harming eelgrass. Winds up the data were from a published 1955 paper from Japan.
 - In 2011, NPS DEIS claimed that acoustic measurements of oyster farm boats and equipment showed a major impact. Winds up the data were from New Jersey State Police measurements of loud Jet Skis from 1995 and Federal Highway Administration road heavy construction equipment from 2006.

NPS deceived people using data from **5,000 miles away** and 50 years earlier. NPS deceived people using data from **3,000 miles away** and 16 years earlier. Both times NPS claimed the data were from Drakes Estero. Some might call this a repeated pattern of deception.