

In the Supreme Court of the United States

DRAKES BAY OYSTER COMPANY AND KEVIN LUNNY,

Petitioners,

v.

SALLY JEWELL, SECRETARY OF THE UNITED STATES
DEPARTMENT OF THE INTERIOR; ET AL.,

Respondents.

On Petition For Writ Of Certiorari To The United
States Court Of Appeals For The Ninth Circuit

**BRIEF OF DR. COREY S. GOODMAN AND
DR. PAUL R. HOUSER
AS *AMICI CURIAE*
SUPPORTING PETITIONERS AND REVERSAL**

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INTEREST OF AMICI CURIAE¹**Dr. Corey S. Goodman**

Dr. Corey S. 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 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 science concerning Drakes Estero. Supervisor Kinsey invited Dr. Goodman to testify as an independent scientist at the May 8, 2007 County hearing as to whether Park Service data supported Park Service claims. At the time, Dr. Goodman did not know Kevin Lunny, owner of Drakes Bay Oyster Company. Dr. Goodman testified that Park Service officials misrepresented their own data in every category of environmental harm. His analysis showed Park Service data did not support Park Service claims.

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

¹ Counsel for petitioners is also counsel for amici Dr. Goodman and Dr. Houser, and, with the assistance of amici, prepared this brief in its entirety. All hard costs are being paid by amici, and counsel's time has been given pro bono. Amici gave timely notice to all parties of their intent to file this brief. All parties gave their consent to this filing, and those consents are being submitted with this brief.

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. Dr. Goodman also filed an amicus brief in support of the oyster farm's petition for rehearing en banc with the Ninth Circuit Court of Appeals. His focus has continued to be on the importance of scientific integrity in guiding policy decisions.

Dr. 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 Partners 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, 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.

Since retiring from his academic career, Dr. Goodman has worked in the private sector, first as President and CEO of a biotechnology company he co-founded, took public, and then sold to a larger company, then as President of Pfizer's Biotherapeutics and Bioinnovation Center and a member of Pfizer's executive leadership team, and today as managing partner of a venture capital firm he co-founded and Chair of six biotechnology companies. In these capacities, he has overseen tech-

nology innovations for new therapeutic approaches to human disease, and drug discovery and development programs in diverse areas including neurological disease, pain, cancer, metabolic disease, immune disease, and cardio-vascular disease.

Amongst his public policy roles, Dr. Goodman is today Chair of 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). In these capacities, he has overseen a range of studies and reports to the Federal and California Government on topics including stem cells, human cloning, waterborne pathogens, the nation's environmental challenges, reorganization of the National Institutes of Health, hydraulic fracking, and water policy management.

Dr. Goodman's analysis of the data behind the Park Service's claims about the oyster farm has all been done pro bono as a public service.

Dr. Paul R. Houser

Dr. Paul R. Houser's interest in this case focuses on its scientific integrity and ethical issues. Dr. Houser is keenly interested in the issue of scientific integrity, and has pursued initiatives to restore public trust in government science.

Dr. Houser is an internationally recognized expert in surface-atmospheric remote sensing, in-situ observation, numerical simulation, hydrologic data assimilation, scientific integrity and policy, and global water and energy cycling. His career began in 1988 exploring surface water quality issues in the Yakima River Basin (Washington State) at the U.S. Geological Survey, followed by the development of landfill cover technology at Los Alamos National

Laboratory in 1991. In 1997, Dr. Houser joined the NASA-GSFC Hydrological Sciences Branch and the Data Assimilation Office, served as manager of NASA's Land Surface Hydrology Program from 1999-2000, and served as branch head of the Hydrological Science Branch from 2000-2005. In 2005, Dr. Houser joined the George Mason University Climate Dynamics Program and the Geography and Geoinformation Sciences Department as Professor of Global Hydrology, and formed the Center for Research for Environment and Water with the mission to quantify and predict water cycle and environmental consequences of earth system variability and change.

Dr. Houser has led numerous scientific contributions, including the development of Land Data Assimilation Systems, the Hydrospheric States Mission, the Land Information System, the NASA Energy and Water cycle Study, and the Water Cycle Solutions Network (WaterNet). He has published over 120 peer-review publications. In 2000, Dr. Houser won the Presidential Early Career Award for Scientists and Engineers (PECASE), and in 2005 he won the NASA Software of the Year Award.

In 2011-2012, Dr. Houser served as Science Advisor to the U.S. Bureau of Reclamation, where he was responsible for developing scientific integrity, peer review, and data stewardship policies, as well as coordinating Reclamation activities with other agencies and the scientific community. After raising concerns about the scientific integrity of biased science reporting concerning the proposed Klamath dam removals, Dr. Houser was fired from Reclamation. He raised his concerns to the Office of Special Council in a formal whistleblower case, and with the Department of the Interior in a formal

scientific integrity allegation. The whistleblower case was settled with a favorable outcome, and the scientific integrity case was dismissed largely because an independent review found that bias in science-based press releases was standard business practice at the Department of the Interior. Dr. Houser had no fiduciary ties or conflicts associated with the Klamath River decision process. He is not for or against dam removal, but rather is for the best science informing policy decisions that obey the law, protect the environment and advance society.

Dr. Houser has a unique perspective on the Department of the Interior's Scientific Integrity Policy because he: (i) served on the team that wrote Interior's Scientific Integrity Policy; (ii) served as Reclamation's Scientific Integrity Officer where he processed scientific integrity allegations (e.g., Judge Wanger's September 2011 allegations on Delta-Smelt issues); and (iii) was the subject of whistleblower retaliation related to his scientific integrity concerns with the Klamath Dam removal. He has used his unique experience to offer a critique of DOI's Scientific Integrity Policy (August 2012) which is partially reported in this brief.

Dr. Houser has had no involvement in decisions about Drakes Bay Oyster Company, and is not advising the company in its litigation against the Department of the Interior.

**SUMMARY OF ARGUMENT:
SCIENTIFIC INTEGRITY IS CENTRAL TO
OUR DEMOCRACY**

The Einstein Memorial outside the National Academy of Sciences building in Washington D.C. is inscribed with a quotation from Albert Einstein: “The right to search for truth implies also a duty; one must not conceal any part of what one has recognized to be true.”

In the same vein, President Obama received a standing ovation from the country’s top scientists at the National Academy of Sciences annual meeting in 2009 when he said: “the days of science taking a back seat to ideology are over. Our progress as a nation – and our values as a nation – are rooted in free and open inquiry. To undermine scientific integrity is to undermine our democracy.”²

Nowhere are these principles more important than in government decision-making. When Congress passes laws, agencies make decisions, and courts hand down rulings, people’s lives and livelihoods—and the environmental future of our planet—are on the line. Ensuring that decisions use the best science is central to good government.

But too often, as this brief explains, scientific misconduct—defined as fabrication, falsification, plagiarism, or retaliation—is used to support government decisions. The government decision at

² *Remarks By The President At The National Academy Of Sciences Annual Meeting* (April 28, 2009), available at http://www.whitehouse.gov/the_press_office/Remarks-by-the-President-at-the-National-Academy-of-Sciences-Annual-Meeting.

issue in this case was the denial of a new permit to a historic oyster farm in California. That decision was based in part on an environmental analysis that falsely claimed to find a significant adverse impact, even though the agency's own analysis of the data, confirmed by the agency's outside expert, found "no evidence" of any impact. The false claim of harm followed a years-long pattern of other false, and now retracted, claims by the Park Service that the oyster farm causes environmental harm. In other cases, agencies have overstated projects' benefits while hiding negative impacts, retaliated against whistleblowers, and hid exculpatory laboratory evidence from the criminally accused.

Worse still is the persistent lack of accountability for scientific misconduct. The executive branch has recently developed a scientific integrity policy, and yet misconduct complaints can still go unaddressed and scientific whistleblowers still suffer retaliation. And in this case, the federal courts have declared that they lack jurisdiction to set aside agency decisions for abuse of discretion even when they are based in part on scientific misconduct.

Although most judges profess no special scientific expertise, they do have an important role in ensuring scientific integrity in government decision-making. In *Daubert*, the Supreme Court recognized that judges can and should act as gatekeepers to screen unreliable science from the reliable. The abuse of science in this case goes far beyond harmless errors, unreliable data, differences of opinion, or honest mistakes. The Court should take this case to make clear that judges can and should provide a remedy when government decisions are based on scientific misconduct.

ARGUMENT

I. SCIENTIFIC MISCONDUCT UNDERMINES OUR DEMOCRACY: THREE EXAMPLES

A. Drakes Bay Oyster Company

On the western coast of the continental United States, in Point Reyes, California, just north of San Francisco, is an 80-year old family-run oyster farm, Drakes Bay Oyster Company. When Point Reyes was acquired by the National Park Service (creating Point Reyes National Seashore), the Park Service and every interested civic and environmental group supported the long-term continuation of the farm. It was a historic collaboration between environmentalists and agriculturalists in what has become a hugely successful model for the rest of the world – that production of wholesome food can exist in harmony with protection of the environment.³

For the past eight years, however, a pattern has developed of the Park Service and some of those same environmental groups making one false claim of environmental harm after another against the oyster farm. The false claims of environmental harm began in 2006, when local Park Service officials began claiming that the oyster farm was polluting

³ For an extended discussion of the support the farm enjoyed from the Park Service, and environmental groups like the Sierra Club and the Environmental Action Committee of West Marin, during the creation of the Seashore and the passage of wilderness legislation there, *see generally* Brief Of Dr. Laura Watt, Amicus Curiae In Support Of Petition For Rehearing En Banc (Oct. 25, 2013), Ninth Circuit docket (“CA9 dkt.”) no. 78-1.

the water, smothering eelgrass, harming fish, and degrading the ecology. Most alarmingly, in 2007, Park Service officials said the oyster farm's owners should be prosecuted for committing "environmental felonies" because the farm allegedly caused an 80% decline in the local harbor seal population, a protected marine mammal.⁴

These charges were surprising. Clams, oysters, and other shellfish were an important part of the environmental baseline for Drakes Estero,⁵ 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. 33 U.S.C. § 1251(a)(2).

The Park Service's surprising charges prompted the President of the Marin County Board of Supervisors to ask Dr. Goodman to review the Park Service's data. Dr. Goodman found that the publicly available data did not support the claims of major adverse impacts on water quality, sediments, eelgrass, fish, or the ecology.

The Park Service's harbor seal claims were also false. Harbor seal populations in Drakes Bay

⁴ District court docket ("N.D. Cal. dkt.") no. 39-1 at 38. References to page numbers in documents filed below are to the page number ECF-stamped to the top of the document.

⁵ N.D. Cal. dkt. no. 39-2 at 20.

were stable, with some disturbances coming from wildlife, others from park visitors, but none from the oyster farm. Three years later, the Park Service formally retracted its 80%-decline claim.

In 2009, the National Academy released a report on the Park Service's claims.⁶ It found that the Park Service had "selectively presented, overinterpreted, or misinterpreted" the available data, and concluded that, at Drakes Bay, "there is a lack of strong scientific evidence that shellfish farming has major adverse ecological effects".⁷

By that point, the Park Service had retracted most of the claims it made against the oyster farm in 2006. In January 2011, the Department of the Interior released a scientific integrity policy.⁸ Around the same time, the Solicitor's Office of the Department of Interior concluded that Park Service scientists showed "bias", "advocacy", a "troubling mind-set", and that five employees had "violated [the Park Service] Code of Scientific and Scholarly Conduct".⁹

With the retraction of the false claims, rebukes by the National Academy and the Park Service's own lawyers, and the institution of a new scientific integrity policy, there was reason to hope that the Park Service's use of science concerning the oyster

⁶ *Id.*

⁷ *Id.* at 85-86, 99.

⁸ Department of the Interior, *Integrity of Scientific and Scholarly Activities* (January 28, 2011), available at <http://elips.doi.gov/elips/0/doc/3045/Page1.aspx>.

⁹ N.D. Cal. dkt. no. 40-1 at 36-37.

farm would improve as the decision on the renewal of the farm's permit approached in 2012.

Instead, the pattern of false claims continued. Again, the main culprit was the Park Service's claims about adverse impacts to harbor seals. In 2009, the National Academy concluded that inadequate data existed to support the Park Service's claim that the farm disturbs the seals, but recommended that the controversy could be resolved if the Park Service established a camera surveillance system.¹⁰ In fact, such a program had secretly been in place since 2007, collecting photographs of seals and oyster boats every minute of the day during pupping season for over three years—for a total of more than 300,000 photographs.¹¹ The Park Service's private analysis of those photographs was withheld from the National Academy and the public, presumably because that analysis did not reveal disturbances by the farm.¹²

In early 2012, the Park Service contracted one of the world's foremost marine mammal behavior experts, Dr. Brent Stewart, to re-analyze the photos. Dr. Stewart submitted his report in May 2012.¹³ Dr. Stewart found "no evidence of disturbance" of seals by oyster boats.¹⁴ Dr. Stewart's report should have finally put the issue to rest.

¹⁰ N.D. Cal. dkt no. 39-2 at 59-60.

¹¹ N.D. Cal. dkt nos. 40-1 at 17 and 41-3 at 5.

¹² N.D. Cal. dkt no. 40-1 at 13-14.

¹³ Excerpts of Record ("ER") 279-285.

¹⁴ *Id.*; see also N.D. Cal. dkt. no. 52-1 at 29-35 (Dr. Goodman's analysis of Dr. Stewart's report).

Unfortunately, it didn't. On November 20, 2012, the Park Service released an environmental impact statement (EIS) on the oyster farm. The EIS concluded that the oyster farm has a significant "adverse impact" on harbor seals.¹⁵ Dr. Stewart's finding of "no evidence of disturbance" was transformed into a false finding that the farm did in fact cause serious disturbances.¹⁶ This manipulation of research results is a form of scientific misconduct known as falsification. See Part II.A below.

A week later, Secretary Salazar decided not to renew the oyster farm's permit, citing, in part, the conclusions about environmental harm in the EIS.¹⁷ Ideology had triumphed over science.¹⁸

¹⁵ Supplemental Excerpts of Record at 58.

¹⁶ ER 284-285.

¹⁷ Petitioners' Appendix at 162.

¹⁸ In the district court, Dr. Goodman's opinion that the EIS "misrepresents" Dr. Stewart's conclusions about harbor seals went un rebutted. ER 188. In its brief to the Ninth Circuit, Interior tried to defend the EIS by citing a study from the Marine Mammal Commission ("MMC"). CA9 dkt. no. 36-1 at 55 n.10. But the MMC report does nothing to support the EIS's harbor seal conclusions. After reviewing the three years of Park Service photographs at issue here, the MMC described a single potential oyster-boat-related disturbance on May 15, 2008, and advised that a "fuller examination" of the photographs was necessary to form any conclusions "with a reasonable level of confidence". Marine Mammal Commission, *Mariculture And Harbor Seals In Drakes Estero, California* at 27 (November 22, 2011). Dr. Stewart conducted just such a fuller examination of the photographs, and he concluded, with particular reference to the potential disturbance on May 15, 2008, that there

B. Klamath River Dams Removal

Water use in the Klamath Basin in Oregon and California has been a source of conflict between tribes, farmers, environmentalists, a power company, and the governments for decades. In 2002, many blamed a massive Chinook salmon kill on an allegedly politically motivated decision to divert water to farmers rather than to instream flows. A 2004 National Academy of Sciences report complicated the picture by concluding that poor water quality, rather than low instream flows, was the main risk to threatened and endangered species.¹⁹

When the Obama administration came into office, it began considering a billion-dollar project to remove four dams on the Klamath River. There was never much doubt about the outcome: in 2009, Interior Secretary Salazar is widely reported to have

was “no evidence of disturbance”. N.D. Cal. dkt. no. 52-1 at 15. The Director of the MMC later admitted in a letter to Dr. Goodman (blind copied to the Park Service) that there was no evidence supporting the MMC claims of harbor seal disturbances by the oyster farm. Editorial, “In Private Letter, Tim Ragen Admits No Evidence For Seal Study”, *Point Reyes Light* (August 9, 2012), available at <http://www.ptreyeslight.com/article/private-letter-tim-ragen-admits-no-evidence-seal-study>.

¹⁹ National Research Council, *Endangered And Threatened Fishes In The Klamath River Basin: Causes Of Decline And Strategies For Recovery* at 5-6 (2004), available at http://www.nap.edu/catalog.php?record_id=10838.

proclaimed that the proposal to remove the dams “will not fail”.²⁰

In April 2011, the Bureau of Reclamation (an agency within Interior) hired Dr. Paul Houser as its Science Advisor and Scientific Integrity Officer—a position created after Interior released its scientific integrity policy in January 2011.

In September 2011, Interior released a draft EIS for the dam removal project. Dr. Houser complained to his superiors that the draft EIS and its accompanying press release misrepresented the science panel reports that had been commissioned on the dam removal project, emphasizing the positive benefits without the uncertainties or negatives identified by the panel. In February 2012, just one month before Secretary Salazar was scheduled to formally make his decision, Dr. Houser was terminated. He believed this was retaliatory and intended to prevent him from investigating whether the final EIS was also tainted by scientific misconduct. In response, he filed a whistleblower complaint with Interior’s Inspector General as well as a scientific misconduct complaint with Interior’s Scientific Integrity Officer.²¹

²⁰ John Bowman, “Secretary Of Interior Announces Resignation”, *Taft Midway Driller* (Jan. 17, 2013), available at <http://www.taftmidwaydriller.com/article/20130117/NEWS/130119808/0/FRONTPAGE>.

²¹ Letter from Dr. Paul Houser, Scientific Integrity Officer, Bureau of Reclamation, to the Department of the Interior, *Allegation Of Scientific And Scholarly Misconduct And Reprisal For A Disclosure Concerning The Biased Summarization Of Key Scientific Conclusions For The Klamath River Dam Removal Secretarial Determination Process* (February 24, 2012), available at

In March 2013, Interior released a report on Dr. Houser's scientific integrity complaint.²² The report was written by an outside consultant whose main client is Interior.²³ Interior tasked the consultant with answering a given a set of questions, and the consultant did not interview witnesses.²⁴ The report dismissed the charge of "misconduct" as but "normal practice".²⁵ Interior's Scientific Integrity Officer, who reports to the Secretary of Interior, agreed and closed the case.

In May 2013, the House of Representatives Committee on Natural Resources released a report on Interior's Inspector General, highlighting the Klamath River scientific integrity complaint because of what the Committee concluded were failures of both Interior and Interior's Inspector General (IG).²⁶ The House Committee reported that an IG

http://www.peer.org/assets/docs/doi/8_8_12_Houser_sci_integ_complaint.pdf.

²² RESOLVE, *Independent Evaluation Of The Scientific Record Pertaining To The Allegations Of Dr. Paul Houser* (August 2012) ("RESOLVE report"), available at <http://www.doi.gov/scientificintegrity/upload/DOI-SI-Case-313-Independent-Report.pdf>.

²³ See RESOLVE Reports and Papers, available at <http://www.resolve.org/resources/reports-papers> (listing RESOLVE reports done for Interior).

²⁴ RESOLVE report, *supra*, at 4-7.

²⁵ *Id.* at 9.

²⁶ U.S. House of Representatives, Committee on Natural Resources, Office of Oversight and Investigations: *Holding Interior Watchdog Accountable*, 59-66 (February 21, 2013), available at <http://naturalresources.house.gov/uploadedfiles/oversightreportdepartmentofinterior.pdf>.

investigator thought it was likely that Dr. Houser was terminated because Interior disagreed with his scientific analysis. The investigators thought the reasons cited by Interior for the termination were “trivial”. Still, Dr. Houser has not been reinstated, and both his whistleblower and scientific misconduct complaints have been quietly dismissed.

C. Department of Justice

In a widely noticed recent dissent, Chief Judge Alex Kozinski of the Ninth Circuit Court of Appeals criticized an “epidemic” of Department of Justice prosecutors failing to disclose exculpatory scientific information to defendants and the courts. *United States v. Olsen*, 737 F.3d 625, 626 (9th Cir. 2013) (Kozinski, C.J., dissenting from denial of reh’g en banc), petition for certiorari filed April 24, 2014 (no. 13-1287). In *Olsen*, the prosecutor failed to disclose that the key piece of forensic evidence—lab results finding that pills were laced with poison—was created by a police technician who had been terminated for “gross misconduct” in contaminating many other lab samples in other cases. *Id.* at 627. Chief Judge Kozinski concluded about the science: “nearly everything the district judge understood to be true was false”. *Id.* at 628.

But that was not an isolated case. Chief Judge Kozinski cited the “distressingly common” phenomenon that has come to light in recent years, involving many thousands of cases, of lab technicians falsifying their results to support a prosecution. *Id.* at 632. And prosecutors from Justice have too often obliged: “I wish I could say that the prosecutor’s un-professionalism here is the exception ... [b]ut it wouldn’t be true”. *Id.* at 631. In support, he cited 29 published appellate opinions from just the last ten years in which courts around the country found that

prosecutors had failed to disclose exculpatory evidence. *Id.* at 631-632. Presumably many more cases have gone undiscovered because “all the incentives prosecutors confront encourage them not to discover or disclose exculpatory evidence”. *Id.* at 630.

Chief Judge Kozinski recognized that scientific misconduct by Justice is corrosive to our system of government, and that courts have a share of the responsibility:

When a public official behaves with such casual disregard for his constitutional obligations and the rights of the accused, it erodes the public's trust in our justice system, and chips away at the foundational premises of the rule of law. When such transgressions are acknowledged yet forgiven by the courts, we endorse and invite their repetition.

Id. at 632. He concluded by urging courts to “send prosecutors a clear message” by vacating the “ill-gotten conviction”. *Id.* at 633.

II. THERE IS A LACK OF ACCOUNTABILITY FOR SCIENTIFIC MISCONDUCT IN GOVERNMENT

A. Need For Scientific Integrity Policy Becomes Apparent

Historically, scientific research relied on a self-regulating honor system. In the 1980's, however, the scientific community was rocked by a series of highly publicized cases of scientific misconduct. As a result, the federal government set into motion policies to

oversee research conduct, and adjudicate research misconduct.

In 1981, a subcommittee of Congress, under the leadership of then-Congressman Al Gore, held hearings on fraud in biomedical research in response to widespread reports of scientists falsifying their data. Such cases were exposed in several books.²⁷

Congress, the public, and many others in the scientific community wanted oversight of federally funded research. Congressional hearings called for investigation of the National Institutes of Health (“NIH”) and other federal agencies. In response, various scientific societies issued guidelines for research conduct. The two federal agencies that sponsor the most federally funded research, NIH and the National Science Foundation (“NSF”), released scientific misconduct policies in the mid to late 1980’s. By the late 1980’s, the National Academy of Sciences was asked to propose a unified federal policy.

In 1992, the National Academy responded by releasing a report that proposed a definition of scientific misconduct: “fabrication, falsification, or plagiarism, in proposing, performing, or reporting research”.²⁸ (NSF added retaliation against whistleblowers to its definition.) The report recommended that an office in the White House, the

²⁷ E.g., William Broad and Nicholas Wade, *Betrayers Of The Truth: Fraud And Deceit In The Halls Of Science* (1982).

²⁸ National Academy of Sciences, *Responsible Science: Ensuring the Integrity of the Research Process* at 27 (1992), available at http://nap.edu/catalog.php?record_id=1864.

Office of Science and Technology Policy (OSTP), establish common government-wide definitions and procedures for confronting the problem. A unified federal policy, so it seemed at the time, was within grasp.

Eight years later, in 2000, OSTP finally issued a “Federal Policy on Research Misconduct” that instructed agencies to implement the policy. Some agencies complied; others—including the Department of the Interior—did not.

B. The Rocky Development And Implementation Of The President’s Scientific Integrity Policy

In March 2009, shortly after coming into office, President Obama released a Memorandum on Scientific Integrity and directed OSTP to provide detailed guidelines within 120 days.²⁹

The President’s policy got off to a rocky start. It took OSTP eighteen months to release a mere four pages of guidelines.³⁰ Those guidelines provided little guidance. Instead of providing concrete standards or common procedures for every government agency to follow, as the National Academy had recommended in 1992, the guidelines gave individual agencies nearly complete discretion by

²⁹ *Presidential Memorandum on Scientific Integrity* (March 9, 2009), available at <http://www.whitehouse.gov/the-press-office/memorandum-heads-executive-departments-and-agencies-3-9-09>.

³⁰ John P. Holdren, Director, Office of Science and Technology Policy, *Memorandum on Scientific Integrity*, (December 17, 2010), available at <http://www.whitehouse.gov/sites/default/files/microsites/ostp/scientific-integrity-memo-12172010.pdf>.

recommending that each agency develop its own policies. And the guidelines said nothing at all about how scientific misconduct should be investigated or how errors should be corrected.

The shortcomings of the President's scientific integrity policy and the OSTP guidelines are manifest in each of the cases discussed in Part I.

In the case of Drakes Bay Oyster Company, efforts to get the falsified science in the EIS corrected have been rejected or ignored. In December 2012, the Park Service Director dismissed a formal complaint under the Data Quality Act³¹ on the ground that the Secretary's decision "mooted" any requirement to correct the science in the EIS.³² And the Department of Interior has still not even decided *whether* it will open a formal investigation into a formal scientific misconduct complaint Dr. Goodman filed one year ago in *May 2013*.³³ (To date, nearly everyone involved with the Park Service's false science in this case has been promoted.)

Meanwhile, in its briefs to the Ninth Circuit in this case, Interior has continued to cite the EIS's

³¹ P.L. 106-554 § 515, 114 Stat. 2763A-153-154 (December 21, 2000).

³² Letter from Jonathan B. Jarvis, Director, National Park Service, to Amber D. Abbasi, counsel for Dr. Goodman (Dec. 21, 2012), *available at* http://causeofaction.org/assets/uploads/2013/03/FINAL-Report_Exhibits.pdf at Exhibit 51 (page 1003).

³³ *See* Emily Yehle, "Rushed USGS Report On Oyster Farm Misrepresented Biologist's Findings", *Greenwire* (May 14, 2013), *available at* <http://www.eenews.net/greenwire/stories/1059981143> (describing complaint).

conclusions about adverse impacts to harbor seals as a reason why the farm should be removed.³⁴

In the case of the Klamath River dams removal project, the whistleblower Dr. Houser was fired and his misconduct complaints have been dismissed by a process ripe with conflicts and lacking independence, transparency, and accountability.

And in the *Olsen* case, the government has so far not conceded error, and the Justice prosecutor who hid the exculpatory evidence has (to our knowledge) not been held accountable, even though Justice has a scientific integrity policy that acknowledges that the Department is “entrusted with awesome responsibilities” and commits to “pursue, rely upon and present evidence that is well-founded in fact and veracity”.³⁵

Unfortunately, the President’s scientific integrity policy and OSTP’s guidelines have failed to ensure independent investigations, accountability for

³⁴ In opposing Drakes Bay’s motion for an injunction pending appeal, Interior quoted the Park Service’s EIS’s conclusion that Drakes Bay causes “long-term moderate adverse impacts” to harbor seals in support of the argument that “the public interest in the quality of the Drakes Estero environment weighs against an injunction”. CA9 dkt. no. 17-1 at 20-21. And in Interior’s opposition to Drakes Bay’s motion for a stay of the mandate pending certiorari, Interior again argued that “the Park Service’s interest in protecting harbor seals in Drakes Estero during pupping season is an equitable factor” supporting closure of the farm. CA9 dkt. no. 105 at 11-12.

³⁵ Department of Justice, *Scientific and Research Integrity Policy*, at 1, available at <http://www.justice.gov/open/doj-scientific-integrity-policy.pdf>.

scientific misconduct, whistleblower protections, and correction of egregious errors.

III. COURTS HAVE AN IMPORTANT ROLE IN ENSURING SCIENTIFIC INTEGRITY IN GOVERNMENT

Twenty years ago, in *Daubert*, this Court held that federal judges have the “gatekeeping” role in ensuring that only “scientific ... knowledge” is used as expert evidence in court. *Daubert v. Merrell Dow Pharms.*, 509 U.S. 579, 590, 597 (1993) (quoting Fed. R. Evid. R. 702). What constitutes scientific knowledge? This Court explained that it is based not on “subjective belief or unsupported speculation”, but on “the methods and procedures of science” (i.e., the scientific method). *Id.* at 590 (internal citation and quotation marks omitted).

Most judges are not scientists, and many openly struggle with screening scientific knowledge from the unscientific. On remand in *Daubert*, for example, (then) Judge Kozinski candidly acknowledged that this Court’s holding “puts federal judges in an uncomfortable position”:

[S]cientists often have vigorous and sincere disagreements as to what research methodology is proper, what should be accepted as sufficient proof for the existence of a “fact,” and whether information derived by a particular method can tell us anything useful about the subject under study.

Our responsibility ... is to resolve disputes among respected, well-credentialed scientists about matters squarely within their expertise, in areas where there is no scientific consensus as

to what is and what is not “good science,” and occasionally to reject such expert testimony because it was not “derived by the scientific method.”

Daubert v. Merrell Dow Pharmaceuticals, 43 F.3d 1311, 1315-16 (9th Cir. 1995).

Rather than shirking this responsibility, Judge Kozinski vowed to “take a deep breath and proceed with this heady task”. *Id.* at 1316.

In the years since *Daubert*, federal judges have proven capable of managing this task. Judge Oliver W. Wanger of the Eastern District of California, for example, presided over extremely complex and contentious Endangered Species Act litigation about the Delta smelt. *San Luis & Delta-Mendota Water Auth. v. Salazar* (the “*Delta Smelt Cases*”) (E.D. Cal. no. 1:09-cv-00407). The main issue in *Delta Smelt Cases* was whether the science justified restricting water exports in California in order to protect the smelt. At the close of the trial court proceedings, Judge Wanger found that the testimony of the government’s experts lacked credibility.³⁶ To Judge Wanger, those experts were driven by a policy goal to restrict exports, regardless of what the scientific data showed. Judge Wanger expected better from the government:

I’m going to be making a finding in this case of agency bad faith. There is simply no justification. There can be no acceptance by a Court of the United

³⁶ *Delta Smelt Cases*, Bench Ruling on Motion to Stay Pending Appeal (Sept. 16, 2011), dkt. no. 1056, *available at* <http://plf.typepad.com/files/9-16-11-motion-to-stay-final-1.pdf>

States of the conduct that has been engaged in in this case by these witnesses.

And I am going to make a very clear and explicit record to support that finding of agency bad faith because, candidly, the only inference that the Court can draw is that it is an attempt to mislead and to deceive the Court into accepting what is not only not the best science, it's not science.³⁷

Judge Wanger stressed that the government has a “duty” to use good science in its decisions:

[T]he United States, as a sovereign, has a duty not only in dealing with the Court, but in dealing with the public to always speak the truth, whether it is good or bad. It's never about winning or losing, it's always about doing justice.³⁸

Judge Wanger saw past the agency's policy goals and the flawed testimony of its scientists and ruled that the science did not support the proposed new restrictions, showing the extreme importance of the court's role in scientific integrity.

In the present case, however, the panel threw up its hands at the science. It proclaimed that it lacked jurisdiction to review petitioners' claims that Secretary Salazar's decision was an abuse of discretion because it was based, in part, on false science. Petition for Certiorari at 11-12. And it created a rule of “harmless error” in which agencies

³⁷ *Id.* at 17:15-25.

³⁸ *Id.* at 33:18-22.

can avoid responsibility for scientific misconduct simply by asserting that their decisions are not based on flawed data. *Id.* at 32-33.

The panel's decision, if allowed to stand, creates a dangerous precedent. If courts lack jurisdiction to review claims that agency decisions are based on scientific misconduct, and if courts are required to forgive scientific misconduct whenever an agency makes assurances that the misconduct was immaterial, then agencies are likely to feel less constrained about falsifying scientific information to the courts and the public. This decision is likely to result in more scientific misconduct in government decisions, and thus undermine our democracy.

The Supreme Court should take this case to make clear that the courts can, and should, remedy scientific misconduct. *See General Electric, Inc. v. Joiner*, 522 U.S. 136, 146 (1997) (courts can reject scientific claims when "there is simply too great an analytical gap between the data and the opinion proffered"). Scientific misconduct is not qualitatively different from the kinds of issues courts have no trouble adjudicating in other cases every day. In even the most complex breach of contract cases, for example, courts are routinely asked to determine whether a party has made a material misrepresentation of the facts. In analyzing these types of claims, courts can and do compare the underlying facts against the representation to assess whether they are consistent.

The scientific misconduct claim here is really no different. The facts are that the internal analysis by the Park Service and its outside expert was that there is no evidence that the oyster farm disturbs harbor seals. See Part I.A above. And yet the representation in the EIS, relied upon by the

Secretary in making his decision, was that the oyster farm causes significant adverse impacts to harbor seals. This was not a case where the court was asked to choose between conflicting expert opinions. It is not about unreliable data or harmless errors. There is nothing “harmless” about an eight-year pattern of Park Service misrepresentations about a historic family farm. This is a case where the agency simply falsified the science, and the panel should not have refused to say so.

CONCLUSION

The petition should be granted.

Respectfully submitted,

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