

really disadvantaged in a world where research dollars were effectively going down and people who had had successful research before had a much better chance to know how to get and then to be awarded a grant that young researchers weren't getting.

So 2 years ago, last year, and again today—2 years ago and last year, successfully—the Congress said: Now we are going to make a substantial increase to healthcare research. It was \$2 billion each of those 2 years, which was about a 6.6-percent increase in healthcare research. Today we proposed another \$2 billion, and just like the previous 2 years, we really had no new money. So we had to figure out how to prioritize, eliminating programs. I think over the 3 years we have now eliminated over 30 programs that just simply weren't performing well or performing well enough to be a priority.

As the Presiding Officer and I have talked about before, when everything is a priority, nothing is really a priority. So we decided this is one of our priorities, and probably, we can safely suggest, a top priority for this committee now over the last 3 years. So we have gone from a 22-percent decline to where we are almost caught up to where the country was 15 years ago, in terms of buying power, with about a 20-percent increase in this one account in three budgets.

Again, I think it is important for us and the taxpayers to understand we did that because other things were carefully looked at and either had their amounts reduced or had their programs eliminated so we could look at the health research. In that 12-year period of time, there had been such a decline in commitment to health research that often the health research projects that were funded weren't funded in a way that allowed them to have success. At some Institutes at NIH, the success ratio was as low as 9 percent, and even when you are looking at everything, 9 percent is, frankly, too low.

I hope we are going to see some real breakthroughs as a part of that research. One of the areas that has been a part of that research has been the investment in Alzheimer's research. Every 68 seconds, someone in America develops Alzheimer's, and this is a disease that not only impacts in a dramatic way the person who has it but arguably impacts, in at least as dramatic a way, the people who care about them and do all they can to care for them. It is the most expensive disease in America. As our population gets older, more and more people get into that age realm where if something doesn't change, they are going to have Alzheimer's too.

Right now we are spending right at 250 billion tax dollars every year on Alzheimer's-related care. That is about half the defense budget. The estimate for 2050 is that if something doesn't change, we will be spending \$1.1 trillion of today's dollars on Alzheimer's-related care.

We talk about big numbers here, and it is easy to get confused. That is a lot or that is half of that—what does that really mean? Well, \$1.1 trillion is twice the defense budget. If you can get in your mind all we spend all over the world to defend the country, if we don't do something to change what is happening with Alzheimer's, we are going to be spending twice everything we spend to defend the country just on taxpayer-related Alzheimer's care.

The estimate on Alzheimer's, by the way, is that for every tax dollar spent on Alzheimer's, there are two private dollars spent and almost never covered by insurance. It has a dramatic impact on people, dramatic impact on their families, and a dramatic impact on taxpayers. We are spending about \$1 on Alzheimer's research right now for every \$125 we spend on Medicare and Medicaid. The biggest expenditure in those two funds of any disease is what we spend on Alzheimer's. Hopefully, we will see changes in that and begin to see things develop there.

Also, on the BRAIN Initiative, there has been nearly a 54-percent boost over last year's level in the BRAIN Initiative. The BRAIN Initiative, as part of the 21st Century Cures legislation we voted for, is really developing a more complete understanding of brain function. It has the possibility of helping millions of people who suffer from a wide variety of neurological challenges, psychiatric and behavioral disorders, diseases like Alzheimer's, Parkinson's, and traumatic brain injuries in addition to that. It is all part of what we can look at as part of the BRAIN Initiative for psychiatric disorders.

Remember, the estimate is that one out of every four adult Americans has a diagnosable and almost always treatable behavioral health issue. If you know that issue, if you know how the brain works in a better way, the treatment may be easier, better, more effective, and more long-term than it is now.

The National Cancer Institute is looking at the Precision Medicine Initiative. This is where we utilize all we know now about the human genome and about environmental and lifestyle data to see if we can come up with solutions. Genomically, we didn't know any of this a generation ago, but with the human genome, now that we know what we know, we can look at how we individually are different than everybody else. There is a great feeling that in many cancers, there is a unique cancer-fighting agent for that unique cancer in you, but what you need to do is amp up that cancer-fighting agent. The Federal Drug Administration just last week approved the first T cell-amping treatment that would do that.

Senator TOOMEY and I went 2 years ago to the University of Pennsylvania, Philadelphia, and saw the work that Dr. Carl June was doing, the groundbreaking work on leukemia. Again, he was amping up that fighting

cell in patients whom everybody else had given up on and had great success and caused great optimism about what can happen there.

Dr. Tim Eberlein, director of the Siteman Cancer Center in St. Louis, testified before our subcommittee on the critical role of Federal support for looking at these kinds of things and seeing what can happen to make a difference.

He shared a story of one of his colleagues, Dr. Lukas Wartman, an oncologist and leukemia survivor, who had a relapse while, fortunately for him, he was a fellow at Washington University. Research performed a detailed analysis of Dr. Wartman's cancer genome profile. They identified an existing drug typically used to treat a different kind of cancer, but it targeted the kinds of genetic structures that Dr. Wartman had, and he is in remission. It enabled him to undergo a stem cell transplant. He is now continuing his work on behalf of other cancer patients.

Whether it is immunology—again, amping up of what you have to fight that unique challenge that you have, whether it is looking at the BRAIN Initiative, these are things that make a difference to families, they make a difference to taxpayers, they make a difference to our economy, and certainly we hope seeing the committee move forward today on what would be the third groundbreaking commitment by the Congress in recent years to make a difference here is an important thing.

I hope we get a chance to bring this bill so all the Senators get a chance, as our Members did today, to debate it, to amend it, but no matter what happens on the floor of the Senate, we will have a chance to talk to our colleagues in the House and, hopefully, once again, in the final appropriations bill this year, do what makes a difference.

I suggest the absence of a quorum.

**THE PRESIDING OFFICER.** The clerk will call the roll.

The senior assistant legislative clerk proceeded to call the roll.

**Mr. WHITEHOUSE.** Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

**THE PRESIDING OFFICER (Mr. BLUNT).** Without objection, it is so ordered.

#### CLIMATE CHANGE

**Mr. WHITEHOUSE.** Mr. President, I am here to deliver my "Time to Wake Up" speech, which I do every week that the Senate is in session. We have been out of session for a few weeks, so there is a fair amount to talk about that happened while we were gone.

One of the first things was a new study in my home State of Rhode Island. Rhode Island is a coastal State. We have considerable worries about sea level rise, and we have a State Coastal Resources Management Council that has done what is probably the best modeling anywhere in the country of

the effects of sea level rise and the risk of ocean storms on our shores. In conjunction with them, there has been a report from the Rhode Island Division of Planning—this is the State government—which has identified roads and bridges that are most likely to be underwater as the tides climb higher and as waves push farther inland.

The State's 10 roads most vulnerable to sea level rise are Hope Street in Bristol, which everybody knows—a beautiful, historical street; Memorial Boulevard in Newport; Wampanoag Trail in Barrington; Conanicus Avenue in Jamestown; North Road in Jamestown; County Road in Barrington; Beach Street in Narragansett; Main Street in Warren; and State Highway 24 South in Tiverton.

Throw in storm surge on top of sea level rise, and the 10 most vulnerable roads are County Road North in Barrington; Phillips Street in North Kingstown; America's Cup Avenue in Newport; Route 138 West onramp in Newport; Hope Street in Bristol; Highway 24 North in Portsmouth; Centerville Road in Warwick; Narragansett Avenue in Narragansett; Main Street in Warren; and Route 38 West in Jamestown.

The report goes on to identify the 10 bridges most vulnerable to sea level rise and the 10 bridges most vulnerable to a combination of sea level rise and storm surge.

Overall, Warwick, Narragansett, Newport, Barrington, and Providence are our top five municipalities most vulnerable to climate change-related road damage. So when I come to the floor to talk about this, this is not some hypothetical, liberal concern.

The Coastal Resources Management Council in my home State is predicting 9 vertical feet of sea level rise by the end of this century. As the Presiding Officer knows, Rhode Island is not a huge State. We don't have a lot to give back to the ocean. Nine feet of sea level rise is potentially catastrophic. And when my State Division of Planning is highlighting the roads and bridges that we are going to lose to sea level rise and to storm surge, don't expect me to sit idly by.

There is a larger context, of course, for all of this. I am pretty Rhode Island-centric, but, boy, are we seeing a lot going on.

Let's start off with what is going on out West. We have an extraordinary wildfire situation happening in the American West. I am reading a news story here:

Wildfires burned across hundreds of thousands of acres in the American and Canadian West this week, fueled by scorching temperatures that are breaking heat and fire records across the region.

In California, at least 15 cities have seen record-breaking heat. The State has experienced its hottest summer on record. San Francisco hit 106 degrees over the weekend, breaking its previous high ever by 3 full degrees.

By the end of the day Tuesday, there were at least 81 large fires blazing across 1.5 mil-

lion acres of the U.S. West, from Colorado, to California, and north to Washington.

"These unprecedented extreme events are exactly the types of events that are more likely due to the global warming that has already occurred," say the scientists.

Studies find that a warmed global atmosphere with increasingly clear human fingerprints will continue driving a potent mix of heat and dryness that is projected to escalate in the West.

The climate scientist at UCLA says: "That's not a future projection, but an observational reality, and that is something that we expect to increase in the future. When we get these extremes, there is a human fingerprint."

"The increased occurrence of severe heat and the role of global warming on the occurrence of severe heat, that is already happening," said a Stanford scientific researcher.

This is not a fluke.

Nine of the 10 worst fire seasons in the past 50 years have all happened since 2000. And 2015 was the worst fire s in U.S. history, surpassing 10 million acres burned for the first time ever recorded. So far this year, wildfires in the U.S. are at 7.8 million acres, but the fire season is far from over.

Researchers have shown that human-induced climate change accounted for about half the observed increase in fuel aridity, or forest dryness, that has been setting off these fires in the Western United States since 1979 and that this had nearly doubled the area of the U.S. West affected by forest fires since 1984. The conclusion:

We know that global warming has already increased the probability of unprecedented high temperatures in the western U.S., including in California. And we know—

"We know," the scientists say—with high confidence that continued global warming will continue to intensify those increases.

Last week in Montana, a 20-square-mile blaze burned the historic Sperry Chalet, a hotel and dining room built in 1914 only reachable by trail.

It had been there for more than 100 years, but this is the fire that burned it down. This means a lot out at Glacier National Park.

"It's hard to think about the magnitude of what's happened," the National Park Conservancy Executive Director Doug Mitchell said.

One of the western fires even jumped the Columbia River to burn across into Washington—the Eagle Creek fire.

As the news said, in Oregon's Columbia River Gorge, a blaze known as the Eagle Creek Fire has jumped the Columbia River and is inching into the State of Washington, creating dramatic and dangerous scenes.

Another news report called this a devastating summer in which an area larger than a certain State has burned.

I would hate to have Rhode Island be used as the unit of measure, but that is what they said: An area larger than Rhode Island has burned this summer. And they are looking not just at the loss of the Sperry Chalet but potentially losing Lake McDonald Lodge—"a

loss that would," says a historian who has worked at the lodge for years, "be unimaginably devastating."

"These are some of the most remarkable buildings anywhere in the United States and they are an integral part of the Glacier experience and the Glacier tradition."

They are either burned or at risk of burning.

If you are in those Western States, it is not just in the high, dry forests; if you go down to the oceans, climate change is whacking away at them too.

The Oregon and Washington razor clam fisheries are currently closed due to high levels of domoic acid. Domoic acid is a toxin that is produced by algae—the algae *Pseudo-nitzschia*—and algae are associated with climate change. For instance, a record-breaking red tide in 2015 was likely linked to climate change, and we are going to see a lot more of that in the future.

Now, of course, the dry part of what is happening in our climate has really been drowned out by what we are seeing on the wet part.

The New York Times recently ran an article saying:

Climate change doesn't cause extreme events, it amplifies them. On the climate side of risk, we have unambiguous evidence that the hazards are changing. Our emissions of heat-trapping gases have already increased the likelihood and severity of heat waves, extreme rainfalls, and storm surges. Scientists can now even evaluate how much climate change has increased the odds of individual extreme events, including rainfall and flooding. We certainly understand the mechanisms. Put simply, a warmer atmosphere can hold more water, increasing the potential for heavy downpours.

Storm surge now occurs on top of sea level rise, increasing flooding risks.

We know by the law of thermal expansion why the seas rise when they warm, and we have measured that they are warming with a very complicated device called the thermometer.

Warmer oceans in turn produce more intense hurricanes.

We know that as well, as has occurred in the North Atlantic and the gulf.

The article continues that "unprecedented is increasingly the norm," and it notes that "up to 8 feet of sea level rise is possible in this century."

Rhode Island is in a unique place, so we are riding higher than average, and we are looking at potentially 9 feet of sea level rise.

Harvey has been an astonishing monster of a storm. It was described in one article as 9 trillion gallons of water, a hydraulic cube over downtown Houston 4 miles square and 2 miles high. And then the author said: "The cube doubled to become the most extreme rain event in American history."

Harvey, by the way, is the third 500-year flood in the Houston area in the past 3 years. It dumped enough water in southeastern Texas to equal almost 20 times the daily discharge of the Mississippi River.

So while the wildfires are burning out West, this astonishing set of deluges is happening elsewhere.

Land temperatures, according to NOAA, were the hottest they have ever been in 1,651 months of recordkeeping. July also marked 384 months since the last colder-than-average month in NASA's database. So 384 months since we had a month that was colder than average, with July well warmer than average. The last 3 consecutive years—2014, 2015, and 2016—each set a new global record for warmth, according to NOAA.

Politico writes: "2016 confirmed as planet's hottest year," with the National Oceanic and Atmospheric Administration documenting record-breaking global warming trends of 2016. The observed outcomes of swiftly rising temperatures include the highest sea levels ever recorded, extremes in rain cycles, and declines in global ice and snow cover, with last year the third in a row breaking global temperature records. "Several markers such as land and ocean temperatures, sea level and greenhouse gas concentrations in the atmosphere broke records set just one year prior," the NOAA report said. "The long-term climate change is like riding up an escalator over time, and things like El Nino and La Nina are like jumping up and down on that escalator," one of the NOAA scientists said.

So that is what we are seeing—the underlying trend of climate change raising temperatures, with El Nino and La Nina creating a variation like jumping up and down on that escalator.

Greenhouse gas concentrations are now higher than ever recorded.

Global surface temperatures are the highest on record.

Sea levels are the highest they've ever been since record keeping began.

Precipitation cycles are becoming more extreme.

Antarctic sea ice levels are lower than ever recorded.

Alpine glaciers have declined for 37 consecutive years.

There were more tropical cyclones. . . .

Something is going on, and that well-known far-left liberal outlet, USA Today, had its editorial board say the following:

Could proof grow any more powerful that humanity is responsible for a dangerously warming planet?

It referenced the quadrennial National Climate Assessment:

Scientists from 13 federal agencies found that a rapid rise in temperature since the 1980s in the United States represents the warmest period in 1,500 years.

It quotes the report:

Many lines of evidence demonstrate that human activities, especially emission of greenhouse gases, are primarily responsible. There are no alternative explanations.

Do you hear that? "There are no alternative explanations," and it keeps coming down.

There was an article that came out while we were away on the great flood of 2016 in Louisiana: "The worst rainstorm in a rainy state's history," the article called it.

In some places, more than 2 feet of rain fell over three days. . . . Research has shown it was . . . clearly linked to climate change.

There were two separate teams of scientists that linked Louisiana's great flood with climate change, and the State's own meteorologist, a gentleman named Barry Keim, a professor at Louisiana State University, said that aspects of the August storm were consistent with climate change, and that both of the climate studies so far have shown it likely that climate change likely had its fingerprints on that Louisiana disaster.

Indeed, in Louisiana, the State is mounting a massive battle against rising seas as well as floods. Along the coast, "rising waters and escalating flood insurance rates," the article says, "will drive thousands of families further inland, the state predicts, leaving behind homes"—these families are leaving behind homes—"they have known for generations," leaving behind "places that have fundamentally shaped their identities."

One of the Louisianans living in the area in question said: "This is the first time that I can remember that a group came in and said it's not going to be all right."

But over the next two generations [flooding in Louisiana along the marshes and coastal] will happen at an alarming scale, as the twin challenges of sinking land and rising seas overtake ancestral homes at breakneck speed. In 50 years, the state estimates Terrebonne parish, whose name means "good earth" in the French that some of its residents still speak, will lose 41 percent of its land mass.

Areas are obviously going to lose their tax bases, the report says, "as rising waters and increasing flood insurance rates drive most locals out."

The Louisiana planners had a leg up, since the environmental changes here have been so swift that many residents have seen land lost in their own lifetimes.

When you are seeing it happen before your eyes, it is not so easy to deny it. Indeed, it is affecting local markets, and "new-gated communities advertise 'higher elevations' on bright [advertising] banners facing the highway."

In Louisiana:

What had been the worst-case scenario for land loss when the legislature passed its 2012 version of the master plan became the best-case scenario in the latest version, approved by the legislature in June, thanks to updated sea-level rise estimates.

So we are in Louisiana. We are in a Republican-controlled legislature, and they pass a master plan to address flooding in 2012. That master plan is based on a worst-case scenario. Just in the 5 years since then that worst-case scenario, the legislature has now updated that to become a best-case scenario, with the worst-case scenario far, far exceeding what they anticipated just as recently as 2012.

"Climate change and water management practices could significantly alter the magnitude and variability of extreme flooding events, causing flooding to become nonstationary," said the article, "Deciphering Deluges."

We have to come up with new ways on how to cope with sea level rise, off-

shore storms, major tropical storms, downpours, and riverine flooding.

Right now, our colleague BILL NELSON has left us this afternoon after the vote to go back down to Florida because Hurricane Irma is steaming toward his State. Hurricane Irma is the most powerful storm ever recorded in the Atlantic Ocean. Experts say Irma's strength is the result of unusually warm water for that part of the Atlantic.

Guess what global warming does. It raises ocean temperatures. Do you know how much of the excess heat created has gone into the oceans? About 93 percent—virtually all of it. Thank goodness for the oceans. Without them, we would already be baking in climate change. So 93 percent went into the oceans, but, of course, that raises ocean temperatures, and on go the storms.

If Irma stays on the forecast track and reaches the Florida Straits, the water there is warm enough that the already intense storm could become much worse, with wind speeds potentially reaching 225 mph, warned Kerry Emanuel, an MIT meteorology professor.

"For the Florida Keys, if you were to create the worst case scenario, that is what we are looking at," Monroe County Emergency Operations Center Director Martin Senterfitt told CBS Miami.

Even Tropical Storm Emily some time ago dumped enough rain on Miami Beach—7 inches of rainfall over several hours—that the pumps meant to drain the area went offline for nearly an hour because the power was interrupted. The mayor, Tomas Regalado, used the flooding to make a case for a proposed \$400 million bond initiative to help pump the water out. We have infrastructure demands that come from this disaster as well.

A pretty good summary came, again, from an article in the New York Times, an editorial piece.

What is going on?

First, hurricanes arise from warm waters, and the Gulf of Mexico has warmed by two to four degrees Fahrenheit over the long-term average. The result is more intense storms.

"There is a general consensus that the frequency of high-category (3, 4, and 5) hurricanes should increase as the climate warms," Kerry Emmanuel, a hurricane expert at M.I.T., tells me.

Second, as the air warms, it holds more water vapor, so the storms dump more rain. That's why there's been a big increase in heavy downpours. Nine of the top 10 years for heavy downpours in the U.S. have occurred since 1990.

"Climate change played a role in intensifying the winds and rainfall associated with Hurricane Harvey," says Charles Greene, a climate scientist at Cornell.

Last year was the third in a row to set a record for highest global average surface temperature, according to NASA. The 10 years of greatest loss of sea ice are all in the last decade. Houston has suffered three "500-year floods" in the last 3 years.

So the author asks the question: Why can't we all respect scientists' predictions about our cooking of our only

planet? How is it that we don't listen to the scientists on this, particularly right here in this room, in this Chamber?

There are two very interesting articles that came out while we were away that addressed this. One is about a phony group called the Cooler Heads Coalition, whose job is to call climate science a hoax and denounce environmentalists as global warming alarmists. They write letters, blast out emails, pressure lawmakers, sponsor seminars, appear on television. They even made a documentary movie.

This article in the Washington Post told the story behind this coalition. Obviously, the coalition, this Cooler Heads crowd, is paid for. "The Cooler Heads have received more than \$11 million in donations over the years from coal and oil companies." Who knew? "They've taken in tens of millions from nonprofit foundations, such as those controlled by the wealthy Koch brothers. . . ." Guess what. There is more fossil fuel money. The Koch brothers run a fossil fuel empire.

The Cooler Heads Coalition . . . are allied with industry trade groups, public relations companies and lobbyists, all of whom are working to influence public debate about global warming.

Climate scientists said there is no doubt about the reality of climate change and its consequences, including melting polar ice caps, rising sea levels, and the intensification of storms.

Benjamin Santer is a scientist at Lawrence Livermore National Laboratory. We are pretty proud of our National Laboratories, and we usually don't think people who are there are idiots or are fooling us or are part of a hoax. Dr. Santer, by the way, also received a MacArthur Foundation Genius award. He told the Washington Post that this Cooler Heads outfit is "attempting to turn back the clock on knowledge and science."

The history of this is rooted in a complex influence campaign that began in support of tobacco. The tobacco plan foreshadowed the tactics that Cooler Heads members would soon employ on climate change.

First, there were millions in contributions from affected industries, often laundered through front groups and through foundations. "The same array of donors," the Washington Post reports, "would help finance charities behind" the fight against climate science.

They took the skills they learned, denying the health harms of tobacco, and moved that same technology of propaganda, influence, and politicking into climate change. The Competitive Enterprise Institute became the lead group in this Cooler Heads Coalition, taking over management of the coalition, joined by groups such as the Heartland Institute. The Heartland Institute is really a classy group. They are the ones that put up billboards comparing climate scientists to the Unabomber. That is the quality of debate we get out of the Heartland Institute.

Americans for Prosperity is another influential nonprofit organization, which is a front for—guess whom—the Koch brothers and Koch Industries; i.e., the fossil fuel industry. They got particularly cranked up by the Kyoto Protocol, and the story continues:

The energy industry went on a spending spree to thwart Kyoto, devoting at least \$13 million to public relations and information campaigns in 1997. . . . The Cooler Heads Coalition was in effect a loose confederation of groups with the declared mission of countering "the myths of global warming."

In early 1998, this Cooler Heads group met with energy industry executives and lobbyists in closed-door meetings at the American Petroleum Institute and began to soak up more money, and here is what the plan was. I am quoting from the story in the Post.

One former Cooler Heads member, who spoke on the condition of anonymity because of fear of a punitive backlash, said the coalition's mission . . . was to . . . simulate a "cacophony of voices" against climate-change science.

"There's a whole web," the former member said [out to do this].

The ExxonMobil Foundation, of course, had given millions to Cooler Heads members.

A 2009 IRS filing for the Competitive Enterprise Institute—the group that took over the coalition and managed it—inadvertently made public a filing that disclosed their funding from two coal mining companies, Ohio-based Murray Energy and Richmond-based Massey Energy.

"Contributions to CEI during the Obama administration rose to \$7.6 million in 2014." As the article continues, "CEI and the Cooler Heads were just the tip of the spear. . . . [B]etween 2003 and 2010, energy companies, corporations and conservative foundations contributed hundreds of millions to 91 nonprofit 'think tanks,' educational groups and associations involved in the fight against global-warming regulations."

To put it mildly, as the expert who chronicled this concluded, "This is a large-scale political effort."

We have one last report from inside that large-scale political effort. This is the firsthand voice of the individual. His name is Jerry Taylor. Here is what he says:

I used to be the number two person at the Cato Institute.

The Cato Institute is one of this constellation of rightwing groups that foment and support climate denial and receives money from fossil fuel interests.

He continues:

I was responsible for building our resistance to climate action. . . . I discovered that a lot of the scientific narratives I was offering were really dodgy. . . . [O]ne of the people that I trusted the most was in the business of consciously misrepresenting the debate. This really rattled me.

He goes on.

[O]nce I started looking closely at a lot of the convenient, plausible talking points I was offering they began to fall apart. [I then turned to look at] economic arguments.

He says:

This is pretty hard. It's a very difficult thing . . . to find that you cannot trust any of the scientists that are being offered to resist climate action.

This is the guy who used to lead the anti-climate action effort of the Cato Institute, saying it is a very difficult thing to find that you cannot trust any of the scientists who are being offered to resist climate action, and then the economists whom you have been relying on to put cautious remarks about cost-benefit are now all walking away from the game.

He goes on to say:

We got to the point . . . where you could not find an academic economist who studies climate change who argued against climate action—not one single one.

Here is his conclusion:

Believe it or not, libertarians and conservatives and Republicans were put on this earth with the perfect answer to climate change—harnessing markets and price signals via a carbon tax or a carbon tax-like mechanism to reduce greenhouse gas emission. We're perfectly placed to do that.

[What is it that] keeps Republicans from coming to the conclusion that climate change doesn't just threaten polar bears in the Arctic, it threatens the global economy, it threatens capital flows, it threatens capitalism. . . . It's not the Republican base, let me tell you.

There is poll after poll, survey after survey showing that most Republicans believe in doing something about climate.

He continues:

What prevents Republican politicians from acting is that there are significant members in the Republican Party Coalition who are denialist demanders.

They are not just climate deniers themselves, they are denialist demanders.

They have outsized influence in the party.

He says:

[T]he Koch-controlled Tea Party movement [has] held the GOP by the throat.

By the way, if you were somebody who was trying to find some comfort in the widely reported phenomenon that 97 percent of climate scientists conclude the global warming is real and problematic for the planet and has been exacerbated by human activity, if you are comforting yourself that maybe the 3 percent were right, that the really smart place to place your bet for the future of the planet and our economy and our standing in the world is on those 3 percent—not take the 97 percent bet; no, take the 3-percent bet—if that is the way you are thinking, you got bad news.

Researchers tried to replicate the results of those 3 percent of papers. Guess what. They found biased, faulty results.

Katharine Hayhoe is an atmospheric scientist at Texas Tech University. She said this:

Every single one of those analyses had an error—in their assumptions, methodology, or analysis—that, when corrected, brought their results into line with the scientific consensus.

If you are hoping that 3 percent was somehow going to bail you out from having to face this crisis, that just blew up. There is no 3 percent.

Broadly, there were three main errors in the papers denying climate change. Many had cherry-picked the results . . . some that applied inappropriate “curve-fitting” [to try to step] away from data until the points matched the curve of their choosing.

This is my favorite.

Sometimes the papers just ignored physics altogether.

It has been quite a month with the West ablaze, Houston underwater, the most powerful storm ever measured in the Atlantic is headed our way, heat and rain and other measures breaking records year after year, multiple departments of governments aligning to warn us, and how does the Trump Administration respond?

The Energy department asked scientists to remove the word “climate change” from a grant proposal.

I have been asked to contact you to update the wording in your proposal abstract to remove words such as “global warming” or “climate change.”

Not just one fluke. In March, POLITICO reported as follows:

[T]hat staff at the Department of Energy . . . were told not to use the terms “climate change,” “emissions reduction” or “Paris Agreement.”

The Department put out a power grid study that has been long delayed, and in the power grid study, the words “climate change” never appeared. Whenever they were in earlier drafts, they got scrubbed. The only reference to climate is a reference to “rescinding energy and climate-related policies.”

The EPA has been scrubbing the word “climate change” from its website. It removed its climate change page and then got hammered with a series of Freedom of Information Act requests as to what is going on with that so they quickly scrambled and pub-

lished an archived version but buried it back in the website.

The Department of Interior has also removed discussions of the effects of global warming from several of its pages. The Department of Agriculture has emails showing how staff in their Natural Resources Conservation Service was coached by managers to avoid the term “climate change” and instead use other language.

That is where we are—all of those facts, the motive behind it, the fingerprints of the fossil fuel industry, the confessions by participants in those schemes. Where are we? In this room, silence. Nobody will talk about it because the power of the fossil fuel industry is so strong, the threats are so bloodcurdling that nobody dares. We cannot have a grownup, factual discussion about climate change in this building either. Of course, over in the Trump administration, they have completely thrown in the towel to the fossil fuel industry, and now we are hoping to dodge the problem by forbidding people from using the words “climate change.” It is pathetic.

I yield the floor.

ADJOURNMENT UNTIL MONDAY,  
SEPTEMBER 11, 2017, AT 3 P.M.

The PRESIDING OFFICER. The Senate stands adjourned until 3 p.m. on Monday, September 11.

Thereupon, the Senate, at 6:15 p.m., adjourned until Monday, September 11, 2017, at 3 p.m.

## NOMINATIONS

Executive nominations received by the Senate:

### THE JUDICIARY

R. STAN BAKER, OF GEORGIA, TO BE UNITED STATES DISTRICT JUDGE FOR THE SOUTHERN DISTRICT OF GEORGIA, VICE WILLIAM T. MOORE, JR., RETIRED.  
JEFFREY UHLMAN BEAVERSTOCK, OF ALABAMA, TO BE UNITED STATES DISTRICT JUDGE FOR THE SOUTHERN

DISTRICT OF ALABAMA, VICE CALLIE V. GRANADE, RETIRED.

RYAN WESLEY BOUNDS, OF OREGON, TO BE UNITED STATES CIRCUIT JUDGE FOR THE NINTH CIRCUIT, VICE DIARMUID F. O'SCANNLAIN, RETIRED.

JOHN W. BROOMES, OF KANSAS, TO BE UNITED STATES DISTRICT JUDGE FOR THE DISTRICT OF KANSAS, VICE JOHN THOMAS MARTEN, RETIRED.

REBECCA GRADY JENNINGS, OF KENTUCKY, TO BE UNITED STATES DISTRICT JUDGE FOR THE WESTERN DISTRICT OF KENTUCKY, VICE JOHN G. HEYBURN II, RETIRED.

TERRY FITZGERALD MOORER, OF ALABAMA, TO BE UNITED STATES DISTRICT JUDGE FOR THE SOUTHERN DISTRICT OF ALABAMA, VICE WILLIAM H. STEELE, RETIRED.

FERNANDO RODRIGUEZ, JR., OF TEXAS, TO BE UNITED STATES DISTRICT JUDGE FOR THE SOUTHERN DISTRICT OF TEXAS, VICE GREGG JEFFREY COSTA, ELEVATED.

KAREN GREN SCHOLER, OF TEXAS, TO BE UNITED STATES DISTRICT JUDGE FOR THE NORTHERN DISTRICT OF TEXAS, VICE JORGE A. SOLIS, RETIRED.

BRETT JOSEPH TALLEY, OF ALABAMA, TO BE UNITED STATES DISTRICT JUDGE FOR THE MIDDLE DISTRICT OF ALABAMA, VICE MARK E. FULLER, RESIGNED.

### ENVIRONMENTAL PROTECTION AGENCY

WILLIAM L. WEHRUM, OF DELAWARE, TO BE AN ASSISTANT ADMINISTRATOR OF THE ENVIRONMENTAL PROTECTION AGENCY, VICE REGINA MCCARTHY, RESIGNED.

### THE JUDICIARY

RAINEY R. BRANDT, OF THE DISTRICT OF COLUMBIA, TO BE AN ASSOCIATE JUDGE OF THE SUPERIOR COURT OF THE DISTRICT OF COLUMBIA FOR THE TERM OF FIFTEEN YEARS, VICE JUDITH NAN MACALUSO, RETIRED.

DEBORAH J. ISRAEL, OF THE DISTRICT OF COLUMBIA, TO BE AN ASSOCIATE JUDGE OF THE SUPERIOR COURT OF THE DISTRICT OF COLUMBIA FOR THE TERM OF FIFTEEN YEARS, VICE MELVIN R. WRIGHT, RETIRED.

ELIZABETH L. BRANCH, OF GEORGIA, TO BE UNITED STATES CIRCUIT JUDGE FOR THE ELEVENTH CIRCUIT, VICE FRANK M. HULL, RETIRED.

MATTHEW J. KACSMARYK, OF TEXAS, TO BE UNITED STATES DISTRICT JUDGE FOR THE NORTHERN DISTRICT OF TEXAS, VICE MARY LOU ROBINSON, RETIRED.

GREGORY G. KATSAS, OF VIRGINIA, TO BE UNITED STATES CIRCUIT JUDGE FOR THE DISTRICT OF COLUMBIA CIRCUIT, VICE JANICE R. BROWN, RETIRED.

EMILY COODY MARKS, OF ALABAMA, TO BE UNITED STATES DISTRICT JUDGE FOR THE MIDDLE DISTRICT OF ALABAMA, VICE MYRON H. THOMPSON, RETIRED.

JEFFREY CARL MATEER, OF TEXAS, TO BE UNITED STATES DISTRICT JUDGE FOR THE EASTERN DISTRICT OF TEXAS, VICE RICHARD A. SCHELL, RETIRED.

## CONFIRMATION

Executive nomination confirmed by the Senate September 07, 2017:

### IN THE ARMY

THE FOLLOWING NAMED ARMY NATIONAL GUARD OF THE UNITED STATES OFFICERS FOR APPOINTMENT IN THE RESERVE OF THE ARMY TO THE GRADE INDICATED UNDER TITLE 10, U.S.C., SECTIONS 12203 AND 12211:

*To be brigadier general*

COL. JOHN K. MULLER