

**[Union of
Concerned Scientists**



Catalyst

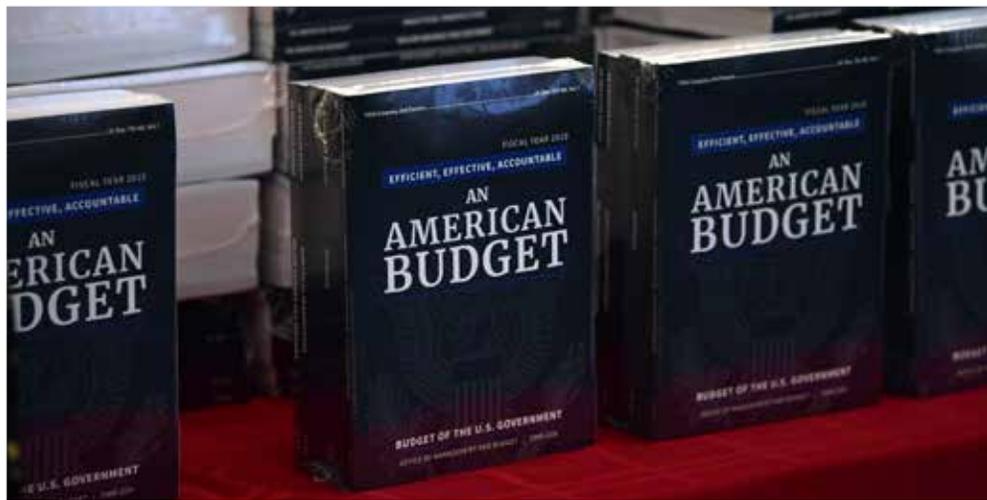
Volume 18, Spring 2018

**Trump's EPA Is
Hurting Americans**

**ExxonMobil's
Conspiracy Claims**

**Interview with
Sally Jewell**

A Victory for Science



By Ken Kimmell



The past year has been rocky, with many disappointments, so I am particularly pleased to report that Congress finally passed a budget in March, and science was a clear winner. I am proud of the work the Union of Concerned Scientists did to secure this victory.

As detailed in this issue, many federal agencies, such as the Environmental Protection Agency, have already taken a beating through buyouts of senior talent, rollbacks of important health safeguards, and political appointees tampering with staff work. On top of that, the Trump administration had proposed severe cuts to the EPA and other agencies, focusing particularly on budget line items that fund vital scientific work. And many in Congress who favor a radical agenda to cut the safeguards we all rely upon added “riders” to the budget: poison-pill provisions that would limit the ability of these agencies to enforce laws such as the Endangered Species Act.

In partnership with many other groups, we at UCS rolled up our sleeves. Our scientists and advocates educated the press and the public on how important independent government science is to our future, and our outreach team mobilized our Science Network to speak directly to members of Congress about the harms these cuts would cause.

Standing up and fighting still matters and, even in this political climate, we can still win.

And we won! The final budget bill *increases* funding for clean energy research and development programs; sustainable agriculture research allocations will grow by 30 percent; and badly needed funds that will help communities take proactive steps to protect themselves against storms and other extreme weather related to climate change will see a 150 percent increase. The budget keeps the EPA’s funding at last year’s level—far preferable to the draconian cuts proposed by the president. Congress even eliminated all of the harmful riders from the budget bill (with one exception—a misguided provision to declare that burning trees for energy is “carbon neutral”). The lesson is clear: old-fashioned standing up and fighting still matters and, even in this political climate, we can still win.

Ken Kimmell is president of UCS.

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EDITORIAL DIRECTOR
Seth Shulman

MANAGING EDITOR
Bryan Wadsworth

PRODUCTION MANAGER
Heather Tuttle

CONTRIBUTING EDITOR
Pamela Worth

CONTRIBUTING WRITER
Elliott Negin

DESIGN
Rigsby Hull

COVER
Jim West/Alamy Stock photo

BACK COVER
Audrey Eyring/UCS

The Union of Concerned Scientists puts rigorous, independent science to work to solve our planet’s most pressing problems. Joining with people across the country, we combine technical analysis and effective advocacy to create innovative, practical solutions for a healthy, safe, and sustainable future.

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CHAIR
Anne Kapuscinski

PRESIDENT
Kenneth Kimmell

NATIONAL HEADQUARTERS
Two Brattle Square
Cambridge, MA
02138-3780

PHONE
(617) 547-5552

EMAIL
ucs@ucsusa.org

WEB
www.ucsusa.org

Pictured on the cover: A power plant in Monroe, Michigan—one of several Midwest states at risk from the region’s diminished EPA enforcement. Read more on p. 9.



WHAT OUR MEMBERS ARE SAYING

Here's a sampling of recent feedback from the UCS Facebook page (www.facebook.com/unionofconcernedscientists) and Twitter feed (www.twitter.com/ucsusa).

ON THE WITHDRAWAL OF KATHLEEN HARTNETT WHITE'S NOMINATION

f Claudia Coble:
Contemplating the possibility that she would be joining forces with [EPA administrator] Scott Pruitt caused me to experience panic attacks, bouts of unspeakable anger and outrage, and profound sorrow. I'm exaggerating—a bit—but am thrilled she is out of the running.

f Hector Carballosa:
I watched a bit of the hearing. I almost felt sorry for her until I realized she's [representative] of the inability of this government and many citizens to find consensus on solutions: too many rich folks thinking they know more than lifelong science professionals.

ON THIS WINTER'S RECORD LOW LEVELS OF ARCTIC ICE

t @kbjurgens:
What's abnormal is the lack of #US #leadership in the face of perilous #climatechange #RunForSomething

f Jim Goodwin:
Hope it can be adapted to, as we are unlikely to change our lifestyle patterns (emissions) in any meaningful way. Has happened before, but probably not in such a short period of time.

f John Fabel:
We don't get a "do-over" with climate change.

ON ELECTRIC VEHICLE LOVE DAY (A.K.A. VALENTINE'S DAY)

t @MikeSalisbury78:
Doubt thou that EVs reduce cost,
Doubt that EVs' performance does impress,
Doubt their lovely lack of exhaust,
But never doubt that EVs emit less.
#EVlove @UCSUSA

t @DHGriff:
#EVlove Had to start my new grandson off right. His first ride (home from the hospital) was in a Tesla.

t @AmyTidd:
Happy #EVLove Day! We love our Nissan Leaf and are so happy to pass by gas stations on our way around town. The acceleration is awesome!

f Talia Rose:
Have not bought gas or done an oil change in 18 months—whoohoo!

CORRECTION

An article in the *Advances* section of the last issue incorrectly stated that Dr. James McCarthy was the first oceanographer to receive the Tyler Prize, and neglected to mention that he will share the prize with a co-recipient, Dr. Paul Falkowski, distinguished professor in the departments of Earth and Planetary Sciences and Marine and Coastal Sciences at Rutgers University. We apologize for the error and omission.

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Surveying Federal Scientists about Political Interference

This spring, the Union of Concerned Scientists sent surveys to some 63,000 government scientists at 16 federal agencies to get their perspective on the state of scientific integrity across the government.

This effort is the 10th in a series of surveys of federal scientists UCS has been conducting since 2005. Our partner in this latest survey, Iowa State University's Center for Survey Statistics and Methodology, has deep expertise in the technical and operational aspects of sample surveys and the steps needed to ensure respondents' anonymity.

Past results have proved useful in assessing federal scientists' work environment and, in some cases, have paved the way for improvements in scientific integrity policies and government transparency. The current survey seeks data on questions such as: Are scientists being inhibited from conducting and communicating their work? How common are incidents of political interference? Are problems more widespread at some agencies than others?

Anecdotal concerns about the Trump administration's attacks on science and scientists make the timing particularly opportune for such questions. Federal scientists have already blown the whistle on the Trump administration for reassigning them to do tasks for which they do not have expertise, for prohibiting them from speaking to the press, and for discouraging the use of terms such as "climate change" and "evidence-based" in some agency documents. Our survey should provide more evidence about the extent of such problems.

EPA DISCOURAGES PARTICIPATION

In one notable glitch in the dissemination of the survey, Environmental Protection Agency computer administrators reportedly designated the emails from UCS as spam, and recommended that EPA staff delete them—despite the fact that UCS had notified the agency that the survey was coming. After the

incident received press coverage, the EPA General Counsel's Ethics Office notified agency employees that they were allowed to participate as long as they did so on their own time and did not use a government computer. Nonetheless, as a result some EPA employees may have gotten mixed signals about their ability to participate in the 2018 survey.

The survey fared markedly better at other agencies, however. At the National Oceanic and Atmospheric Administration (NOAA), Rear Admiral Tim Gallaudet, acting undersecretary of commerce for oceans and atmosphere, even encouraged NOAA staff to respond, pledging his personal commitment to integrity and "world class science" at his agency.

UCS had received more than 4,000 responses as *Catalyst* went to press, for a response rate of nearly 7 percent. For our analysis of the results in the months to come, visit www.ucsusa.org/2018survey.

Government Watchdog to Expand Investigation of EPA Practices

The Government Accountability Office (GAO), Congress's watchdog agency, announced this spring that it would expand an ongoing investigation of the EPA, to determine whether political appointees at the agency improperly influenced the selection of science advisory committee members and other staff scientists.

The announcement comes less than two months after the UCS report

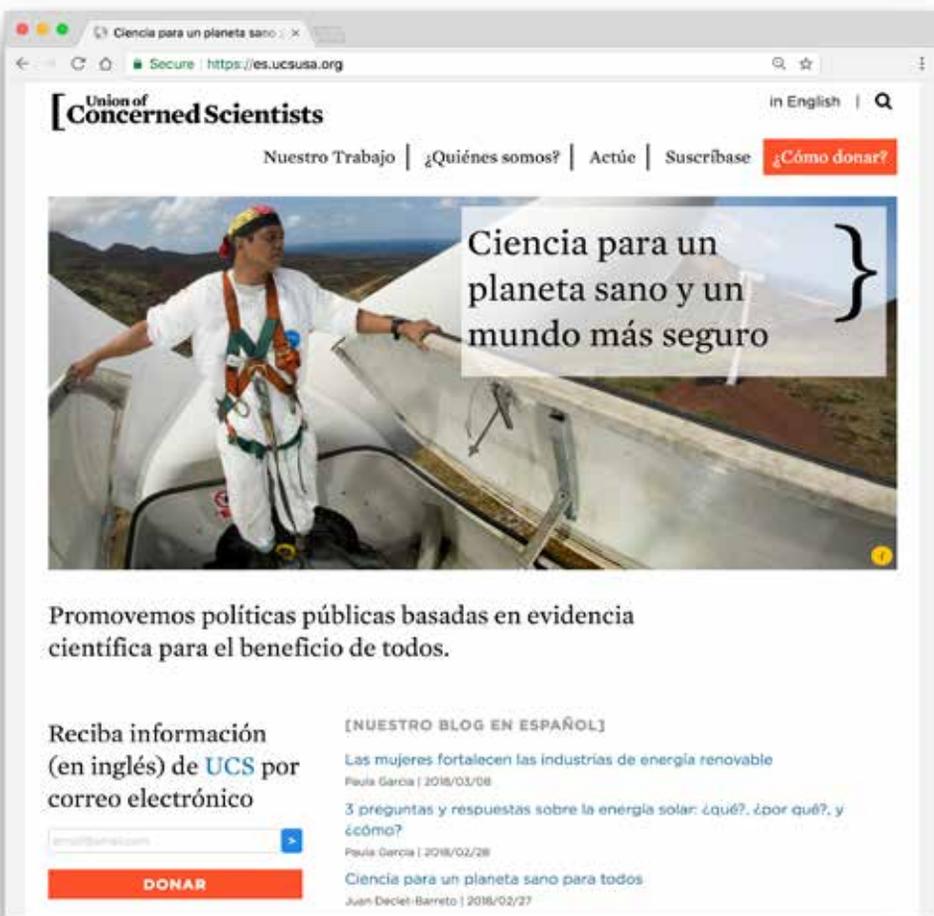
Abandoning Science Advice documented that the Trump administration was neglecting expert advice from science advisory committees across the government and, in some instances, politicizing the selection of committee members.

The GAO was responding to a request from Delaware Senator Tom Carper and Rhode Island Senator Sheldon Whitehouse (both senior members of the Senate Environment and Public

Works Committee), who noted that EPA Administrator Scott Pruitt and his subordinates had rejected the advice of career employees in making appointments to the EPA's Clean Air Scientific Advisory Committee (CASAC).

As a result, the investigation is now reportedly examining the actions of Pruitt and his staff not only with regard to the CASAC appointments but also to the EPA's 21 other science advisory committees.

Our New Spanish-Language Website



In mid-February, we launched *UCS en español* (<http://es.ucsusa.org>), our new website for Spanish speakers, establishing UCS as a reputable and accessible source for analyses and information on issues of interest to Latino communities in the United States, especially those working to confront environmental injustice.

12,000 PARTNERS: CELEBRATING A MILESTONE IN MONTHLY GIVING

Since President Trump took office, UCS has stepped up our work to defend science and government scientists like never before. Monthly gifts from supporters like you make it possible for us to fight off attacks on science on multiple fronts. That's why we're pleased to announce that over the past year, more than 6,000 UCS members have become new Partners for the Earth, committing to defend science by making regular, dependable monthly gifts. We now have more than 12,000 loyal Partners making monthly gifts that provide UCS with the resources we need to push back against the Trump administration and seize every opportunity for positive change.

You can become a Partner with a monthly gift of as little as \$10, either automatically charged to your credit or debit card or deducted directly from your checking account. To learn more, or become our newest Partner, join online at www.ucsusa.org/monthly or call (800) 666-8276.

Sidelining Science at the USDA



There's something rotten at the US Department of Agriculture (USDA). Under President Trump's pick for agriculture secretary, Sonny Perdue, the department responsible for assisting American farmers, improving child nutrition, maintaining food safety, protecting food system workers from job-related illness and injury, and alleviating hunger is reversing progress on many of these goals. A recent UCS report, *Betrayal at the USDA: How the Trump Administration Is Sidelining Science and Favoring Industry over Farmers and the Public*, documents numerous examples in which the USDA has ignored the best available research and its own scientists' recommendations—in favor of special interests.

"From farm to fork, our nation's food system should help farmers succeed, protect our environment, and

improve access to healthy food for all Americans. And the USDA should rely on science to carry out this mission," says report coauthor and UCS Senior Analyst Karen Perry Stillerman. "Unfortunately, this administration is prioritizing the bottom line of big agricultural companies over the needs of farmers, rural economies, consumers, and even schoolchildren."

Stillerman points to the Trump administration's rollbacks of evidence-based standards for healthy food in American schools, and Perdue and other USDA leaders' refusal to acknowledge that climate change threatens the livelihood of American farmers and our future food supply.

Perdue made headlines recently by suggesting that Supplemental Nutrition Assistance Program (SNAP) benefits (formerly known as food stamps) be at

least partially replaced with one-size-fits-all "harvest boxes" filled with canned food. This is just one of a series of uninformed proposals that would hurt millions of people across the country, Stillerman says.

"As a pretext for cutting benefits and tightening restrictions, Perdue has raised the bogeyman of 'waste, fraud, and abuse.' But evidence shows that SNAP is one of our country's most effective social programs, with very low rates of any such problems," she explains. "Rather than allowing special interests to dictate how our food system functions, the USDA would do better basing policies on science and evidence."

You can find the full report—including recommendations for keeping science central to the USDA's policies—at www.ucsusa.org/USDAbetrayal.

Partnering for Environmental Justice in Delaware

Along the industrial corridor in Delaware's New Castle County, pollution emitted from chemical facilities and waste sites creates health risks for people living nearby, including certain cancers and respiratory illnesses.

"Environmental justice advocates in New Castle County have been pushing back and demanding real protections," says Jessica Thomas, outreach coordinator with the Center for Science and Democracy at UCS. To help strengthen their case, Thomas and her team used EPA data to show conclusively that African American, Latino, and low-income New Castle County residents face greater health risks than wealthier white Delawareans who live further from polluting industries and waste sites. The data are compiled in the report *Environmental Justice for Delaware: Mitigating Toxic Pollution in New Castle County Communities*, a collaboration with the Environmental Justice Health Alliance (www.ej4all.org)



Delaware resident Kenneth Dryden leads a tour of toxic facilities that are polluting neighborhoods in New Castle County.

and several affiliated EJ organizations.

"In the battle for better policy, residents are too often dismissed by decisionmakers if they don't have access to technical data that support them,"

Thomas says. "UCS doesn't try to speak for communities; we speak with them, and offer the scientific backing they need to make their case." Learn more at www.ucsusa.org/EJDelaware.



The Truth about Coal

Facts and evidence are important to us at UCS. That's why we felt motivated to counter misinformation from President Trump and other administration officials that they are reviving the coal industry. Such propaganda is dangerous because it encourages false hope—leading some coal workers to even refuse training opportunities in other industries due to their mistaken belief that more mining jobs are sure to materialize.

Our new video "Everything to Know about Coal (in under Three Minutes)" offers a quick, accurate, and accessible explanation of why coal has been on the way out for a while now—and is highly unlikely to stage a comeback. Watch it at www.ucsusa.org/CoalVideo.



EPA ROLLBACKS ARE HURTING AMERICANS WHERE THEY LIVE

UCS visits the EPA's Midwest Office to investigate how Trump administration policies are hampering the agency and harming Americans' health.

BY DERRICK Z. JACKSON

From the regional office of the Environmental Protection Agency in the tall, modern Ralph Metcalfe Building in downtown Chicago, teams of scientists, investigators, and lawyers enforce the nation's environmental laws across the EPA's Region 5: a vast swath of the midwestern United States that includes Illinois, Indiana, Michigan, Minnesota, and Ohio as well as the lands of some 35 Native American tribes and the enormous Great Lakes.

On a recent visit, the 12th-floor office walls sported photos of EPA officials actively cleaning up spills, analyzing lab samples, and engaging with community residents. But interviews with current and former staffers struck a strikingly different note as they described the current work environment with a discordant mixture of despair and defiance, candor and fear.

Tasked with one of the hardest workloads in the nation because of the heavy industrialization in many parts of the 388,000-square-mile region they oversee, these career government officials say their office is a prime example of the Trump administration's ongoing efforts to hollow out the EPA and sideline science—with potentially devastating consequences for the environment and for Americans' health.

DIMINISHED CAPACITY

Lilly Simmons, a Region 5 environmental scientist, inspects industrial injection wells to make sure hazardous wastes don't pollute groundwater. "When I started, we had 10 inspectors," she says. "Now we're down to three."

Michael Mikulka, president of the local union of the American Federation of Government Employees, which represents most of Region 5's 1,000 employees, laments the loss of Superfund investigators. "We had four Superfund civil investigators," he says. "Now we have zero."

As Mikulka explains, these investigators did the gumshoe work needed to uncover pollution in communities. "These were the investigators, much like police detectives, who would go out to ask people who live by factories, 'What did you see?', 'What did you do?'" he says. They would talk to people who worked in industrial plants and discover that the companies had dumped liquid wastes in the back lot, he says. "And then they would dig a circle in the ground and ask them, 'Where'd you dump it?'"

At the time of my visit in February, Steve Faryan, who rushes to emergency and hazardous waste cleanups for the agency in his capacity as a so-called on-scene coordinator, had recently returned from assisting government efforts in hurricane-devastated Puerto Rico. He told me that, this year, his office will likely get to many fewer than the 60 contaminated sites it usually inspects annually. Wayne Whipple, a chemist sitting next to Faryan, spelled out the consequences: “A lot of poor people stuck with [toxic] plumes, and fenceline communities living next to refineries getting impacted,” he says. “If the EPA keeps slowing everything down, what’s the point? The EPA should be leading, especially with many states pulling back on their environmental regulations.”

SOFT ON POLLUTERS . . .

Stories like these bring home the realities of today’s EPA. Region 5 may well be especially hard-hit, but the aggregate numbers tell a similar story.

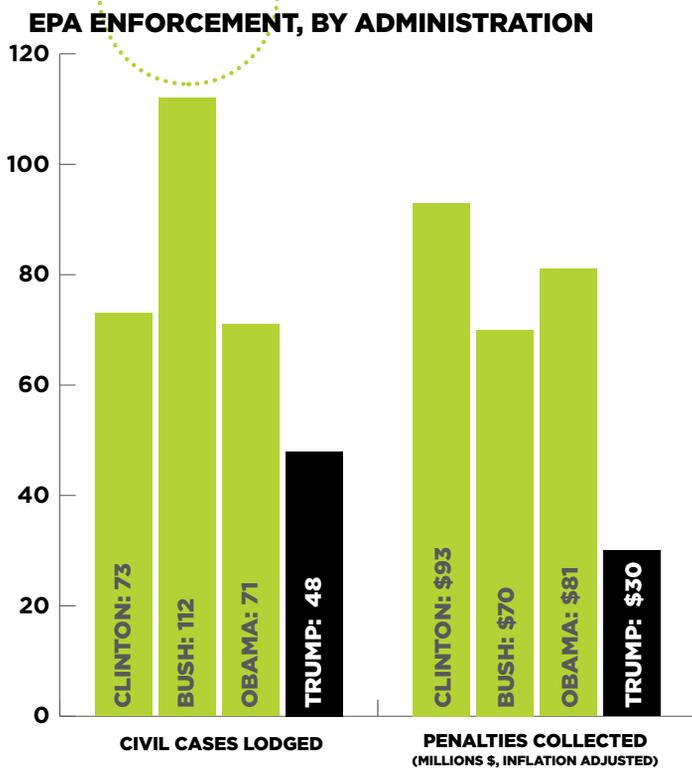
All told, at least 1,200 employees have left the EPA since the election of President Trump, who turned the agency over to Scott Pruitt, a man notoriously hostile to its mission—having personally sued the EPA 14 times on behalf of industry in his previous role as Oklahoma’s attorney general. The most recently announced tally of EPA employees (14,162 nationwide) is the lowest in three decades. And, given that nearly half the remaining staff reportedly becomes eligible for retirement over the next five years, attrition may help accomplish Pruitt and President Trump’s goal of dramatically shrinking the agency. The very real possibility that the EPA staff could shrink to fewer than 8,000 employees would be the lowest level since the first two years after the agency began in 1970.

The numbers are important because the evidence is clear that a shrinking staff also means less enforcement of the nation’s environmental laws and that, in turn, means more pollution reaching our communities and imperiling our health and that of our children.

A February report by the Environmental Integrity Project, a group led by Eric Schaeffer, former director of the EPA Office for Civil Enforcement in the Clinton and George W. Bush administrations, found that the Trump EPA successfully prosecuted and resolved 48 civil cases in its first year, collecting \$30 million in penalties from polluters. Even the George W. Bush administration—hardly known for drawing a hard line on environmental enforcement—resolved more than twice as many cases in its first year (112) and collected some \$70 million in penalties (see the figure).

A review by UCS of the EPA’s own enforcement database (available at <http://echo.epa.gov>) offers more detail. Here are some examples:

- The number of formal enforcement actions to remove pollutants from the nation’s public drinking water supply is at its lowest level since 2011.



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Just miles from EPA Region 5 headquarters in downtown Chicago, homes loom under the shadow of chemical plants. Diminished staff capacity has led to a precipitous drop in enforcement actions on hazardous waste violations in Illinois compared with previous years.

- In Region 5, the number of such enforcement actions in Indiana has been dropping steadily for years, from 202 in 2011 to just 26 last year.
- The dollar amount of penalties collected for air pollution violations tells a similar story; it is down by roughly a third since the start of the Trump administration.
- Formal enforcement actions on hazardous waste violations are also down. In Illinois, for instance, the EPA had been averaging roughly 12 for each of the past six years; last year, there were four.

... HARD ON COMMUNITIES

Nicole Cantello and Josh Zaharoff, attorneys in the EPA Region 5 office, explained how a directive from headquarters last May further tied their hands in their quest to pursue polluters. While regional investigators previously asked companies directly to provide air, water, or waste data, such requests must now be authorized in Washington, DC, especially those requiring testing and sampling or where the EPA and the state do not agree on environmental regulations. One staffer who did not want to be quoted by name said the new rules were intended “to shield oil and gas companies.” Zaharoff said he was aware of at least one water pollution inspection request that was approved,

but two months were lost in the process. Others have thus far gone unanswered. “We’re dedicated, but this slowing down of the process chills the desire of people in the region to pursue violations,” Zaharoff said.

Data requests can wind up having a large impact on people’s health, Cantello explains. Back in 2014, she says, Region 5 analysts’ requests for air monitoring data intended to measure petcoke dust—a by-product of oil refining—from one facility in southeast Chicago detected elevated levels of manganese emissions from another company several blocks away, in a neighborhood of 20,000 people. Manganese, used in processing steel, is a food nutrient that can build bones. But it is a neurotoxin when inhaled.

“If we hadn’t issued the letter for the air monitors to measure particulates, we never would have found the manganese,” Cantello said, adding that the requests ultimately led the city of Chicago to strengthen regulations that forced the plant to curb its emissions.

In Chicago, as elsewhere around the country, air pollution is literally a matter of life and death. As a 2013 study by researchers at the Massachusetts Institute of Technology found, air pollution kills some 200,000 Americans a year, with the average victim losing a decade of life expectancy. And research published last year in the *New England Journal of Medicine* and the *Journal of the American Medical Association* found that thousands of lives could be saved by even relatively minor reductions in fine particulate matter (or soot).

(continued on p. 21)

Parks and Regulations: Sally Jewell Reflects on Her Service

INTERVIEW WITH THE FORMER
SECRETARY OF THE INTERIOR



SALLY JEWELL served as secretary of the interior from 2013 to 2017, during which time she was known for her policies aimed at the conservation of natural resources and the expansion of national parks. She also initiated a landmark renewable energy and conservation plan for 10 million acres of desert in California. Before heading the Department of the Interior—her first foray into public service—Jewell was CEO of the sporting/outdoor goods retailer REI.

What are you most proud of when you look back at your tenure as head of the Department of the Interior?

SALLY JEWELL: I'd say that I'm most proud of the people I worked with, and the incredible work they did. As a private-sector person coming into government, I didn't really know what to expect. I was blown away by the talent of the researchers, the committed public servants, those who are serving the public on a day-to-day basis, those who were upholding our trust with the American public. And I'm proud to have had their backs as they took risks to move our nation forward.

Do any specific accomplishments stand out to you as game changers?

SALLY JEWELL: We were able to leverage today's technology to make smarter decisions about our public lands and waters that I think will pay dividends for generations to come. With incredible mapping capabilities, with satellite data, with the benefit of hindsight from mistakes made in the past... we can

now look at the landscape across public lands, private lands, state lands and understand more about what's at stake and why it is important to us.

Because of advances in science, we now know the areas that are important to set aside for conservation and the areas that are less important. We know the areas with great solar energy potential, or geothermal or wind energy. We know the areas that are important for endangered species such as the desert tortoise. This is information that can help us leave our environment in better condition for our children, grandchildren, and generations to follow. By applying the science, we can make smarter decisions.

Things are changing fast in the Department of the Interior. What changes have been most troubling to you since the Trump administration appointed Ryan Zinke to head the department?

SALLY JEWELL: What's extremely frustrating to me about the Trump

administration, Secretary Zinke, and what's happening in the Department of the Interior is that they're retreating from science. I don't see a proactive strategy for what they want to do. I see only a proactive strategy for undoing what we did.

When thoughtful regulations are done right, they account for a lot of different points of view. They strike a balance between economic success and appropriate environmental protections, along with protections for people and resources. When you sit across the table from businesses, and help them understand how their activities can adversely impact things, or where they can be a constructive partner and build their brand and their reputation, you end up with scenarios where people work together for a common good. It takes years and years.

This administration has to go through the same process of undoing regulations that we had to go through to create them, and it's not going to be fast. I take some comfort in knowing that.

Secretary Zinke has said he's being judged by how many regulations he can get rid of. Which regulations are you most concerned about this administration rolling back?

SALLY JEWELL: If you look at methane venting and flaring rules [*Editor's note: the Bureau of Land Management under Zinke has proposed to undo limitations on the burning of methane on federal and tribal lands*], that is American taxpayer assets going up in smoke—or going up in emissions that are hugely harmful. Methane is a greenhouse gas that's 20 times more powerful in the

“Keep up your support, keep up your engagement, keep teaching children science, and keep advocating for science at a local level. It makes an enormous difference.”

short run compared to carbon dioxide. But there’s no royalty being paid on that to the American people. And why would this administration want to just allow the assets of American people to go up in smoke, or to go up into the atmosphere? And yet that is what they are doing.

Likewise, they’ve rolled back regulations on the federal coal program. We had required that when you’re selling coal and you’re paying a royalty to the federal government and state governments, half of it goes to the states in that case. We wanted to make sure the royalties are paid on what you’re actually receiving from the coal. What coal companies are doing now is, they’re selling to a related company for, say, a dollar a ton, and then that company has sold it on to an exporter for, say, \$10 a ton. They pay a royalty on the dollar and not the \$10. That is a regulation the Trump administration has rolled back that just screws the American taxpayer. And the only rationale I can see for that is that they are being highly influenced by the coal industry.

What is keeping you hopeful as you see progress being stalled on climate change and environmental protections?

SALLY JEWELL: I’ve spoken with a handful of people, especially young people, who joined federal government service because of the opportunity that they have—beyond anything they could do in the private sector—to make a difference. And they have said to me, “Don’t worry, Sally. I know we are in a different period now than we were a year ago, but I want to reassure you, I’m in this for the long game because I care about our country. I care about future

generations. I care about climate change. I care about what we’re leaving behind, and I am committed to doing this even if it’s painful in the short run.”

It’s frustrating, but we live in a more transparent country than some, and I think what will happen is a backlash from the public that says: this is not okay.

I also have to say how much I appreciate the Union of Concerned Scientists for standing up for the critically important work that is being

done in this country and around the world—helping all of us understand what’s at stake with climate change, for future generations, for communities that may not have the voice that they should, and of course for the critters that have no vote or voice anywhere.

To your supporters out there: keep up your support, keep up your engagement, keep teaching children science, and keep advocating for science at a local level. It makes an enormous difference. {C}

**Union of
Concerned Scientists**

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SCIENCE THAT

Decades since it began, the UCS Science Network showcases its activist side.

BY ELLIOTT NEGIN

To appreciate the growing strength of the UCS Science Network, consider the key role it played in blocking President Trump's nomination of industry-friendly toxicologist Michael Dourson to head the Environmental Protection Agency's chemical safety division.

Even in an administration rife with controversial appointments, Dourson stood out as an appalling choice to head a division tasked with protecting the public from toxic chemicals. Since its founding in 1994, his nonprofit consulting firm has been representing the interests of EPA-regulated chemical companies including Dow AgroSciences, DuPont, Koch Industries, and Monsanto by downplaying their products' risks and advocating for weaker government safeguards.

Given the mounting opposition to Dourson's nomination, UCS realized that it only needed to convince a few additional senators to block his confirmation and identified lawmakers in Arizona, Maine, Nevada, North Carolina, and Tennessee as the top targets. And thanks to the UCS Science Network, with its nearly 24,000 members nationwide, scientists in every one of those states were ready and eager to help.

In Tennessee, biologist and Science Network member Cliff Cockerham got straight to work, eventually hand-delivering 75 letters from network members opposing Dourson to the in-state offices of Senators Lamar Alexander and Bob Corker and helping to enlist more than 100 scientists to make follow-up phone calls.

In Maine, a UCS alert about Dourson spurred biologist and Science Network member Dianne Kopec to take action. She coauthored a letter with physicist Martha Dickenson and Colby College toxicologist Gail Carlson urging Maine Senators Susan Collins and Angus King to oppose Dourson. Signed by 85 Science Network members and UCS supporters in the state, the letter brought the issue home by including details about how some of the chemicals Dourson had exonerated on behalf of his clients threatened the health of Maine residents.

When Kopec personally delivered the letter to the senators' in-state offices, she was pleasantly surprised by the experience. "I had never spoken with either senator's staff members before, and they were informed and interested in what I had to say," she says. "They were both grateful for the input and said they would act on it." The very next day, Collins announced she would oppose Dourson's nomination.



Collins' opposition was enough to sink Dourson's candidacy. A month earlier, North Carolina Senators Richard Burr and Thom Tillis had pulled their support, and without them and Collins, Dourson recognized that he didn't have enough confirmation votes and withdrew his name from consideration.

TRANSFORMING CONCERNS INTO ACTION

Defeating Dourson's nomination is just one of several campaigns in recent months in which the Science Network played a decisive role. More on those in a minute. But first, it's worth noting just how actively engaged many UCS Science Network members have become and what an important development that represents.

The UCS Science Network's origins date to the 1990s when the organization established several environmental

ADVOCACY GETS RESULTS



Michael Dourson, Sam Clovis, and Kathleen Hartnett White (left to right) were anti-science nominees for top government posts. Each were forced withdraw their nomination thanks to significant pressure from UCS and our supporters.

and security networks of scientists across the country. These efforts consolidated in 2004 as a means of rallying the scientific community to blunt the George W. Bush administration's efforts to undermine science and roll back public health and environmental protections. Previous efforts had rallied scientists around particular issues such as climate change and nuclear weapons; now, we were organizing scientists to defend the scientific process itself.

In sounding the alarm, UCS issued a groundbreaking report, *Scientific Integrity in Policymaking*, that exposed the ways in which the Bush White House was manipulating and distorting the work done by scientists at federal agencies and stacking scientific advisory panels to favor industry—a precursor to what we are witnessing today.

At the same time, UCS mobilized more than 15,000 scientists, including Nobel laureates, National Medal of Science recipients, and senior science advisors to both Republican and Democratic presidents, to sign on to a public statement denouncing the administration's then-unprecedented politicization of science.

The network has come a long way since then, from a group of scientists willing to sign a letter or send an email to a far more engaged coalition spanning the country.

“Over the years, we’ve upped our game to offer more dynamic ways for scientists to transform their concerns into action,” says Shreya Durvasula, UCS senior outreach coordinator for the network. “In addition to email petitions and other online actions, we now encourage network members to make phone calls and organize in-district meetings with

Over the years, we've upped our game to offer more dynamic ways for scientists to transform their concerns into action.

elected officials and their staffs. Our members' growing capacity to lead actions and mobilize their peers has shown there is a real appetite for this sort of organizing."

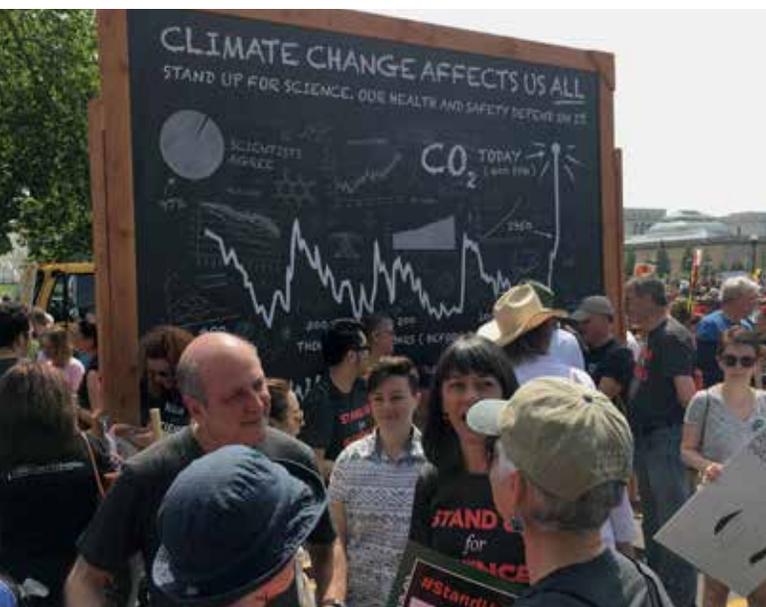
SCIENTISTS + ACTIVISTS = A FORCE FOR CHANGE

Durvasula reels off an impressive list of recent initiatives. Scientists at Indiana University, for example, have organized their own group, Concerned Scientists @IU, which now has 700 members. It has held a number of events, including a meeting with Indiana Senator Joe Donnelly's staff, and participated in last year's March for Science.

In Oregon, eight local climate scientists and experts visited more than two dozen legislators at the state capitol on behalf of

last year, some 50 network members from 11 states traveled to Washington, DC, for the March for Science; the March for Climate, Jobs, and Justice; and more than 75 meetings with lawmakers or their staffs on Capitol Hill. It was the largest science lobbying effort in UCS history.

Equally important, Durvasula says, UCS greatly augments the work of scientists in the Science Network through the active engagement of other concerned members and supporters through initiatives such as the UCS Science Champions and Science Watchdogs. "Our Science Network plays an important role, but you certainly don't have to be a scientist to engage in UCS advocacy—all UCS members and supporters have a vital role to play and can help make a difference." See the box to find out how you can get involved in these efforts.



From left to right: science supporters take action at the People's Climate March; Science Network members meet with Senator Angus King; Dianne Kopec (right) presents a letter opposing Michael Dourson's nomination to Senator Susan Collins's office; participants in a UCS Science Watchdog workshop hone their engagement skills.

the UCS Science Network to promote the Clean Energy Jobs bill under consideration this session.

In Illinois, network members pressed their legislators to support clean energy through letters to the editor, media appearances, community town hall presentations, and in-person visits at the state capitol. Thanks in part to these efforts, UCS and its Illinois allies persuaded lawmakers to pass the biggest clean energy bill in state history. Among other things, it will provide new investment for renewable energy, access to solar power for low-income residents, and a clear path to meeting the state's goal of 25 percent renewable energy by 2025.

Also, during the "Science Week of Action" UCS organized

RESISTING UNQUALIFIED NOMINEES

For all its disparate projects, the UCS Science Network has won its most tangible victories by raising the alarm and working with other UCS activists to block egregious Trump nominees.

Besides its successful campaign against Michael Dourson, the network actively opposed Sam Clovis, President Trump's pick to be the chief scientist at the Department of Agriculture. Clovis—a climate science denier and former radio talk show host—has no background in science, let alone agriculture or food.

Last October, UCS sent a letter signed by more than 3,100 network scientists who opposed Clovis to the Senate Agriculture Committee's chairman, Pat Roberts of Kansas,

and the panel's ranking Democrat, Debbie Stabenow of Michigan. Mike Hamm, a professor of sustainable agriculture at Michigan State University, helped draft the letter. "I was happy to do it because Sam Clovis was as unqualified as one could imagine for that position," Hamm says. "Kudos to the team at UCS for getting it out."

Two days after UCS released the letter, Clovis withdrew his name from consideration.

The network also sprang into action to help block the confirmation of Kathleen Hartnett White as chair of the Council on Environmental Quality, a White House office whose job is to ensure federal agencies meet their obligations to uphold environmental laws.

As head of the Texas Commission on Environmental Quality, Hartnett White had a track record of making scientifically indefensible claims about climate change. But it was her display of raw ignorance during an early November Senate Environment and Public Works (EPW) Committee hearing that pushed climate scientist Amanda Lynch "over the edge," as Lynch puts it.

GET INVOLVED

If you are a scientist, you can **JOIN OUR SCIENCE NETWORK** and put your expertise to work on a wide variety of issues.

www.ucsusa.org/science-network

Nonscientists have a huge role to play too! **JOIN OUR SCIENCE CHAMPIONS** initiative and we'll help you inform your local media or elected officials about attacks on science when they occur.

www.ScienceChampions.org



"Hartnett White couldn't answer fundamental questions about environmental science that would affect her ability to do her job," says Lynch, a professor at Brown University. "She didn't even understand that water expands when it is warmed."

Lynch was inspired to write a letter opposing Hartnett White's nomination and reached out to UCS to help find cosigners. In short order, more than 300 scientists signed, and UCS—in partnership with the Natural Resources Defense Council—sent it to the Senate and placed a full-page ad featuring it in *Politico*. Other news organizations, including Inside Climate News and the Weather Channel, ran stories about the letter, and Tom Carper, the top Democrat on the Senate EPW Committee, promoted it on Twitter. Ultimately, Science Network pressure combined with the efforts of other concerned UCS members and supporters



raised enough opposition to Hartnett White's confirmation that the White House withdrew her nomination in February.

The Dourson, Clovis, and Hartnett White victories all demonstrate the powerful role the UCS Science Network plays. Armed with the expertise to fully understand and clearly explain the ramifications of government policy on public health and the environment, scientists' views can prove particularly effective in commanding the respect of elected officials on both sides of the aisle.

Durvasula emphasizes that UCS sees the Science Network as "a long-term, enduring community that engages in local, state, and national issues." If this past year is prologue, though, the Trump administration will likely provide more immediate opportunities for the network to demonstrate just how engaged it is. {C}

THE MEETING THAT STRUCK FEAR INTO THE HEART OF EXXONMOBIL

ExxonMobil is ludicrously claiming in court that a 2012 meeting co-convened by UCS hatched a conspiracy. Here's the real story.

BY SETH SHULMAN



As most *Catalyst* readers likely know, ExxonMobil and other oil and gas companies are currently being sued by New York City and seven California counties and cities, including Oakland and San Francisco, for damages arising from climate change–driven sea level rise. These lawsuits allege that ExxonMobil and other fossil fuel companies actively misled the public about climate science for decades, despite knowing full well that emissions from their products pose a grave threat to the planet.

Now, in a move that carries more than a whiff of desperation, ExxonMobil has adopted the unusual and aggressive legal tactic of countersuing the lawyers who are

ExxonMobil's aggressive legal tactics carry more than a whiff of desperation.

trying to hold the company accountable for the damage its products have caused. Although the Union of Concerned Scientists has been spared, at least for the moment, ExxonMobil has already targeted at least 30 people and organizations, including the attorneys general of Massachusetts and New

York, hitting them with lawsuits, threats of lawsuits, or demands for sworn depositions.

A central part of ExxonMobil's claim is that a 2012 meeting UCS co-convened in La Jolla, California, launched a conspiracy that deprived the company of its free-speech rights. In legal complaints that try to portray the company as a victim, ExxonMobil (a company with \$19.7 billion in 2017 revenue—more than scores of small to midsize countries) even refers to a vaguely sinister-sounding, if nonexistent, “La Jolla playbook” it claims the roughly two dozen scientists, historians, lawyers, and policy experts attending the meeting have continued to draw upon in a supposedly coordinated campaign.

Of course, the charge that any of these lawsuits is about free speech is not supported by the facts. None of the various cases cited have sought in any way to silence ExxonMobil but instead have focused on the unassailable fact that ExxonMobil has actively worked to confuse the public about the reality of climate change decades after its own internal scientists warned the company about the risks.

As for the La Jolla meeting, as an attendee I can say unequivocally that ExxonMobil's laughable claim lacks even the tiniest shred of validity. Rather, UCS—along with its partner in convening the meeting, the Climate Accountability Institute—was doing what we always do: looking ahead and bringing



together a diverse collection of talented individuals to discuss pressing problems and work toward solutions.

Specifically, we discussed what lessons could be learned from the case of the decades-long public health battle against the tobacco companies. And, as we often do with gatherings such as this, we published the proceedings publicly on our website (www.ucsusa.org/climate-accountability-lajolla-2012).

LESSONS FROM TOBACCO CONTROL

Climate scientists have been warning us since the 1980s about the dangers posed by our outsized reliance on fossil fuels, and yet the large oil and gas companies have continued to actively mislead the public and block climate action. In an eerily similar fashion, scientists in the 1960s concluded that smoking causes cancer but, for decades after the science was clear, the tobacco companies continued to successfully mislead the public about the link between smoking and disease. Eventually, however, Americans' attitudes about smoking were transformed and the tobacco companies' clout diminished substantially.

In planning the 2012 La Jolla meeting, we sought to explore a wide variety of perspectives about exactly how that transformation in the tobacco case was achieved, and what

developments proved to be most significant in retrospect. Our hope was that lessons from the tobacco experience could be of some use in addressing the urgent problem of climate change—

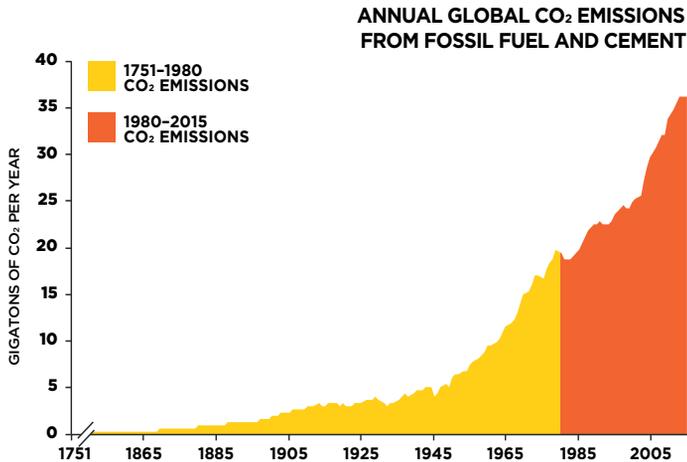
The meeting in question sought to learn lessons from the history of deception by the tobacco companies.

in helping to change public opinion and the behavior of the central corporate actors. To that end, UCS and the Climate Accountability Institute brought leading experts on tobacco control and climate change into a single room for two days.

A RICH, DIVERSE EXCHANGE OF INFORMATION

Respected climate scientists such as Myles Allen from Oxford University explained to the group how the emerging field of “attribution science” was advancing to such an extent that climate scientists could begin to confidently measure how climate change has increased the risk and severity of specific

ExxonMobil can try to claim otherwise, but there was never any hidden agenda about this meeting.



Climate scientists have warned since the 1980s about the dangers posed by our outsized reliance on fossil fuels, and yet the large oil and gas companies have continued to actively mislead the public and block climate action. As shown above, more than 60 percent of the industry's total historic emissions have been generated since 1980.

heat waves and other extreme weather. Richard Heede of the Climate Accountability Institute previewed a study showing how much of the carbon pollution added to the atmosphere each year could be attributed to the oil, gas, or coal produced and marketed by individual companies.

Health professionals such as Stanton Glantz, a professor of medicine at the University of California–San Francisco (UCSF) who helped the UCSF library organize the world's largest collection of tobacco-related documents, spoke about the immense value of having such a centralized repository of documents for academics and activists to draw upon for research.

And Sharon Eubanks, a former US Department of Justice lawyer who led the successful racketeering case against cigarette makers during the Clinton administration, was one of several lawyers to explain how the public release of internal tobacco company memos proved crucial in prosecuting that case. Now a nationally recognized attorney at the West Virginia-based law firm Bordas & Bordas, Eubanks is one of the lawyers who has received a subpoena from ExxonMobil for documents about the La Jolla meeting—some six years after it was held.

“Subpoenaing people for attending a meeting—a conference, really—is actually just a scare tactic designed to re-frame the debate to suggest that Exxon is the victim here. It is not,” she says. “The First Amendment does not embrace any constitutional right to lie or to commit fraud. Fraud is not protected speech, and Exxon’s tactical response is an attempt to silence those who speak out as well as to warn those who might that they could become mired in costly legal proceedings.”

EXXONMOBIL'S FLIMSY LEGAL RATIONALE

Notably, at the end of March, a federal judge dismissed a separate lawsuit ExxonMobil had brought against New York Attorney General Eric Schneiderman and Massachusetts Attorney General Maura Healey in which the company had similarly tried to aggressively claim such a First Amendment right. In that case, ExxonMobil was trying to stop New York and Massachusetts from prosecuting a case that charges the company knew about climate science and the damage its products were doing to the planet but nonetheless misled shareholders and the public on the issue. In the recent ruling, the judge called ExxonMobil’s arguments “implausible” and ruled that the states’ case against the company can move forward.

ExxonMobil’s claims of conspiracy about the La Jolla meeting may meet a similar fate. As Howard Erichson, an expert in complex litigation and a professor at Fordham University School of Law in New York, told *Bloomberg News*, lawyers in big lawsuits, including those targeting tobacco, guns, and pharmaceuticals, meet routinely to share information and

The science of climate attribution is advancing to such an extent that we can trace climate damages back to individual companies.

coordinate strategy. “I don’t think there’s anything wrong with plaintiffs’ lawyers and attorneys general strategizing together,” Erichson said, “just as I don’t think there’s anything wrong with lawyers for oil companies strategizing together.”

Peter Frumhoff, director of science and policy and chief climate scientist at UCS, says he’s proud of the exchange of information and expertise UCS helped to foster at the La Jolla meeting. “ExxonMobil can try to claim otherwise, but there was never any hidden agenda about this meeting, just a rich exchange of views about where the science stood and what we could learn from the history of tobacco control,” he says. “We’re gratified at what a timely and impactful meeting it turned out to be and the extent to which people are now recognizing the need for major oil and gas companies to be held accountable for the severe climate harms their products are causing.” {C}

EPA Rollbacks Are Hurting Americans Where They Live

(continued from p.11)

DEVALUED BUT DEFIANT

Of course, the EPA is charged with protecting us not just from air pollution but also from contaminants on land and in our water supply.

Felicia Chase monitors water quality in Region 5, and assisted in the water crisis in Flint, Michigan. With so many water problems in Region 5, she says, her division was considering adding several more inspectors before President Trump's election. Now, her division is down two inspectors. She says that means fewer people in the agency like Miguel Del Toral, the Region 5 water specialist who helped confirm the dramatically elevated levels of lead in Flint's drinking water.

Chase says the changes since Trump took office have been dramatic, noting that her usual four to six data requests to municipalities have dropped to none. "It's the first critical piece in initiating our work," she says. "It's how we see the red flags."

These staffers see red flags where most Americans don't. Flint reminded people that low-income communities and people of color are significantly more at risk of living with pollution and poor-quality drinking water, increasing the harm of asthma from soot and the irreversible loss of cognitive skills in children from lead at the tap.

"With all the hells of Flint, East Chicago, and so many other places around the nation with water at risk, I'm baffled by all the

cuts," Chase says. "We're basically being told to stand down. . . . It's very difficult when everything you do is devalued and dismissed. We didn't sign up to do nothing. It's like the president is sending signals about who he thinks is disposable and who he does not represent."

Without repeating a recent spectacular slur by President Trump, Chase ruefully says, "Perhaps he views these places as African countries."

With all the political attacks decrying the EPA as a job-killing agency, Chase says, it's easy for most people to forget the passion EPA inspectors and investigators bring to their jobs and the difference it can make in people's lives. She recalls visiting the home of a woman who was five months pregnant during the Flint water crisis and seeing how distraught she was.

When Chase's colleague introduced the EPA team at her door, the woman said, "Stop! I don't want to talk with you. Everyone who has told me the water's safe looks like you." Chase worked to win her trust. "Our work is so often belittled in the current environment, you can get to the point where you feel your input does not matter. But that episode sticks with me. It was a human moment. That woman hugged us before we left. And she brought home to me the true meaning of this agency." {C}

Derrick Z. Jackson is a fellow at UCS with a distinguished career as a journalist, author, and as an award-winning columnist at the Boston Globe.



EPA staff in Chicago protest job cuts during a rally in March 2017.

Real Electoral Reform Requires Science

By Michael Latner



Unfounded claims of widespread voter fraud in the 2016 presidential election, and verified foreign intervention, have brought unprecedented attention to the US electoral system. Less discussed, however, is

the fact that the last decade has also seen large-scale transformation of the legal procedures used to administer elections. Electoral laws shape the composition of electoral districts, and thus the legislators who oversee state and federal public policies can affect us all. Shortsighted electoral “reform” can make our electoral systems vulnerable to inequalities in participation, violations of voting rights, partisan bias, and the subversion of public policy.

To address these challenges, the Union of Concerned Scientists is bringing together scientists, election specialists, and advocates for environmental justice to better understand the impact of electoral institutions on communities across the country. Science is crucial to electoral reform: one need only look to pending Supreme Court cases concerning scientific standards for identifying and preventing partisan gerrymandering. As a voting rights fellow with UCS, I am overseeing a research project over the next 18 months on how disenfranchisement occurs in tandem with environmental injustice.

There is little understanding of the role current electoral laws play in shaping political participation among



populations historically targeted for voter suppression, particularly African Americans. At the same time, we have strong evidence of the overall impact that state election practices have on voter turnout. For example, we know that participatory election procedures reduce inequalities in turnout and representation. Examples include the automatic voter registration recently enacted in California and Oregon, the acceptance of election-day voter registration, and the timing of local elections to coincide with state and federal balloting.

My team will conduct research to better understand the positive and negative impacts recent changes in election laws have had on registration and eligibility. We’ll document the impact of these changes across states, congressional districts, and communities in order to recommend reforms that actually

enhance the performance and legitimacy of elections across the country.

Even as new threats emerge that could weaken free and fair elections in the United States, adapting our institutions to meet these challenges can provide a strong foundation upon which to base the smart policy solutions we need. By advocating for science-based reforms, we can bring down the barriers that inhibit participation; ensure secure, free, and fair elections; and empower all Americans to play a greater role in protecting our collective interests. {C}

Michael Latner is a Kendall Fellow at UCS focusing on voting rights. He is currently on sabbatical from California Polytechnic State University, where he is an associate professor of political science and public policy. Read more from Michael on our blog, The Equation, at <http://blog.ucsusa.org>.

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To join the Henry Kendall Society, contact Molly Lansdowne at (617) 301-8092 or join online at www.ucsusa.org/kendall.

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