

CORKING SCIENCE

George W. Bush is just the most recent president to let politics guide science decisions — the history of White House interference

BY MATTHEW CIMITILE

The scope of the last Bush administration's disregard of the science of climate change, public health and other issues is unprecedented, said Seth Shulman, science writer and author of *Undermining Science: Suppression and Distortion in the Bush Administration*.

"From climate change to public health, science and technology issues were greatly politicized," he said.

But it is not the first time politics and science have clashed.

The government-science relationship has always been rocky. There have been crests of scientific prestige and influence over public policy and valleys where science was distorted and censored.

The U.S. government's heavy involvement in science started with WWII programs like the Manhattan Project, which produced the first atomic bombs, and the development of radar, said David Kaiser, Massachusetts Institute of Technology science, technology and society professor.

After 1945, when the U.S. dropped atomic bombs on Hiroshima and Okinawa, scientists began heavily influencing public policy, said University of Texas history professor Bruce Hunt.

"There was a strong sense after the war that this was a new nuclear age and that scientific research is crucial to national strength," he said.

National security motivated President Harry S. Truman in 1951 to create the Science Advisory Committee to provide government analysis on science and technology. President Dwight D. Eisenhower transformed it into the

President's Science Advisory Committee in 1957, shortly after the launch of the Soviet satellite Sputnik. This gave scientists a direct line to the president. It also prompted Eisenhower to launch NASA, a federal agency concerned with "the problems of flight within and outside the Earth's atmosphere" and initiate the space race with the Soviet Union.

But even during this era of considerable cooperation between scientists and the government, Hunt said, there was a growing fear and hostility toward scientists who were seen as politically unreliable and giving advice based on political agendas.

In the 1950s, Joseph McCarthy-era politicians and top military officials accused many scientists, and oth-

ers, of being Communists. This so-called "Red Scare" in the 1950s climaxed with the trial of J. Robert Oppenheimer, director of the Manhattan Project and

often considered the "father of the atomic bomb."

Eventually, Oppenheimer's security clearance was revoked, symbolizing the government's growing mistrust of scientists and diminished influence, Hunt said.

Two decades later, another great disruption occurred when President Richard M. Nixon fired his entire science committee because of political differences over Vietnam and criticisms of his pet projects. A supersonic transport system and anti-ballistic missile programs drove a wedge between the abrasive president and science advisers who opposed the projects.

"For that era there was a weariness about elite academic experts, and Nixon saw it as the best and brightest

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Suppression and Distortion in the Bush Administration

of the [John F.] Kennedy administration telling politicians what to do,” Kaiser said. Nixon lost to Kennedy in a closely contested 1960 presidential race.

On top of such incursions, Kaiser said, was hostility by some government officials toward publication of Rachel Carson’s influential book, *Silent Spring*, and toward the early environmental movement. There was concerted effort by the military to discredit scientists who supported a ban on nuclear testing. In 1995 the Republican-majority Congress eliminated the Office of Technology Assessment, which provided Congress analysis on complex scientific issues.

While some of these conflicts occurred under Democratic leadership, the Bush administration’s suppression and distortion of scientific and technical information set apart the past eight years from the rest, Shulman said.

His book details how the Bush administration muzzled climate scientists, limited sex education in classrooms, promoted “intelligent design” and appointed science positions based on political affiliation.

The Endangered Species Act is a good example. Placement on the list ensures species federal funding for critical habitat, which many scientists say is key for recovery. The Clinton administration listed 521 species, an average of 65 a year. Prior to that, President George H. Bush’s administration listed 58 species annually.

But over the past eight years only 59 species were listed, and all were initiated by the Clinton administration, Shulman said.

“Unless you believed that we improved the environment so much that no animals were endangered, you would expect to have more habitat threatened and more species endangered,” he said.

Instead, Shulman said, administration officials changed facts to avoid political debate. This occurred perhaps most egregiously in relation to climate change, on which scientists repeatedly accused the White House of editing testimony, suppressing facts and misleading the public.

In a 2005 report, the Union of Concerned Scientists detailed how administrative officials reworded government climate research to undermine the credibility of the findings. The group, a nonprofit that conducts independent scientific analysis, cited the administration’s oil and business connections as reasons for distorting climate science and refusing to act on the global issue.

One of those officials was Philip Cooney, then-chief of staff of the White House Council on Environmental Quality. A former employee of the American Petroleum Institute, Cooney led the oil industry drive to prevent restrictions on greenhouse gas emissions, according to the Union of Concerned Scientists.

President Bush and Vice President Cheney had their own dubious industry ties: Bush previously owned an oil and gas company; Cheney was the former CEO of energy giant Halliburton.

“Though it is hard to impute motive [directly onto the president], the facts are so glaring that they speak for themselves, and there really is no question that ideology trumped facts,” Shulman said.

The president’s budgets show where science fit among priorities. From 2005-2007 funding for academic science and engineering failed to outpace inflation and declined for the first two-year span in the 35-year history of the data, according to a National Science Foundation report

Though anti-science strains illustrated by the Bush administration run through American politics, Shulman said, “we are still a leader in many technological areas, and have a history of scientific endeavors dating back to our Founding Fathers, who not only revered science, but were practitioners.”

Along with writing the Declaration of Independence in 1776, President Thomas Jefferson was an inventor, amateur archaeologist and agricultural researcher. He presided over the American Philosophical Society, the leading American science organization of the day that also included George Washington, Ben Franklin, John Adams and James Madison.

Scientists hope President Barack Obama’s administration will repair the integrity of federal science and start addressing impending issues from climate change to alternative energy. Kaiser said he’s cautiously optimistic.

“I think the president has sent some very powerful and immediate signals, but there is need for more than symbols, and we are looking toward what the next steps will be,” he said.

So far the 44th president has withdrawn limits on federal funding of stem cell research and allowed states the right to curb vehicle greenhouse gas emissions. The American Recovery and Reinvestment act aimed nearly \$79 billion at renewable energy, energy efficiency and clean transportation, according to the nonprofit Environment California.

But as the economy continues to falter, the president’s science and environmental agenda could get pushed back, or altogether scrapped, Shulman said.

“The administration seems to be focused on competence and taking a very pragmatic approach to science issues,” he said. “But I am a journalist; I think some degree of skepticism is always merited.”

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Cleaning and Bombing

America’s government-science relationship has always had ups and downs.

- 1 1804-1806 – Intrigued by the geography, plants, animals soil and weather of the West, and hoping to establish trade with Native Americans, President Thomas Jefferson sends Meriwether Lewis and William Clark to explore the recently acquired Louisiana Purchase territory. The explorers describe 120 animal and 182 previously undocumented plant species.
- 2 1849 – After serving a single term in the U.S. House of Representatives, Abraham Lincoln receives a patent for a device to lift boats over sandbars. He is the only president ever granted a patent.
- 3 March 1, 1872 – President Ulysses S. Grant signs a bill establishing Yellowstone as the first U.S. national park.
- 4 Aug. 6, 1945 — Working in the New Mexico desert under the strictest national secrecy, America’s greatest physicists developed the first atomic bomb. U.S. bombing of Japan on this date marks a dramatic but tragic end to WWII and changes political and military history.
- 5 Early 1950s — As the Soviets began expanding territorially and developing their own nuclear weapons, U.S. government paranoia over Communism leads to the accusations and trials of countless scientists.



Photo courtesy NASA

- 6 1957-1969 — The 1957 launch of Soviet satellite Sputnik spurs the space race between the U.S. and Russia, and unprecedented investment into agencies like NASA, leading to the first man to walk on the moon.
- 7 Early 1970s — The Nixon era includes a stark politicization of science as the president fired his science committee because of disagreements over policies and pet projects. However, Nixon creates the EPA and signs the monumental Clean Air and Water acts.
- 8 2001-2009 — The first decade of the 21st century witnesses the distortion of scientific facts, science policy and appointments heavily influenced by ideology and environmental concerns pushed aside for business interests.



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