

Global Warming News from Alaska: January 17, 2006 – **Reporting from the Front Line**

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Dear Friends,

Happy 2006! I hope that you had a wonderful holiday season and Martin Luther King Day. For the sake of future generations, I also hope that 2006 brings important progress in addressing the causes of global warming.

Since the last monthly report, Alaska continues to “heat up”. This report will highlight the latest evidence in Alaska, and then describe several significant national and international developments.

Alaska Global Warming News :

1. **Alaska’s Sizzling Temperature Statistics for 2005.** The numbers are in. Temperatures in Alaska during the first 11 months of 2005 substantially exceeded the minimum and maximum historic averages for 1961-1990, as follows:

<u>City</u>	<u>% over maximum</u>	<u>% over minimum</u>
Anchorage	5.2%	9.1%
Barrow	19.9%	67.2%
Bethel	5.8%	8.8%
Fairbanks	3.8%	8.0%
Juneau	5.2%	6.8%

As this table indicates, Alaska’s minimum temperatures have increased even more than maximum temperatures. Data are from the National Climatic Data Center and were compiled by Clear the Air.

2. **Study Predicts Dramatic Thawing of Permafrost.** According to a sophisticated computer study released by the National Center for Atmospheric Research, global warming could thaw the top 11 feet of permafrost in almost all of Alaska and up to 90% of the northern hemisphere by 2100. (See [map](#)) (Geophysical Research Letters, 12/17/05, vol. 32, L24401.)
 - As Alaska demonstrates, thawing permafrost results in considerable damage to homes, highways, entire communities, lakes, wetlands, and forests.
 - Expanded permafrost thawing could send significant amounts of water to the ocean. Runoff to the Arctic Ocean has already increased about 7 percent since the 1930’s. Under the high emission computer scenario, runoff increases by another 28% by the year 2100, with approximately 15% of the rise attributable to melting permafrost.
 - Also, thawing permafrost will release of large amounts of methane and carbon dioxide previously trapped in the frozen ground. Permafrost may hold at least

30% of all carbon stored in soils throughout the world. (The National Center for Atmospheric Research, News Release, 12/19/05).

3. **Alaska Lakes Are Shrinking because of Global Warming.** Using aerial and satellite photos, scientists at the University of Alaska have been studying lakes on Alaska's Seward Peninsula (the large land mass in northwest Alaska that includes Nome). During the last five decades, of the 23 lakes studied, 21 are appreciably smaller (KTUU, 12/16/05).
 - These lakes appear primarily to be draining into the thawing permafrost.
 - Drying lakes have adverse consequences for waterfowl, caribou, subsistence hunting and fishing, and overall climate.
4. **Impacts of Global Warming on Pollock Roe Feared.** (Note: since I just returned from a vacation in Japan, having visited the Tokyo fish market and Kyoto among other remarkable sites, I wanted to share this short news story with you.) Citing Japanese sources, Seafood.com News Headlines reported that pollock roe producers are concerned that warmer water temperatures in Alaska's North Pacific could lead to an over-rapid maturing of roe.
 - Since the value of roe declines quickly once it is over-mature, warming will put "tremendous production pressure" on the A season fishery (1/9/06).

Key National and International News – Not So Good News

1. **Global Warming is Causing Frog Extinctions.** In a study published in the prestigious journal Nature, scientists concluded that there is a compelling linkage between global warming and the extinction of more than 60 frog and toad species in tropical forests in Latin America (Nature, 1/12/06).
 - As reported by the Washington Post, the study's lead author stated, "Disease is the bullet killing frogs, but climate change is pulling the trigger." (1/12/06).
 - The highly photogenic harlequin frogs of tropical America are truly at risk. Approximately two-thirds of their species have now died out (Nature, Editor's Summary, 1/12/06).
2. **US Greenhouse Gas Emissions Continue to Increase.** According to the US Energy Department, US emissions of greenhouse gases (including carbon dioxide, methane and nitrous oxide) increased to 7.12 million metric tons in 2004, an increase of 2% from 2003.
 - More startling, this represents a 16% increase in US emissions since 1990. (In contrast, the Kyoto protocol calls on nations to cut their emissions to approximately 5% below 1990 levels, by 2012.)
 - If the US continues to increase emissions of greenhouse gases at its current rate, by 2012 US emissions will be almost 25% higher than they were in 1990.
3. **2005 Ranks as One of the Hottest Years on Record.** Depending on the study, 2005 was either the hottest (NASA) or the second hottest (NOAA and the U.K. Meteorological Office) year on record. This also means that now the 8 warmest years ever recorded have all occurred within the last decade (Washington Post, 12/16/05).
4. **Asia-Pacific Pact Will Not Reduce Current Total Emissions.** The US met for two days with five other countries (Australia, China, Japan, India, and South Korea) to discuss

“clean energy technologies”. The US and these five countries together account for about half of all greenhouse emissions. The group created eight task forces, but chose not to adopt any emission limits, stating that “fossil fuels underpin our economies, and will be an enduring reality for our lifetimes and beyond.” According to the World Wildlife Fund and a report produced at the meeting, even if the Partnership succeeds in promoting low-pollution technologies, there will still be a doubling of global emissions by 2050 (BBC News, 1/12/06).

Key Positive and Encouraging National and International News

- 1. California Passes Solar Initiative:** In December, I noted that California was considering the adoption of a major solar initiative. On January 12, the California Public Utilities Commission did, indeed, approve a \$2.9 billion program. The initiative seeks to add 3,000 megawatts of solar energy through the installation of 1 million rooftop solar energy systems. The state currently has only 100 megawatts of solar electricity. This program could save California approximately \$9 billion due to the reduced need to build new power plants (the equivalent of 6 new power stations) and the reduced purchase of electricity in peak summer months.
- 2. A Highlight of 2005: GE Committed to Reducing Emissions and Increasing Green Investments.** Recently, several publications have discussed positive global warming highlights in 2005. Several pointed to the fact that the ninth largest corporation in the world, General Electric, launched its [“Ecomagination”](#) program that will increase R&D in green technologies, while also cutting GE’s own carbon dioxide emission by 1 percent by 2012 (equivalent to a reduction of 40% from the emissions that GE would have produced if it did not implement emission controls and if the company continues to grow as planned.)
 - GE’s Chief Executive was quoted as proclaiming: “Green is green (dollars green)” The Observer 1/8/06.
 - GE will double its investment in green technologies to \$1.5 billion annually by 2010. GE is also calling for tough regulations on carbon emissions.
- 3. Important Regional Greenhouse Gas Initiative (RGGI) Signed.** On December 20, seven Northeast states agreed to the [RGGI Memorandum of Understanding](#). This MOU provides that carbon dioxide emissions will stabilize at current levels by 2015, followed by a 10% reduction by 2019; and that some offsets and trading are allowed.

Legal Actions and Other Announcements:

- 1. Lawsuit Filed to List Polar Bears as Threatened Because of Global Warming.** Because the Department of Interior failed to respond to a listing petition, the Center for Biological Diversity (CBD), the Natural Resources Defense Council (NRDC), and Greenpeace filed suit to have polar bears protected under the Endangered Species Act because of global warming.
- 2. Global Warming Conference in Alaska – Last Notice.** Please join over 1200 people from throughout Alaska, February 6th through 9th, for an exceptional series of global warming presentations at Alaska’s largest environmental conference, the Alaska Forum for the Environment:

https://protected.accountsupport.com/akforum2/registration_06.html. World renowned global warming scientists and others who will be presenting the latest information on climate change include: Dr. Robert Corell, Dr Vladimir Romanovsky, Dr. Jonathan Overpeck, Dr. James Overland, Dr. Glenn Juday, Dr. Matthew Sturm, Dr. John Reynolds, Dr. Russ Hopcroft , and Sheila Watt-Cloutier.

- 3. Senator McCain Expresses His Concerns.** While in New Zealand with three other senators on a global warming fact finding tour that included Antarctica, Senator McCain stated candidly: “It’s happening. We are doing terrible things to future generations all over the world and the longer we wait to address this issue, the more serious the damage is.” (Fairfax New Zealand Limited, 1/12/06).

Thank you again for receiving these monthly reports. The list of recipients grows daily, and includes key people throughout Alaska and the nation. If there is anyone else to whom you would like me to send the reports, just let me know.

Also, next week, my new web site will be up and running. Please visit it at:
www.alaskaconservationsolutions.com.

I have also attached to this monthly report a summary document that I provided CNN in December. It summarizes, by topic, the latest global warming impacts on Alaska.

Best wishes, always.

Yours,

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