

No. 13-15227

**UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT**

DRAKES BAY OYSTER COMPANY and KEVIN LUNNY,
Plaintiff-Appellants,

v.

SALLY JEWELL, in her official capacity as Secretary,
U.S. Department of the Interior; U.S. DEPARTMENT OF THE INTERIOR;
U.S. NATIONAL PARK SERVICE; and JONATHAN JARVIS, in his official
capacity as Director, U.S. National Park Service,

Defendant-Appellees.

On Appeal from the United States District Court
for the Northern District of California
(Hon. Yvonne Gonzales Rogers, Presiding)
District Court Case No. 12-cv-06134-YGR

**BRIEF OF DR. COREY S. GOODMAN, AMICUS CURIAE
IN SUPPORT OF PETITION FOR REHEARING EN BANC**

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FRAP RULE 29(c)(4) STATEMENT

This brief is filed pursuant to FRAP 29(a) and FRAP 29-2(a). All parties have consented to its filing.

Dr. Corey S. Goodman was Professor of Biology at Stanford University and Evan Rauch Chair of Neurobiology at University of California Berkeley for twenty-five years before retiring and moving into the private sector where he is Managing Partner of venBio LLC, a life sciences venture capital firm. Dr. Goodman remains Adjunct Professor of Anatomy and Biochemistry & Biophysics at the University of California San Francisco. He has published over 200 peer-reviewed scientific papers. He is an elected member of the National Academy of Sciences (NAS), American Academy of Arts and Sciences, and American Philosophical Society, and recipient of many honors including the Alan T. Waterman Award, Canada Gairdner Biomedical Award, March-of-Dimes Prize in Developmental Biology, Reeve-Irvine Research Medal, and Dawson Prize in Genetics. Amongst his many public policy roles, Dr. Goodman is on the California Council on Science and Technology (advising the Governor and State Legislature) and is former Chair of the National Research Council's Board on Life Sciences (advising the Federal Government).

Dr. Goodman's interest in this case dates back to April 28, 2007 when Marin County Supervisor Steve Kinsey (then President of the Board of Supervisors, and today Vice Chair of the California Coastal Commission) contacted Dr. Goodman, based upon his scientific credentials and experience in science and public policy, and asked him to analyze the National Park Service (NPS) science on Drakes

Estero. Kinsey invited Dr. Goodman to testify as an independent scientist at the May 8, 2007 County hearing as to whether NPS data supported NPS claims. At the time, Dr. Goodman did not know Kevin Lunny, owner of Drakes Bay Oyster Company. Dr. Goodman testified NPS officials misrepresented their own data. His analysis showed NPS data did not support NPS claims. He stated:

“I believe that public policy decisions can and should be informed by quality science. But this must be science conducted rigorously, without agendas or conflicts-of-interest. The political process can be dangerously misled by bad or misused science. One of my greatest concerns when I see science being invoked in public policy debates is to make sure that it is good science and not pseudo-science or -- even worse -- a blatant misuse of science.”

Dr. Goodman cautioned the Supervisors that day (May 8, 2007) when he stated:

“My only hesitation in coming forward to testify today is the realization that openly expressing my views as a scientist may cause me to come under personal attack by local groups that are determined to remove Lunny’s operation from the PRNS. Nevertheless I feel compelled to speak out for good science instructing public policy.”

Dr. Goodman’s knowledge of the science involving the oyster farm led him to write numerous reports to Federal, State and County agencies and committees, to work with elected officials at all levels of government, and to publish numerous articles/op-eds in local media about the oyster farm controversy with a focus on the misrepresentation of science by NPS and their supporters, and the lack of evidence showing environmental harm by the oyster farm.

Counsel for Appellants, who are also counsel for Dr. Goodman, have assisted in the drafting and filing of this brief.

I. INTRODUCTION

The majority called the removal of the oyster farm an “environmental conservation effort” because, in their view, “removing the oyster farm is a step toward restoring the natural, untouched physical environment.” (Op. 31, internal citation and quotation marks omitted.). In doing so, the majority accepted as true the claim in the National Park Service (NPS) Final Environmental Impact Statement (EIS) that the oyster farm causes significant environmental harm to Drakes Estero. The majority was misled. There is no scientific basis for this view. To this day, NPS and their supporters continue to recite a fictional narrative that they have evidence of environmental harm, when they have no such evidence.

Clams, oysters, and other shellfish were an important part of the environmental baseline for Drakes Estero, just as they were for San Francisco Bay and other coastal bays and estuaries around the world before most were fished out or destroyed by pollution. Oysters actually provide environmental benefits by clarifying water. Those benefits are why oysters are being restored in projects around the world. And those benefits are why Congress, in the Clean Water Act, “listed the ‘protection and propagation of ... shellfish’ as one of the goals of reduced pollution and cleaner water.” (*Ass’n to Protect Hammersley v. Taylor Res.*, 299 F.3d 1007, 1016 (9th Cir. 2002) (quoting 33 U.S.C. § 1251(a)(2)).)

The EIS is the latest chapter in a seven-year effort by NPS to claim the oyster farm causes environmental harm. Again and again, NPS issued papers, reports and testimony claiming the oyster farm harms the environment. Each time,

NPS had to correct, revise, or retract its claims after being sharply criticized by the National Academy of Sciences (NAS), the Department of the Interior's Inspector General and Office of the Solicitor, or Congress. But each correction has proven to be a new opportunity for NPS to misrepresent the science on some new issue—be it eelgrass, sediments, fish, harbor seals, soundscape, and, most recently, a tunicate.

In the end, NPS spent millions of dollars searching for adverse environmental impacts that do not exist. It is difficult not to conclude that this pattern was intentional. It certainly was not harmless.

This campaign to shut down a family farm has exposed an unflattering side of both NPS and some in the conservation movement.¹ Real environmentalists support the oyster farm as a model of sustainable agriculture and environmental protection.

II. OYSTERS PROVIDE ENVIRONMENTAL BENEFIT

Oysters, which along with other shellfish populated shores around the world before most were decimated by humans, are good for the environment. Oysters are being reintroduced in restoration projects from the Chesapeake Bay to Florida Gulf

¹ This unflattering side was recently exposed by *Harpers* in *The West Coast Oyster War* (July 26, 2013), available <http://harpers.org/blog/2013/07/the-west-coast-oyster-war/>.

Coast, and from France to New Zealand.² This is why NOAA plays a major role in the Chesapeake Bay restoration project³, and The Nature Conservancy plays a similar role in Virginia, North Carolina, Florida, Texas, and Louisiana projects.⁴

Oysters were also part of the environmental baseline for Drakes Estero until they too were fished out by early European settlers. According to NAS, the farmed oysters “can be viewed as contributions towards restoring an historic baseline ecosystem in Drakes Estero.” (District Court Docket (“D.Dkt”) 39-2 at 35.⁵)

Concerning positive benefits of the farmed oysters, the National Academy of Sciences wrote:

“Eelgrass has approximately doubled in areal cover in Drakes Estero from 1991 to 2007, implying little systemic threat from the existing intensity of oyster culturing activities. Oysters have the potential to benefit eelgrass because their filtering activity improves local water clarity...”

(*Id.* at 81.)

² See, e.g., Chesapeake Bay Foundation (<http://www.cbf.org/oysters>; <http://www.oysterrecovery.org>), Florida Oyster Reef Restoration Project (<http://www.oysterrestoration.com>; <http://www.fgcu.edu/CAS/OysterResearch/>),

³ <http://chesapeakebay.noaa.gov/oysters/oyster-restoration>

⁴ <http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/florida/explore/floridas-oyster-reef-restoration-program.xml>

⁵ Citations are to the page number ECF-stamped to the top of the docket entry, not to the page of the document itself.

The NPS Draft EIS, however, concluded that the oyster farm was bad for water quality. (D.Dkt. 74-3 at 36.) This and other claims of harm apparently surprised Congress, which expressed concern about “the validity of the science underlying the [Draft EIS]” and directed the National Academy to review it. (H.R. Rep. No. 112-331 at 1057 (2011).) The National Academy of Sciences’ review suggested that the Draft EIS had it backwards, and that the oysters are “beneficial” for the environment:

“... the committee determined that an alternate conclusion on the overall impact of DBOC operations could be reached, with the beneficial effects of shellfish filtration outweighing the adverse impacts from sediment disturbance and the low levels of contaminants generated by DBOC activities.”

(*Id.* at 56.)

III. REMOVING OYSTERS WILL CAUSE ENVIRONMENTAL HARM

The NPS EIS acknowledged that removing the oyster racks would lead to negative short-term impacts to the Drakes Estero environment, including to water quality, eelgrass, fish, birds, harbor seals, and special-status species. (SER 53-55, 57-58, 62-63, 66, 74.)

The EIS was silent on the important potential long-term negative impacts. Interestingly, the EIS provided the basis for concluding a long-term negative impact of removing the farm when it wrote:

“[T]he primary source of nonpoint-source pollution in Drakes Estero is from cattle waste from ranches in the Drakes Estero watershed. ... Continued ranching in the vicinity of the project area has the potential to impact the

following resources: water quality and socioeconomic resources.”

(D.Dkt. 67-3 at 55.)

The surrounding cattle ranches produce manure, with fecal coliform bacteria, that drains into Drakes Estero. Water quality in Drakes Estero remains good, however. If the oyster farm is removed, the estero will lose the filtering and clarifying function provided by the oysters, potentially resulting in increased levels of fecal coliform, poorer water quality, less dense eelgrass, and less healthy birds, fish, and invertebrates. Unless NPS intends to remove the surrounding cattle ranches (which they publicly promise not to do⁶), the prudent “environmental conservation effort” would be to allow the oysters to continue to filter and clarify the water.

IV. NO EVIDENCE OYSTER FARM CAUSES ENVIRONMENTAL HARM

On April 5, 2007, a “crazed” Point Reyes National Seashore (PRNS) Superintendent Don Neubacher met with Marin County Supervisor Steve Kinsey and made “strong environmental accusations” against the oyster farm, claiming “overwhelming data” of harm to harbor seals (according to Kinsey’s testimony to the Inspector General). (FER 58.) A few weeks later, on April 26, 2007, NPS scientist Dr. Sarah Allen co-authored a guest column in a local newspaper, making

⁶ Secretary Salazar’s decision memo directed NPS to “pursue extending permits for the ranchers” for 20-year terms. (ER 119.)

many extreme claims of environmental harm against the oyster farm, including impacts on harbor seals, eelgrass, and sediments. She wrote:

“The natural ecological processes in Drakes Estero have been degraded by oyster operations.”⁷

At a hearing of the Marin County Supervisors on May 8, 2007, Superintendent Neubacher testified that the harbor seals were “seriously threatened now” and Dr. Allen testified that the oyster farm had led to an “80% reduction in the seals” and that this had “national significance.”⁸

Dr. Goodman also testified at that same May 8 County hearing, at Supervisor Kinsey’s invitation. Dr. Goodman’s conclusion was that NPS misrepresented NPS data, and that NPS data did not support NPS claims.⁹ Dr. Goodman submitted his findings in writing to the Supervisors, and sent a copy to Senator Dianne Feinstein.

At the County hearing, the Supervisors unanimously approved asking Senator Feinstein to review the issue. In response, Senator Feinstein and NPS

⁷ Sarah Allen, Jules Evens, and John Kelly, April 26, 2007 issue of the *Point Reyes Light*, entitled: *Coastal Wilderness: The Naturalist*.

⁸ The video of the hearing is available here: http://media-08.granicus.com:443/OnDemand/marin/marin_c09900c9ffdafd6d012218c349055083.mp4.

⁹ Dr. Goodman’s written testimony is available here: http://marin.granicus.com/MetaViewer.php?view_id=33&clip_id=2173&meta_id=228114.

then-Director Mary Bomar held a meeting on July 21, 2007, during which they invited Dr. Goodman to discuss the NPS claims of environmental harm versus the NPS data. Based on that discussion, Director Bomar and Senator Feinstein asked NPS Regional Director Jon Jarvis (now NPS Director) to commission a study by the NAS to investigate the scientific validity of NPS's claims. They asked Regional Director Jarvis to remove those claims from the NPS web site and to post a series of corrections of some of its more blatant misrepresentations (which NPS did the following week).¹⁰

The NAS convened a scientific panel, held a series of public meetings, and ultimately released its review on NPS's claims on May 5, 2009. The NAS panel came to two major conclusions:

“[NPS] selectively presented, overinterpreted, or misrepresented the available scientific information on DBOC operations ...”

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

(D.Dkt. 39-2 at 85-86, 99.)

The NAS also commented on the positive benefits of oysters. They found NPS gave “an interpretation of the science that exaggerated the negative and

¹⁰ In March 2011, the Solicitor's Office concluded five NPS employees violated the NPS Code of Scientific and Scholarly Conduct. (D.Dkt. 40-1 at 37.) The Solicitor's Office concluded NPS showed a “troubling mind-set” and that “[t]his misconduct arose from incomplete and biased evaluation and from blurring the line between exploration and advocacy through research.” (*Id.*)

overlooked the potentially beneficial effects of [DBOC].” (*Id.* at 86.) NPS ignored the facts that oysters “will contribute to water filtration, the transfer of nutrients and carbon to the sediments, and biogeochemical cycling”—as oysters have done “for millennia until human exploitation eliminated them ...” (*Id.* at 16-17.)

In 2011, the National Marine Fisheries Service (NMFS, the agency responsible for protecting marine mammals and other resources) echoed the NAS Report when it wrote: “there do not appear to be significant impacts of DBOC operations” on harbor seals, fish, or eelgrass in Drakes Estero.¹¹

These reports by the nation’s top scientific body and NMFS should have put this matter to rest. Unfortunately they didn’t.

V. SEVEN-YEAR PATTERN OF NPS MISREPRESENTATIONS CULMINATED IN AN EIS THAT IS SCIENTIFICALLY FLAWED

In September 2011, NPS released the Draft EIS (DEIS), which made provocative new claims about environmental harm allegedly caused by the oyster farm. For the first time, NPS claimed that the oyster farm’s operations had a “major” impact on the “soundscape,” disturbing both wildlife and visitor experience. (D.Dkt. 74-3 at 16.)

¹¹ NOAA letter to NPS, commenting on Draft EIS (Nov. 17, 2011), correspondence ID: 51997, *available at* http://www.nps.gov/pore/parkmgmt/upload/planning_dboc_sup_deis_public_comments_51000_51999_hardcopy.pdf.

How did NPS reach this conclusion? Instead of conducting easy-to-collect sound measurements of oyster skiffs and onshore equipment at Drakes Estero, NPS relied on bizarre proxies. The DEIS used a study of a 400 hp cement truck from a Federal highway construction guide as “representative” of the noise generated by DBOC’s 1/4 hp 12-volt electric oyster tumbler. (*Id.* at 21, 35-38.) The Park said the oyster tumbler could be heard for 2.4 miles (12,450 feet), when actual measurements show that it can only be heard for at most 140 feet. (*Id.*)¹² And the DEIS used a study of a Jet Ski off the Jersey Shore as “representative” of the noise generated by DBOC’s small oyster skiff. (D.Dkt. 40-3 at 19-21.)

In December 2011, Congress, concerned about “the validity of the science underlying the DEIS”, directed NAS to again review NPS’s science. (H.R. Rep. No. 112-331 at 1057 (2011).)

¹² The government has argued to this Court that their current Inspector General absolved NPS of any misconduct related to this 2.4-mile claim. (Dkt. 36.1 at 13 n.4 (citing Inspector General Report at 1, available at: <http://www.doi.gov/oig/news/drakes-bay.cfm>.) The IG accepted without question NPS’s claim that using the cement truck as a noise proxy for the oyster tumbler, rather than collecting on-site data, was “reasonable and justifiable”. (IG Report at 13.) The IG neglected to consider, however, the allegation that the use of sound proxies violates the NPS policies requiring man-made sounds to be “measured”. (NPS Director’s Order 47(D)(5), *available at* <http://www.nps.gov/policy/DOrders/DOrder47.html>.) Had NPS taken the simple and inexpensive step of actually measuring on-site sounds, it would have found that it is possible to stand right next to the oyster tumbler, while fully operational, and have a conversation in a normal voice—just as Secretary Salazar was able to do with Kevin Lunny (with his wife Nancy taking sound measurements right next to them) when the Secretary visited the oyster farm in November 2012. (*See* appended photo.)

In August 2012, the Academy issued its report on the DEIS, which found there to be a great “uncertainty associated with the scientific information on which [NPS] conclusions were based”, and that those conclusions were almost certainly exaggerated:

“In some cases, the committee concluded that an impact on a resource category could most accurately be described as negligible.”

(D.Dkt. 74-3 at 58.) The NAS also found that NPS had not adequately assessed the potentially “significant” positive effect that DBOC’s oysters have on water quality. (*Id.* at 47.)

NPS was not deterred, and released its Final EIS – with essentially the same provocative findings of harm to the soundscape – less than three months later. For example, the EIS replaced the cement truck proxy with an Army metal cement mixer full of rock and gravel that can be heard for 1.8 miles, as if that is somehow more appropriate. (D.Dkt. 67-3 at 9.) It isn’t. (*See* D.Dkt. 43-2 at 7-44 (oyster farm’s preliminary critique of EIS soundscape analysis).)

The majority correctly noted that the oyster farm submitted its preliminary critique of the EIS’s soundscape conclusions less than one week after NPS released the EIS, and two days before former Secretary Salazar made his decision. (Op. 33-34.) The majority also correctly noted that Secretary Salazar wrote that his decision did not rely on the soundscape “data that was asserted to be flawed”. (*Id.*) Thus, the majority reasoned, these errors were not “prejudicial” and constitute “harmless error”. (Op. 33.)

But the majority seems to have thought that those soundscape conclusions are the *only* scientific errors being challenged in the EIS. (*See op.* 34 (“Drakes Bay sent the Secretary its scientific critique *before* he issued his decision”, emphasis added).) They’re not. A few days *after* Secretary Salazar made his decision, Dr. Goodman uncovered serious scientific errors on another topic: harbor seals. (*See* ER 286-294 (December 20, 2012 declaration of Dr. Goodman).)

VI. OYSTER BOATS DO NOT DISTURB HARBOR SEALS

Scientific studies on harbor seal populations¹³ have led the NMFS to recommend a 100-yard buffer zone around hauled-out seals during pupping season.¹⁴ However, at Drakes Estero, for seven years, NPS claimed oyster boats disturb harbor seals at a distance of over 700 yards (2,100 feet), with an elevated sandbar between them. This is a distance of seven football fields, or from San Francisco Mayor Lee’s office at City Hall on Van Ness to the Ninth Circuit Court on 7th Street.

¹³ For example, Sarah Allen, David Ainley, Gary Page, and Christine Ribic (1984), *The Effect of Disturbance on Harbor Seal Haul Out Patterns at Bolinas Lagoon, California*, Fishery Bulletin 82, 493-500; Robert Suryan and James Harvey (1999), *Variability in reactions of Pacific harbor seals, Phoca Vitulins richardsi, to disturbance*, Fishery Bulletin 97, 332-339.

¹⁴ For example, California Coastal Commission (July 18, 2012), Coastal Development Permit No. 6-11-078, City of San Diego Park and Recreation Department, Children’s Pool Beach; Sarah Allen and Hal Markowitz (2006), *Monitoring the Potential Impact of the Seismic Retrofit Construction Activities at the Richmond San Rafael Bridge on Harbor Seals (Phoca vitulina)*: May 1, 1998 – September 15, 2005.

To listen to NPS accounts over the past seven years, you would think “we have a serious problem,” which is precisely what then PNRS Superintendent Neubacher told the Marin County Supervisors on May 8, 2007. His top scientist, Dr. Allen, told the Supervisors that the oyster farm caused an “80% reduction in the seals.” Three years later (February 24, 2010), Dr. Allen retracted her false claim – there is no evidence the oyster farm caused any reduction in seals.¹⁵

In 2009 the NAS wrote that “time and date stamped photographs” could put the whole matter of impacts to harbor seals by the oyster farm to rest:

“... It is not possible for the committee to resolve the controversy ... The latter would require a data collection system that could be independently verified, such as time and date stamped photographs.”

(D.Dkt. 39-2 at 59-60.) Undisclosed to the NAS panel, starting two years earlier, on May 5, 2007, NPS established just such a data collection system: a secret camera program taking photographs of seals and oyster boats every minute of every day during pupping season for three years (gathering and examining approximately 300,000 photographs in total). (D.Dkt. 40-1 at 6, 13.) NPS may have thought it would catch oyster boats in the act of disturbing seals. But NPS never disclosed this secret camera program to NAS, the public, or elected officials

¹⁵ In fact, the NPS data showed that there was a location with an 80% decline. That decline occurred far away from the oyster farm and was caused by harassment by Park visitors and *wildlife*, not oyster boats.

— presumably because its private analysis of those photos concluded that the oyster boats do *not* disturb the seals. (D.Dkt. 40-1 at 13.)

FOIA requests finally uncovered this secret camera program and NPS’s private analysis of the photographs in September 2010. For the EIS, NPS contracted one of the world’s marine mammal behavior experts, Dr. Brent Stewart (Hubbs-SeaWorld Research Institute), to re-review the photographs. Dr. Stewart filed his report on May 12, 2012. He again found “no evidence of disturbance” of seals by oyster boats. (*See* ER 286-294.)¹⁶

But that is not what the EIS said that Dr. Stewart found. Dr. Stewart’s findings were altered. Concerning Dr. Stewart’s analysis, the EIS stated:

“Two flushing disturbance events were attributed to [DBOC] boat traffic at nearby sand bars ...”

(D.Dkt. 67-3 at 128.) The word “attributed” in this context means causation. Based upon this misrepresentation of Dr. Stewart’s report, the EIS concluded that continuation of the oyster farm would result in “moderate adverse impacts” to harbor seals. In other words, NPS falsely claimed that Dr. Stewart’s finding of no seal disturbances by the oyster farm was really a finding that the oyster farm *did* cause disturbances to seals. This was a blatant misrepresentation of the Stewart Report.

¹⁶ He did find that the seals were disturbed by kayakers and birds. (D.Dkt. 52-1 at 5.)

The government continues to use this flawed conclusion to try to harm the oyster farm.¹⁷ But the truth is that NPS falsified Dr. Stewart's analysis, tried to cover up his work, and all the while was collecting data showing that harbor seals are thriving in Drakes Estero.¹⁸

There is nothing "harmless" about NPS misrepresenting harbor seal impacts for seven years.

VII. THE MOST RECENT CLAIMS OF ENVIRONMENTAL HARM

A pattern has developed over all these years: each time one of NPS's or its supporters' claims of environmental harm by the oyster farm is debunked, they move on to another. For several years, their focus was on harbor seal disturbances

¹⁷ The impact of the oyster farm operations on the environment has been part of most government briefs and oral arguments since this case was filed. For example, in their February 19, 2013 brief to the Ninth Circuit, government counsel wrote:

"the public interest in the quality of the Drakes Estero environment weighs against an injunction."

¹⁸ It was later learned that the government went back to Dr. Stewart and asked him to re-review certain photographs to see if he might change his opinion. Dr. Stewart submitted a Supplemental Report on December 10, 2012 reaffirming his initial finding of no evidence of disturbance. NPS has never disclosed this Supplemental Report. Dr. Goodman has recently obtained this report and will make it available for filing with the district court at an appropriate time.

NPS also released a report in August showing 2013 was a "great year for the seals" in Drakes Estero. Drakes Estero had the highest regional count of seals and pups. These most recent data should put to rest any notion that the oyster farm disturbs the harbor seals.

and eelgrass. Those claims were put to rest when Dr. Stewart found “no evidence for disturbance”, and when the National Academy of Sciences observed that eelgrass coverage has doubled in recent years. In the DEIS, their focus was on soundscape, but that too was bogus. In recent months, their attention has shifted to the colonial tunicate *Didemnum vexillum* (Dvex).

Dvex is an invasive tunicate that colonizes bays and estuaries throughout the temperate waters of the world, from Venice Lagoon¹⁹ to the New Zealand coast. Dvex was observed in Drakes Estero a decade ago.²⁰ In addition to Drakes Estero, Dvex has been found in San Francisco Bay, Half Moon Bay, Monterey Bay, Elkhorn Slough, Morro Bay, Tomales Bay, Humbolt Bay, Port San Luis, and Bodega Bay.²¹

According to the National Academy of Sciences, Dvex would have attached to the native oysters that were in Drakes Estero historically and are part of the ecological baseline. (D.Dkt. 39-2 at 18-19.)

¹⁹ Davide Tagliapietra et al. (2012), *First record of the colonial ascidian *Didemnum vexillum* Kott, 2002 in the Mediterranean: Lagoon of Venice (Italy)*, *BioInvasions Records* 1, 247-254.

²⁰ Deborah Elliott-Fisk and Sarah Allen (2005), *Drakes Estero Assessment of Oyster Farming Final Completion Report*.

²¹ S.G. Bullard et al. (2007), *The colonial ascidian *Didemnum* sp. A: Current distribution, biology and potential threat to marine communities of the northeast and west coasts of North America*, *J. Exper. Marine Bio. & Ecology* 342, 99-108.

The NAS 2012 Report stated:

“Multiple non-indigenous species are already present in Drakes Estero (NRC, 2009), although their avenue of introduction is mostly unknown and they appear to be much less conspicuous than in nearby San Francisco Bay.”

(D.Dkt. 74-3 at 34-35.) Thus, there was nothing surprising about the occurrence of Dvex in Drakes Estero given its worldwide distribution and its spread up and down the California coast.

In 2010, Dvex was recorded on eelgrass at Martha’s Vineyard.²² NPS has also reported Dvex growing on eelgrass in nearby Tomales Bay. In 2011, the same was reported by Dr. Grosholz for Dvex on eelgrass in Drakes Estero.²³

In 2013, however, the language of alarm ramped up again from some of NPS’s supporters. In January and October 2013, Jude Stalker declared Dvex growth in Drakes Estero “alarming”. (*E.g.*, D.Dkt. 62-7 ¶10 (January report).) But her findings are essentially the same as Dr. Grosholz’s from 2011. And she provided no evidence that Dvex growth in Drakes Estero is any different than the many other places Dvex has been found growing naturally up and down the coast.

²² Mary Carman and David Grunden (2010), *First occurrence of the invasive tunicate *Didemnum vexillum* in eelgrass habitat*, *Aquatic Invasions* 5, 23-29.

²³ Ted Grosholz (2011), *Estimating the Relative Abundances of Naturalized Manila Clams and Invasive Fouling Species in Drakes Estero*, Report to NPS OP Fund #42496.

As this case moves forward, expect more alarming claims. But don't expect them to have any more merit than the many previous false—and retracted—claims.

VIII. CONCLUSIONS

The majority was misled to think the oyster farm is harming Drakes Estero. It is not. There are plenty of scientific reasons why oysters and other shellfish are beneficial for the environment and are part of the environmental baseline for Drakes Estero, San Francisco Bay, and most coastal bays and estuaries. In 2009, the NAS concluded: "... there is a lack of strong scientific evidence that shellfish farming has major adverse ecological effects on Drakes Estero." Although NPS has been obsessed for years with finding scientific evidence for harm, they remain empty-handed. The government and its supporters have misrepresented the scientific facts to this court.

Senator Feinstein wrote on May 22, 2012:

"The Park Service's repeated misrepresentations of the scientific record have damaged its trust with the local community, and stained its reputation for even-handed treatment of competing uses of public resources."

(D.Dkt. 40-2 at 13.)

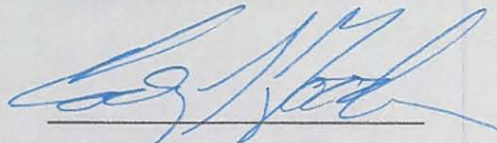
In his speech to the NAS on April 27, 2009, President Obama said "the days of science taking a back seat to ideology are over."²⁴ At Drakes Estero, science

²⁴ <http://www.pnas.org/content/106/24/9539.full>

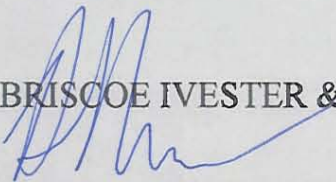
has indeed taken a back seat to ideology. The court should reject these false claims and, as the President said, "return science to its rightful place."

DATED: October 24, 2013

Respectfully submitted,



Dr. Corey S. Goodman, Amicus Curiae



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CERTIFICATE OF COMPLIANCE

I certify, pursuant to Circuit Rule 29-2(c)(2), that this brief contains 4,011 words, excluding the parts exempted by FRAP 32(a)(7)(B)(iii); and that this brief complies with the typeface requirements of FRAP 32(a)(5) and the type style requirements of FRAP 32(a)(6) because this brief has been prepared in a proportionally spaced typeface using Microsoft Word 2003 and 14 point Times New Roman.

/s/ *Peter S. Prows*

Peter S. Prows



9th Circuit Case Number(s) 13-15227

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CERTIFICATE OF SERVICE

When All Case Participants are Registered for the Appellate CM/ECF System

I hereby certify that I electronically filed the foregoing with the Clerk of the Court for the United States Court of Appeals for the Ninth Circuit by using the appellate CM/ECF system on (date) Oct 25, 2013 .

I certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the appellate CM/ECF system.

Signature (use "s/" format) s/ Peter S. Prows

CERTIFICATE OF SERVICE

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