

**SOLAR RADIATION MANAGEMENT
ATMOSPHERIC & OCEAN GEOENGINEERING**

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<http://newswithviews.com/Peterson/rosalinda.htm>

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Geoengineering is defined as “planetary-scale environmental engineering of our atmosphere, our weather, the oceans, and the Earth itself. The methods, or schemes, that may be used now without public oversight or debate, prior public notification, U.S. Congress or State oversight, are staggering in number and scope.

Many private corporations, universities, government agencies, private individuals, states, counties, and cities, may participate in deploying a vast array of geoengineering experiments. Currently no government agency, or the U.S. Congress at this time, will have any idea what the cumulative or synergistic effects may be when these experiments are deployed. In addition, no one, not even the U.S. Congress or the public, will have any oversight of these programs or how they will be implemented unless action is taken today to prevent these questionable experiments.

The U.S. House of Representatives held a Geoengineering Hearing (1), on November 5, 2009, where the public, the Environmental Protection Agency, at either Federal or State levels, state agencies, agriculture representation or ocean scientists were not present. And now many climate and geoengineering scientists are holding meetings in 2010, preparing to implement and fund various geoengineering schemes with either public or private funding without any oversight, public notification or consent.

One scheme is to conduct “Solar Radiation Management (SRM)” experiments. SRM is designed to reduce the amount of direct sunlight reaching the Earth. The consequences of these SRM schemes are unknown since planetary-scale engineering involves so many different geoengineering schemes.

One of these meetings is being held in San Diego, California, on February 18-22, 2010. The AAAS meeting on Geoengineering programs will be held February 20, 2010, in San Diego California. The public is invited to attend, ask questions, and demand public hearings in order to be more informed about the consequences of these proposed actions (5-9). In addition presentations will be held on a variety of other topics one of which should be of interest to the public.

A presentation on how to enlist public support for AAAS plans is also scheduled (9). A key statement from the AAAS program write-up: “...Studies show, however, that people make judgments based primarily on their values, belief systems, world views, and emotions. Facts play a much more minor role. This gap cannot be bridged by loading the public with facts, or trying to make the public more science literate...” Just how does the scientific community then propose to manipulate the public into going along with their various geoengineering schemes? The only way to find out about their plans to control and manipulate public opinion is to attend the meetings and ask questions.

In a Press Release Dated December of 2002 titled: “GEOENGINEERING TOO RISKY” A Lawrence Livermore Laboratory Press release warns, “...There are many reasons why geoengineering is not a preferred option for climate stabilization...” These prescriptions include risks of global “system failure” and the “unpredictable responses” of Earth's climate system to large-scale human intervention...”

On March 22-26, 2010, the Climate Respond Fund is sponsoring the Asilomar International Conference on Climate Intervention Technologies in Monterey, California (5-8) This Conference will address and “...develop guidelines for “...research and testing of proposed climate intervention and geoengineering technologies...” Funding for these programs (and the spending of funds granted by the Bill Gates (5), Foundation, and others to implement hurricane and other geoengineering experiments), may also be on the agenda. (Some of the Patents can be found at the U.S. Patent Office.)

What are the consequences of deploying geoengineering experiments? We are now moving toward using solar panels to produce energy. It should be noted that any attempt to reduce the amount of sunlight reaching the Earth will lower solar panel energy output. And the particles and chemicals will coat the solar panels making them less efficient. We need to be working toward solutions to our problems not exacerbating the ones we already have or making new technology, like solar panels, less efficient.

Many proposed chemicals or particles used in these geoengineering schemes (i.e., U.S. Navy/NASA C.A.R.E. experiment deployed September 19, 2009), are likely to be toxic to humans, marine mammals, oceans, fish, wildlife, food pollinators, and birds. Many of these toxic chemicals, like sulfur, have the potential to contaminate drinking water, soil, cause acid rain or air pollution, and may impair human health, from lack of Vitamin D, by reducing the amount of sunlight reaching the Earth.

NASA research studies show that increasingly persistent jet contrails may turn into “man-made clouds” (or white haze), and are “...trapping warmth in the atmosphere and exacerbating global warming...Any change in global cloud cover may contribute to long-term changes in the Earth’s climate...” No current U.S. legislation addresses water vapor and aviation impacts on the global atmosphere. In addition, our scientists do not appear to be funding or working toward reducing or eliminating this problem.

SRM may limit Honey Bee food pollination because the bee navigates and communicates through the use of ultraviolet light. And we have no idea what the cumulative impacts of toxic chemicals, particles, and reduced sunlight will have on all of our pollinators endangering food production.

Photosynthesis is required for the majority of life on Earth to exist, along with healthy trees, and food crop production. When cloud cover and reduced sunlight is present crop production drops. When direct sunlight and normal rainfall is present crop production increases. What happens when geoengineers deliberately reduce the amount of direct sunlight reaching the Earth? What are the consequences of multiple uncontrolled experiments?

The climate scientists and geoengineers all have one repeated mantra: “...Geoengineering is not a solution to climate change and global warming...” They are instead enlisting support to spend enormous sums to buy time to do something later. Just what research, project funding, and development are they now engaging in to fix our current pollution problems now? Nothing! They are not promoting research into benefits that will be long-lasting or make a difference now. The “temporary fix” theory with “unknown consequences” seems to be their only contribution to the disaster they predict. Should the public be willing to accept this temporary fix? This attitude is unacceptable because those conducting the geoengineering experiments will be unaccountable if their experiments go awry or create profound negative consequences.

Professor Benford wrote the following regarding the public in a Reason.com article in 1997 (3+10): “...But perhaps the greatest unknown is social: How will the politically aware public react--those who vote, anyway? If geoengineers are painted early and often as Dr. Strangeloves of the air, they will fail. Properly portrayed as allies of science--and true environmentalism--they could become heroes... A major factor here will be whether mitigation looks like yet another top-down contrivance, another set of orders from the elite. Draconian policing of fuel burning will certainly look that way, a frowning Aunt Bessie elbowing into daily details, calculating your costs of commuting to work and setting your thermostat level. In contrast, mitigation does not have to push a new camel's nose into our tents.

Technical solutions can play out far from people's lives, on the sea or high in the air...Once we become caretakers, we cannot stop. The large tasks confronting humanity, especially the uplifting of the majority to some semblance of prosperity, must be carried forward in the shadow of our stewardship...Having sinned against Mother Nature inadvertently, many are keenly reluctant to intervene knowingly. Sherwood Rowland, a chemist at the University of California at Irvine who predicted, with Mario Molina, the depletion of the ozone layer, declared, "I am unalterably opposed to global mitigation." This added considerable weight to the abstention cause...Even now, many argue that even to speak of geoengineering encourages the unwashed to more excess, since the masses will think that once again science has a remedy at hand...”

Instead of questionable geoengineering experiments all reductions of greenhouse gas emissions and other pollutants, at their source, should be regulated by the Environmental Protection Agency and all funding should go to the EPA. Scientists and researchers who will invent ways to use waste energy from currently operating energy plants to produce clean, green power, and reduce greenhouse gas emissions is where funding should be directed...not to those programs and experiments that will not reduce our impact on Earth from various types of pollution sources.

Alaska Senator Murkowski will be bringing Resolution 26, to the floor of the U.S. Senate for a vote in the next few weeks. This Resolution will prevent the EPA from regulating any Greenhouse Gases now and in the future. Since the reduction of greenhouse gases appears to be a crisis priority...why not let the EPA, which was granted this power by the U.S. Supreme Court, regulate these gases starting in 2010? This resolution will not solve our problems and should be voted down.

EPA regulation of greenhouse gases is ideal solution because they can start today and the U.S. can lead the world in taking immediate action instead of waiting until 2017, under U.S. Senate Bill 1733, or 2020 under the United Nations Accord. The hitch in both U.S. Senate Bill 1733 and the U.N. Accord on Climate Change is that nothing is planned until either 2017 or 2020, and then only a 10-20% reduction in greenhouse gas emission is on the table at this time-nothing that starts today...which means, due to the long delay and limited reductions, that there must be no greenhouse crisis?

Our local, county, state and federal representatives should take immediate action to stop these geoengineering scheme deployments until scientists from every field, agriculture interests, and the public have had time to thoroughly investigate these schemes and their effects on the Earth's environment. And they must allow the EPA to regulate them starting in 2010.

No one has the right to use the Earth, or Earth's atmosphere, as a giant experimental physics laboratory due to the unknown consequences of such actions.

State and U.S. Congressional Hearings should be immediately held in order to completely investigate the consequences of proposed and ongoing geoengineering experiments by any individual, state, county, private corporation, the U.S. military, university or U.S. government agencies on agriculture, crop production, human health, and our oceans. **There is a lot at stake and all of us should make our voices heard in this debate.**
End

For more information: Contact Rosalind Peterson E-Mail: info@californiaskywatch.com
Websites: <http://agriculturedefensecoalition.org/> or <http://californiaskywatch.com/>
Archive of Articles: <http://newswithviews.com/Peterson/rosalinda.htm>

- 1) http://science.house.gov/Publications/hearings_markups_details.aspx?NewsID=2668
U.S. House of Representatives Geoengineering Hearing – November 5, 2010
- 2) **TAKE ACTION TODAY:** Please visit or contact:
<http://geoengineeringwatch.org/> for more information.
ALERT- Geo-Engineering Scientists to Meet in San Diego-Saturday, February 20, 2010
Organizer Contact: Mauro (530) 356-7343
ALL Activists, Demonstrators Meet at the San Diego Convention Center at 7:30 AM on Saturday, February 20th. Scientists and others will be meeting for their conference entitled "Can Geoengineering save us from Global Warming". There is a small park area across the street and sidewalk from Building F. We will be gathering there. All in attendance are DEEPLY ASKED to respect the rights of others, especially the City of San Diego, which is now aware of our demonstration. If SDPD officers should request your attention, treat him / her as a brother / sister. They have asked us to NOT BLOCK any doors, entrances, intersections, traffic etc. We are free to express our 1st amendment rights, respectfully expressed. Both SDPD and the Port Police serve the convention center neighborhood.
- 3) More information on Geoengineering: <http://agriculturedefensecoalition.org/?q=geoengineering>
See articles, government documents, and other studies and reports at this site.

Note: Professor Gregory Benford of U.C. Irving stated in his article on Arctic Geoengineering on November 20, 2006, (3+10): "...This idea is only the first step in making climate science...into an active science... This is not a new transition in scientific style...We will live inside the experiment...The main thrust of all this is to carefully use our ability to attack warming at its roots – incoming sunlight now, carbon dioxide later... Costs seem readily attainable – perhaps a few hundred of millions of dollars for an Arctic experiment. High altitude trials over the open ocean are little constrained by law or treaty, so show-stopper politics may be avoided..."

- 4) January 28, 2010 Wired Science: Bill Gates has sunk at least \$4.5 million of his personal wealth into geoengineering research.
<http://www.wired.com/wiredscience/2010/01/bill-gates-paying-for-climate-hacking-research>

"...While it's a small chunk of Gates' vast personal fortune, it's a sign that the founder of Microsoft thinks We should at least be looking into the controversial practice of intentionally altering the Earth's climate on a global scale. "[Gates] views [geoengineering as a way to buy time](#), but it's not a solution to the problem" of climate change, Gates' spokesperson John Pinette told Science Insider. "Bill views this as an important avenue for research — among many others, including new forms of clean energy."

The money will be directed by two high-level scientists at the forefront of geoengineering research: climate scientist Ken Caldeira, of Stanford's Carnegie Department of Global Ecology, and physicist David Keith of the University of Calgary. They will decide which technologies should receive the cash in order to alter the stratosphere to reflect solar energy, filter carbon dioxide directly from the atmosphere and brighten ocean clouds..."

"...In a related development Keith, one of the scientists directing Gates' money, co-authored a *Nature* editorial this week calling for an international fund for "solar-radiation management" in addition to traditional carbon emissions cuts. "Solar-radiation management may be the only human response that can fend off rapid and high-consequence climate change impacts," Keith said in a press release Wednesday... He and his co-authors, Edward Parson at the University of Michigan and Granger Morgan at Carnegie Mellon University, propose a budget for solar-radiation management (aka geoengineering), beginning with \$10 million a year now and growing to \$1 billion annually by the end of 2020. The organization that manages the funds would also develop the governance structures to provide transparent risk analysis and manage feedback from the world's countries..."

- 5) AAAS 2010 Annual Meeting – February 18-22, 2010 The AAAS bills itself as the world's largest scientific society.

GLOBAL GEO-ENGINEERING SCIENTISTS TO MEET IN SAN DIEGO-San Diego Convention Center:

Scientists from around the world will be meeting at the annual American Association for the Advancement of Science meeting held in San Diego, California on February 18th, 2010. [Ken Caldeira](#), a leading GE scientist and three other publicized GE presentations are planned at AAAS meeting. Here are the links and descriptions (AAAS) of those presentations scheduled for February 20, 2010:

- 6) [Human Dimensions of Geoengineering](#)
7) [Can Geoengineering Save Us from Global Warming?](#)
8) [Geoengineering the Climate: The Royal Society Study](#)

- 9) <http://aaas.confex.com/aaas/2010/webprogram/Session1458.html>

A Wobbly Three-Legged Stool: Science, Politics, and the Public - AAAS Conference Presentation:
"...The Administration is committed to solving society's grand challenges, with energy, health, and education policy topping the list. President Obama wants science to have a key role in a new, more pragmatic approach to governance. In our constitutional democracy an informed public must be able to judge the performance of

those they elect. This requires a triangle comprising political institutions, the community of experts, and a responsible public, all of whom are well informed.

How will the public become informed about energy policy, for example? Studies tell us the public strongly supports energy independence, new sustainable sources, and incentives for energy efficiency. But fewer than half of those interviewed could name a renewable energy source or a fossil fuel, raising the question of how firm the public's views are.

Studies show, however, that people make judgments based primarily on their values, belief systems, world views, and emotions. Facts play a much more minor role. This gap cannot be bridged by loading the public with facts, or trying to make the public more science literate.

How should scientists deal with this awkward reality? How can science help create a more rational, pragmatic, and far-sighted society capable of addressing the challenges we face? Are new innovative methods required to engage the voters in supporting more rational public policies?..."

- 10) Professor Gregory Benford on Geoengineering Reason.com Magazine November 11, 1997
<http://reason.com/archives/1997/11/01/climate-controls>
Gregory Benford is a professor of physics at the University of California at Irvine and the author of Timescape.