

## EXECUTIVE CALENDAR

The PRESIDING OFFICER. The clerk will report the nomination.

The bill clerk read the nomination of Michael Lawrence Brown, of Georgia, to be United States District Judge for the Northern District of Georgia.

The PRESIDING OFFICER. The Senator from Rhode Island.

## CLIMATE CHANGE

Mr. WHITEHOUSE. Mr. President, the Trump administration has come up with a name for its energy policy. The energy policy amounts to, basically, a big, fat cascade of gifts and special favors for oil, gas, and coal companies, which, in turn, make big political contributions. Trump officials call the policy “energy dominance.” More accurately, its name would probably be “fossil fuel industry political dominance” or one might actually call it “ignorance dominance” since the administration willfully ignores scientific understanding, basic economics, market theory, and even the warnings of our national security community.

The situation is not pretty from an environmental point of view. EPA Administrator Scott Pruitt is busily trying to roll back rules that limit, for instance, emissions of methane, which is a more powerful greenhouse gas than carbon dioxide. He is considering walking back fuel efficiency standards that save drivers money at the pump. President Trump withdrew the United States from the Paris climate accord and was promptly ignored by every other nation on Earth.

Last month, on the Interior Secretary’s recommendation, Trump took big areas of the Bears Ears and Grand Staircase-Escalante National Monuments, in Utah, away from the public and opened them, instead, to big mining and oil and gas interests. Zinke has even proposed to open almost all U.S. coastlines to drilling by oil and gas companies. That includes drilling in protected areas in the Arctic, drilling up and down the Atlantic coast, expanded drilling in the Gulf of Mexico, and drilling along the Pacific coastline. The plan even includes Georges Bank and other crucial fishing grounds for New England.

This drilling scheme is likely dead on arrival. Republican Governors in New Jersey, Maryland, and Florida have all denounced the plan, as have Florida’s Democratic and Republican Senators. It even runs into objections from the Pentagon. When President Obama considered opening the southern Atlantic coast to drilling 2 years ago, the Defense Department told the Obama administration that offshore energy development could interfere with military readiness and missile testing.

Given the dominance of fossil fuel political interests in this administration, the whole Trump energy dominance scheme, of course, neglects the warnings of our national security experts about climate change—climate change as an accelerant of global instability

and conflict and climate change as a direct hazard to military installations and infrastructure, from the Naval Station Norfolk to faraway facilities like Diego Garcia in the Indian Ocean.

In 2008, the National Intelligence Council reported more than 30 U.S. military installations facing risk from rising sea levels. A vulnerability assessment directed by the “2010 Quadrennial Defense Review” found that at around 3 feet of sea level rise, 128 military installations are at risk. Naturally, many of those belong to the Navy—indeed, 56 out of those 128. It is a significant share of the Navy’s global footprint, totaling around \$100 billion in value.

In 2011, the National Academy of Sciences report, “National Security Implications of Climate Change for U.S. Naval Forces,” recommended the continued review of how sea level rise and changes in storm frequency and intensity would affect coastal installations.

The National Defense Authorization Act, which we just passed, directs the Department of Defense to study how climate change will affect our most vulnerable military bases over the next 20 years, including “the effects of rising sea tides, increased flooding, drought, desertification, wildfires, thawing permafrost,” as well as how climate change may drive new requirements for combatant commanders.

The law includes a sense of Congress statement that “climate change is a direct threat to the national security of the United States and is impacting stability in areas of the world both where the United States Armed Forces are operating today, and where strategic implications for future conflict exist.”

That is a sense-of-Congress statement that has passed this Republican-controlled Senate and the Republican-controlled House and was signed into law by this administration. Thank you to the author of this language, my friend and fellow Rhode Islander, Congressman JIM LANGEVIN.

Even the U.S. Government Accountability Office has engaged. The independent oversight agency issued a report titled, “Climate Change Adaptation: DoD Needs to Better Incorporate Adaptation into Planning and Collaboration at Overseas Installations.”

I think that title gives away the punch line. Surveying our bases and installations across the world, GAO found that weather and climate change pose operational and budgetary risks to infrastructure. GAO recommended that DOD’s climate planning efforts be expanded and increased; specifically, that the Secretaries of the Army, Navy, and Air Force require defense installations to “systematically track the costs associated with extreme weather events and climate change” and that DOD better coordinate addressing climate change risks across different DOD installations.

This picture in the GAO report shows an unnamed military facility in the

Pacific that has at times been cut off by flooding from access points to its munitions storage complex. If you have a military facility that can’t get access to its munitions storage, you have a problem.

This is the picture of the flooded entryway, and this is the picture of the similar entryway under normal circumstances, able to be traveled.

A 2014 typhoon caused flash flooding here that trapped and imperiled American personnel. The point is, when climate change effects inhibit military base operations, defense preparedness requires climate preparedness.

Naval Station Norfolk, the largest Navy base in the world, is a poster child for the devastation that awaits our coastal military bases if we continue to pump out the greenhouse gas emissions that are driving sea level rise. A tide gauge operated at the base since 1927 has shown nearly 15 inches of vertical sea level rise so far. In the broader Hampton Roads metro area, home not only to the Navy but also to facilities of the Air Force, the Marine Corps, the Coast Guard, NASA, and NOAA, high tides are already regularly forcing seawater back through storm drains and flooding roadways.

DOD’s own environmental research program, the Strategic Environmental Research and Development Program, used Norfolk as its case study for sea level rise and extreme storm risks to coastal DOD installations. The study found a “tipping point” of about a half meter, 1.6 feet, of sea level rise, at which point “the probabilities of damage to infrastructure and losses in mission performance increased dramatically.” This is mapping of the flood hazard around Naval Station Norfolk.

This tipping point at which the mission performance losses increase dramatically is only a few decades away. Retired RADM David Titley, a former oceanographer and navigator of the Navy and leader of its Climate Change Task Force, said Norfolk has about 10 to 15 years to get serious about sea level rise in the region before “we’re really cutting it close.”

In 2017, CAPT Dean Vanderley, who leads infrastructure engineering at the Norfolk Naval base, admitted that sea level rise is “something where I don’t know that we’ve fully defined the problem. And we have definitely not fully defined the solution.”

Retired CAPT Joe Bouchard, a former base commander, told InsideClimate News that Naval Station Norfolk would need significant improvements to nearly every piece of infrastructure, from electrical and drainage systems to pier improvements, not to mention a seawall. He estimated this work could cost more than \$1 billion and take as long as a decade to complete. That is just one base with \$1 billion and a decade’s worth of work. The DOD has identified over 128 bases that would be at significant risk with 3 feet of sea level rise. I think NOAA’s current estimate is for 6 feet of global sea rise by the end of the century.