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**Subject:** WEATHER MODIFICATION NOT CLIMATE CHANGE PDF FILE NO. 1  
**Date:** May 26, 2024 9:33:44 AM  
**Attachments:** [WEATHER MODIFICATION BOOK NUMBER ONE - EMAILED COPY TO VARIOUS MUNICIPALITIES IN BRITISH COLUMBIA..pdf](#)

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Some people who received this message don't often get email from [ladysadie@shaw.ca](mailto:ladysadie@shaw.ca). [Learn why this is important](#)

TO THE ATTENTION: REGIONAL DISTRICT CHAIRMAN OF THE BOARD ALL DIRECTORS. CAO, ETC.

Good Day

Please NOTE this is PDF File No. 1 - the Patent information contained in this file has NOT BEEN UPDATED to include missing years up to 2023. In PDF File No. 2 this information has been updated.

I will be sending PDF file No. 2 in another email as server will not accept the size of the data when both are sent together.

This is for information purposes only and I hope that the documentation will assist you with your search for the truth.

Respectfully submitted

Nora Maddocks  
A very concerned senior citizen

## **WITHOUT PREJUDICE**

April 26, 2024

To: All Mayors, Councilors, CAO, Staff of each Municipality in the Province of British Columbia, UBCM Officials, Premier, Attorney General, and the various Ministries involved in this issue.  
Each identified by personal email.

### **FOR INFORMATION PURPOSES ONLY**

**SUBJECT: WEATHER MODIFICATION MANIPULATION  
IN THE PROVINCE OF BRITISH COLUMBIA AND CANADA  
DEFINED AS PDF BOOK NO. 1 AND PDF BOOK NO. 2**

Good day to you.

This letter is addressed to each individual who received these Documents, Book Number 1 (One) and Book Number 2 (Two) which contain PDF files exposing the Weather Modification world-wide manipulation of our atmosphere.

The capability that exist in today's world of controlling the weather in this manner, is unthinkable to an everyday citizens who does not have the time to pay close attention as they are kept busy striving to keep their heads above water financially to support themselves and their families.

The two PDF files are a compilation of information regarding Weather Modification manipulation of our environment. The information timeline dates back to the late 1800's and includes copies of Canada and USA Agreements, Acts, information sharing agreements, patents, Canadian laws, projects and more regarding the Weather Modification of our Canadian environment and the world.

It includes information on the world wide positive and negative impact on Climate Change, humans, animals, forests, land, water, skies, air, in Canada and worldwide.

It must be determined what the **long term effects** of polluting our atmosphere with the various chemicals that are used in cloud seeding are having on the Climate Change and our environment?

These documents also includes a copy of a warning from a President, world-wide environmentalists, and scientist regarding the possible use of Weather Modification as a bio-weapon and warfare. This has already transpired - see documentation.

This is serious. This question requires an answer. What is causing our weather to be explosively more severe in the last two to four years?

It is **NOT CO2** causing Climate Change as we are being brainwashed to believe by the daily propoganda from the bought and paid for main stream media, the United Nations, the WEF and our own governments.

Therefore, I am providing this information to you, with the assurance that you now are fully aware of the crisis that we as Canadians find ourselves facing.

I am trusting that the information provided will prompt you to do some of your own personal research to apprise yourself further of the danger that we are in as a country if we continue to believe and follow the urgings of the United Nations, WEF, the Canadian Federation of Municipalities, our federal and our provincial governments.

United Nations and Federation of Municipalities' Agenda 21, from which the Municipal Climate Action plans and Land Use Bylaws are derived, are there to strip away any freedoms that we as free Canadians have known in the past.

HERE IS GENUINE PROOF that it is happening in our country. This is no longer a conspiracy theory. Country Canada - It was just announced, "**FIRST CITY IN CANADA TO REQUIRE A QR CODE TO EXIT OR RETURN**". You can verify this information, name of the place is Isl de la Madeleine, an island located in QUEBEC's provincial territory. This is your perfect 15 Minute City, C40 City, Soft Fill Ins, High Density, whatever name they choose to give it, city, which are all mentioned in some form or other in the Climate Action Plans and Land Use Bylaws presented to the residents by the municipal councils in their respective jurisdictions, all across Canada.

Mr. Eby, our Premier and his NDP government are passing Bills that are over reaching and thus taking away the municipal and regional district's jurisdiction of our local elected officials. The time to unite and move forward is NOW. Stand and represent your resident citizens for which you made a sworn Oath to do so .

Municipalities should join together and get their lawyers to earn their money by looking at legal avenues to protect the rights of the citizens of the municipalities that they represent.

You are ALL that stands between the residents who elected you and the provincial government. You are elected by the residents and are trusted by the residents that you will look after their best interest with full consultation with the residents. If you

do not, then you will become the United Nations, WEF, provincial and federal government's "enforcers". They all proclaim they are liability free, are you? With governmental change anything can happen. Don't be the fall guys!

Remember any and all Agenda 2021, 2030, 2035 and 2050 directives are **VOLUNTARY**, that is why the Federal and Provincial elected officials are "liability free". They are not enforcing these directives, you as Mayors and Councils are by formulating and passing Bylaws, policies in accordance with the implementation of Agenda 2021, Sustainable Development. These are **VOLUNTARY** directives. I would advise that you check with your **personal** lawyer to clarify your legal standing in this instance.

I anticipate that this information will help to shed a new positive light on your actions in the future.

I await an acknowledgement confirming receipt of this information.

Respectfully submitted,

A very concerned senior citizen  
Nora Maddocks



**FILE NAME CLIMATE CHANGE - CONCLUSIVE SCIENTIFIC EVIDENCE CO2 EMISSIONS CANNOT CAUSE GLOBAL WARMING.**

**CLIMATE CHANGE - CONCLUSIVE SCIENTIFIC EVIDENCE CO2 EMISSIONS CANNOT CAUSE GLOBAL WARMING.**

**Study has provided **conclusive scientific evidence** proving that carbon dioxide (CO2) emissions in Earth's atmosphere cannot cause "global warming"**

Dr. Jan Kubicki led a group of world-renowned Polish scientists to study the impact of increases in CO2 emissions on the Earth's global temperatures

By News on the Net -- Camus—Bio and Archives--April 25, 2024

A bombshell new peer-reviewed study has provided conclusive scientific evidence proving that carbon dioxide (CO2) emissions in Earth's atmosphere cannot cause "global warming."

Dr. Jan Kubicki led a group of world-renowned Polish scientists to study the impact of increases in CO2... [pic.twitter.com/N50OWIVQt3](https://pic.twitter.com/N50OWIVQt3)

— Camus (@newstart\_2024) April 24, 2024

<https://canadafreepress.com/article/study-has-provided-conclusive-scientific-evidence-proving-that-carbon-dioxide-co2-emissions-in-earths-atmosphere-cannot-cause-global-warming>

**WEATHER MODIFICATION  
AND  
MANIPULATION BY  
MAN KIND  
  
BOOK NUMBER ONE**

# **WEATHER MODIFICATION AND MANIPULATION BY MANKIND**

## **BOOK NUMBER ONE**

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2. US Weather Modification Patents  
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3. Canada & US Weather Modification Agreement reporting activities.
4. Canada & US Treaty -E103819. Convention of military or any other hostile use of environmental modification techniques.
5. Canada & US Memorandum of Agreement Weather Modification signed June 11, 1979
6. Canada & US Weather and Climate collaboration Memorandum of Understanding between the National Oceanic and Atmospheric Administration USA and Department of Environment Canada for collaboration on Weather Climate and other earth systems.....
7. Canada Net Zero Emission Accountability.
8. Canada & US Archive - Owning the Weather in 2025. Weather as a Force Multiplier.
9. ENMOD - the Environmental Modification Convention. Weather warfar ban.
10. Canada - Supreme Court Preserves Principle that Provinces cannot be compelled to Administer Federal Law.
11. Canada - Alberta Premier takes a stand against Federal Government Over reach into areas of Provincial Jurisdiction.
12. US - Tennessee Bans Cloud Seeding Chemtrail spraying.

- 13.** US - CIA Director admits plans for Geoengineering AKA Chem Trails.
- 14.** Canada - Weather Modification Information Regulations - Published by Minister of Justice.
- 15.** Canada - Weather Modification Act 1970 Information.
- 16.** Canada - Weather Modification Information Act.
- 17.** Canada - CBC Radio Article "We've been cloud seeding for decades".
- 18.** Canada & US Caldeira Study.
- 19.** Article - Now do you believe in Chem Trails and cloud seeding?
- 20.** Article - Who now will dispute the Chem Trails?
- 21.** Article - Five Types of Real Chem Trails - many links provided to verify.
- 22.** Canada - Investigate the substances being sprayed into our airspace as to the detrimental impact on our health.
- 23.** Canada - Environment Canada wants to save climate by blocking out the sun - Climate analytics.
- 24.** Article - Weather Modification Plan Benefits and Negatives.
- 25.** Article - Earth's ozone layer will collapse. Does the sun feel scorching hot? Covert Climate Engineering (modification) programs are by far the most damaging.
- 26.** Canada - Canadian Author Biography Rosalie Bertell - "Slowly Wreching The Planet.
- 27.** Canada and the Paris Agreement - Climate Engineering - Geoengineering Technologies.

- 28.** Canada & US - NBC News - Climate ice nucleation cloud seeding operations are a core component for unstable air masses and massive size hail.
- 29.** Weather Modification - What you need to know about cloud seeding.
- 30.** US - Weather Modification - Aircraft "cloud seeding" was in use over Northern California May 15, 2022.
- 31.** Canada - British Columbia Chem Trails Alert - Aluminum Dust from Chem Trails spraying fueling super wildfires.
- 32.** Weather Modification - Climate Change Manipulation - Aluminum levels shocking.
- 33.** Weather Modification - 10,000,000 tons of Aluminum dumped on USA.- Experts admit consequences unknown - you are not sick, you are being poisoned.
- 34.** Canada - Weather Modification Canadian Activities.
- 35.** Weather Modification - Electromagnetic Weather Control is here!
- 36.** Weather Modification - Seeding Cirrus clouds to reduce global warming
- 37.** Canada - Uprooting David Suzuki Fund - George Soros funded - Corporate funding. Follow the money.
- 38.** Canada - Five Eyes Stoneghost Surveillance Network.
- 39.** Canada - Heat Wave was truly amazing.
- 40.** Weather Modification - Graphene Rain - Are Climate Engineering Operations the Source?
- 41.** Canada - Unveils "Carbon Management Strategy" to achieve oil and gas cap on production.

42. Weather Modification - Whoever is in charge of geoengineering operations needs to be prosecuted for crimes against humanity.
43. North West Territory - Did not know Climate Change had 2 legs? Article for reference. Greece - 79 people arrested for arson for lighting 100's of forest fires.
44. Canada Free Press - Climate change & Summary - World Leaders Living in the Dark.
45. Weather Modification - Drastic and Irreversible Climate Geoengineering Worries Scientists.
46. Weather Modification - Question and Answers to most commonly asked questions.
47. US - Proof Weather Modification Geoengineering is capable of targeting specific target areas.
48. Weather Modification - Cloud Seeding 3D Graphene Oxide Nanoparticles.
49. Weather Modification - Copy of Patent for Cloud Seeding 3D Graphene Oxide.
50. Canada & UA - Geoengineering is wreaking havoc all over the world from fire, rain to ice. etc.
51. Canada - West Kootenay - Okanagan soft fruit loss - ability to geoengineer weather to drop drastically and plummet 20 degrees within several hours.
52. Weather Modification - Hottest Temperature?
53. Weather Modification - Model of Cirrus clouds to reduce global warming.
54. Germany - Climate Lockdown bans German citizens from weekend driving, 2024.

- 55.** US - Shocking Electric Weather Modification and Military implications. Companies which existed in 2019 - Miles Research and acquies global rain project. Steering atmospheric rivers with antennas and cloud ionization, electric rain making and laser guided weather modification.
- 56.** US - Rainmaking airplanes, located in Montana and North Dakota.
- 57.** US - Weather Modification Contractor's initial report on Weather Modification  
Administration 3/31/22. "Deploying sulphur dioxide, calcium carbonate and/or other proprietary compounds into the stratosphere to affect global warming and deployment ratio will vary."
- 58.** US - CIA Director Confirms Weather Modification - watch video.
- 59.** US - Weather Channel Founder stated "97%of Climatologists is a manipulated figure...." "gives money only to scientists that produce scientific results that support the global warming hypostasis."
- 60.** US - National Weather Modification Policies and Programs.
- 61.** US - Weather Modification Project Report. Contains report letter from Contractor - North American Weather Consultants, Inc.
- 62.** Canada & US - Instructions for Interim and Final Reports - contains copies of various reports.
- 63.** US - Weather Modification Report for Fiscal Year 1965 - Letter to Congress from then President Lyndon B. Johnson.
- 64.** US - Climate Modification - Project Map. List of areas to be sprayed - Idaho Power.
- 65.** US - Weather Modification - Operational Defense through Weather Control NY2030.

- 66.** US - 2025 A directive from the Chief of Staff of the Air Force. US Air Force dream of future Weather Modification Warfare Techniques.
- 67.** US - Weather Modification Activities - Operation Popeye, Motorpool, Intermediary, Compartriot was titles given to operations used in warfare over Vietnam, Laos, Cambodia, etc.
- 68.** US - CIA Project "Nile Blue" Rain embargo on "Cuban Sugar Crops".
- 69.** US - Gap Report - Governments should be more transparent.
- 70.** Weather Modification Model Report on the Special Commission on Weather Modification.
- 71.** Weather Modification - Gap Report - New Analysis of National Climate Plans - insufficient progress made....
- 72.** US - Production Gap - Phasing up or Phasing down?
- 73.** Global - Product Gap - Top fossil fuel producers plan even more extraction despite climate promises.
- 74.** Global - How many trees are in the entire world?
- 75.** Global - Bill Gates funding a scheme to cut down 70 million acres of forest in North America - could he be using wild fires instead?
- 76.** Canada Free Press - "CO2 not so villanous after all!"
- 77.** Weather Modification - HAARP holds public open house August 27/22.
- 78.** Canada & US - Air Force Agreement allows ionaspheric research to continue.
- 79.** Global - HAARP and inonospheric heaters locations world wide.
- 80.** Weather Modification - Climate Control trading LLC Creates and Steers hurricanes with inonospheric modification and cloud ionization.



- 81.** Space Weather Modification. HAARP and Sky Heaters.
- 82.** Weather Modification - HAARP essential reading, maps, links.
- 83.** Weather Modification - HAARP currently operational ionospheric heaters "induces controlled temporary modification to the electron temperature at desired altitude." Ionospheric Global Map supplied.
- 84.** Global - Weather Modification Creates Hurricanes and steers hurricanes with ionospheric modification and cloud ionization.
- 85.** Article - The Catastrophic Consequences of Climate Engineering Weather Modification.
- 86.** Canada - British Columbia - BC Government Weather Modification Act.
- 87.** Why did the BC Government repeal the Weather Modification Act? Repealed by then Kevin Falcon, who is running for elected office in October 2024 election. Was it due to the fact that BC Hydro hires a very familiar company Weather Modification Inc. out of North Dakota to do a feasibility study.... read the document for the "rest of the story". You be the judge!
- 88.** Canada - British Columbia - Regional District of Central Kootenay change Climate Action and Land Use Bylaws to form as new ideas after much consultation with the residents.
- 89.** Global - Article "Climate Change the man-made crisis."
- 90.** DUBAI - Weather Modification is making it rain in a sweltering desert.
- 91.** DUBAI - Weather Modification Cloud Seeding United Arab Emirates.
- 92.** DUBAI - Floods Act As Stark Warning Of Unintentional Consequences that we can unleash using Weather Modification techniques.

**UNITED STATES WEATHER MODIFICATION PATENTS  
YEAR NUMBER AND NAME  
1891 TO 2023**

<b>YEAR</b>	<b>NUMBER</b>	<b>NAME</b>
1891	US462795A	Method of Producing Rainfall.
1905	US803180A	Means of producing High Potential electrical
1913	US1103490A	Rain Maker (Balloon Image)
1915	US1225521A	Protection from Poisonous gas in warfare
1918	US1279823A	Process and apparatus for causing precipitation Coalescence of ADUEOUS particles.
1918	US1284982A	Process and apparatus for simulating rainfall.
1920	US1338343A	Process and apparatus for the production of intense artificial clouds, fogs, or mists.
1920	US1358084A	Method of producing fog screens.
1924	US1512783A	Composition for dispelling fog.
1927	US1619183A	Process of Producing Smoke Clouds from Moving Aircraft
1928	US1665267A	Process of Producing Artificial Fogs.
1932	US1892132A	Atomizing attachment for airplan engine exhausts.
1933	US1895765A	Artificial production of fog.
1933	US1928963A	Electrical System and Method (for spraying).
1934	US1957075A	Airplane Spray Equipment.
1935	US1993316A	Apparatus for and method of producing oil fog.
1936	US2045865A	Skywriting apparatus.
1936	US2052626A	Method of dispelling Fog (mist)

1937	US2068987A	Process of Dissipating Fog.
1937	US2097581A	Electrical steam Generator ref. Patent 3990987
1939	US2173756	Process of producing fog and mist by partial flameless Combustion.
1939	US2160900A	Method for Vapor Clearing
1941	US2232728A	Method and Composition for dispelling vapors.
1941	US2257360A	Desensitized and Pentaerythritol Tetranitrate explosive.
1944	US2352677A	Artificial Fog Production
1945	US2476171A	Smoke screen Generator
1946	US2395827A	Airplane Spray Unite (US Dept. of Agriculture)
1946	US2409201A	Smoke-Producing Mixture.
1949	US2476171A	Smoke Screen Generator
1949	US2480967A	AERIAL DISCHARGE DEVICE
1950	US2527230A	METHOD OF CRYSTAL FORMATION AND PRECIPITATION.
1951	US2550324A	PROCESS FOR CONTROLLING WEATHER.
1951	US2570867A	METHOD OF CRYSTAL FORMATION AND PRECIPITATION (GENERAL ELECTRIC)
1952	US2582678A	MATERIAL DISSEMINATING APPARATUS FOR AEROPLANES.
1952	US2611992A	ENGINE EXHAUST OPERATED FLUENT MATERIAL DISTRIBUTOR
1952	US2591988A	PRODUCTION OF TIO <sub>2</sub> PIGMENTS (DUPONT)
1952	US2614083A	METAL CHLORIDE SCREENING SMOKE MIXTURE.
1953	US2633455A	SMOKE GENERATOR.
1954	US2688069A	STEAM GENERATOR.

1955	US2721495A	METHOD AND APPARATUS FOR DETECTING MINUTE CRYSTAL FORMING PARTICLES SUSPENDED IN GASEOUS ATMOSPHERE (GENERAL ELECTRIC)
1956	US2903188A	CONTROL OF TROPICAL CYCLONE FORMATION.
1956	US2730402A	CONTROLLABLE DISPERSAL DEVICE.
1957	US2801322A	DECOMPOSITION CHAMBER FOR MONOPROPELLANT FUEL.
1958	US2835530A	PROCESS FOR THE CONDENSATION OF ATMOSPHERIC HUMIDITY AND DISSOLUTION OF FOG.
1959	US2881335A	GENERATION OF ELECTRICAL FIELDS (HAARP-FOR RE-CHARGING CLOUDS).
1959	US2871344A	LONG DISTANCE COMMUNICATION SYSTEM.
1959	US2908442A	METHOD FOR DISPERSING NATURAL ATMOSPHERIC FOGS AND CLOUDS.
1960	US2962450A	FOG DISPELLING COMPOSITION (SEE REFERENCES).
1960	US2963975A	CLOUD SEEDING CARBON DIOXIDE BULLET.
1961	US2986360A	AERIAL INSECTICIDE DUSTING DEVICE.
1962	US3044911A	PROPELLANT SYSTEM
1962	US3046168A	CHEMICALLY PRODUCED COLORED SMOKE
1962	US3056556A	METHOD OF ARTIFICIALLY INFLUENCING THE WEATHER
1962	US3019989A	ATMOSPHERIC SPACE CHARGES MODIFICATION CONTAINERS SILVER IODATE, AMMONIUM NITRATE, NITROCELLULOSE AND NITRATE ESTERS.
1964	US3120459A	COMPOSITE INCENDIARY POWDER CONTAINING METAL COATED OXIDIZING SALT.

1964	US3126155A	SILVER IODIDE CLOUD SEEDING GENERATOR (MAIN COMMERCIAL INGREDIENT.)
1964	US3140207	PYROTECHNIC COMPOSITION
1964	US3127107A	GENERATION OF ICE-NUCLEATING CRYSTALS.
1964	US3131131A	ELECTROSTATIC MIXING IN MICROBIAL CONVERSIONS.
1965	US3174150A	SELF-FOCUSING ANTENNA SYSTEM (HARRP)
1966	US3257801A	PYROTECHNIC COMPOSITION COMPRISING SOLID OXIDIZER, BORON AND ALUMINIUM ADDITIVE BINDER.
1966	US3234357A	ELECTRICALLY HEATED SMOKE PRODUCING DEVICE.
1966	US3274035A	METALIC COMPOSITION FOR PRODUCTION OF HYGROSCOPIC SMOKE.
1966	US3284005	WEATHER CONTROL BY ARTIFICIAL MEANS
1967	US3300721A	MEANS FOR COMMUNICATION THROUGH A LAYER OF IONIZED GASES (HAARP)
1967	US3313487A	CLOUD SEEDING APPARATUS.
1967	US3338476A	A HEATING DEVICE FOR USE WITH AEROSOL CONTAINERS.
1968	US3140489A	AUTOMATICALLY ADJUSTABLE AIRFOIL SPRAY SYSTEM WITH PUMP.
1968	US3378201A	METHOD OF PRECIPITATING ATMOSPHERE WATER MASSES.
1968	US3148184A	SMOKE PRODUCING PROPELLANT.
1969	US33429507A	RAINMAKER.
1969	US3430533A	AIRCRAFT DISPENSER POD HAVING SELF- SEALING INJECTION TUBES.
1969	US3432208A	FLUIDIZED PARTICLE DISPENSER AIR FORCE.

1969	US3437502A	TITANIUM DIOXIDE PIGMENT COATED WITH SILICA AND ALUMINIUM (DU PONT).
1969	US3441214A	METHOD AND APPARATUS FOR SEEDING CLOUDS.
1969	US3445844A	TRAPPED ELECTROMAGNETIC RADIATION COMMUNICATION SYSTEM.
1969	US3456880A	METHOD OF PRODUCING PRECIPITATION FROM THE ATMOSPHERE.
1970	US 3518670A	ARTIFICIAL ION CLOUD
1970	US3517 512A	APPARATUS FOR SUPPRESSING CONTRAILS
1970	US3534906A	CONTROL OF ATMOSPHERIC PARTICLES.
1970	US3545677A	METHOD OF CLOUD SEEDING.

**UNITED STATES WEATHER MODIFICATION PATENTS**

**YEAR NUMBER PATENT**

**1971 TO 2024**

1971 US3564253A System and method for irradiation of plant surface areas.

1971 US3587966A Freezing nucleation.

1971 US3595477 Fog dispensing method and composition.

1971 US3601312A Method of increasing the likelihood of precipitation by the artificial introduction of sea water into the atmosphere win ward of an air lift region.

1971 US3608810A Method of treating atmospheric conditions.

1971 US3608820A Treatment of atmospheric condition by intermittent dispensing of materials therein.

1971 US3613992A Weather modification method.

1971 US3630950A Combustible for generating aerosolo, particularly suitable for cloud modification and weather control and aerosolization process.

1973 USRE29142A Combustible composition for generating aerosolo, particularly suitable for cloud modification and weather control and aerosolization process.

1971 US3659785A Weather Modification utilizing microencapsulated material.

1972 US3666176A Solar temperature inversion device.

1972 US3677840A Pyrotechnics comprising Oxide of silver for weather modification use.

1972 US3690552A Fog dispersal.

1973 US3722183A Device for clearing impurities from the atmosphere.

1973 US3748278A Process and agents having an influence on the weather.

1973 US3751913A Barium release system

1973 US3769107A Pyrotechnic composition for generating lead based smoke.

1974 US3784099A Air pollution control method.

1974 US3785557A Cloud seeding system.

1974 US3788543A Uniform size particles generator.

1974 US3795626A Pyrotechnic formulation for weather modification comprising a mixture of iodates.

1974 US3808595A Chaff Dispensing system.

1974 US3813875A Rocket having barium release system to create ION clouds in upper atmosphere.

1974 US3835059A Method of generating Ice Nuclei smoke particles for weather modification and apparatus therefore.

1974 US3835293A Electrical heating apparatus for generating super heated vapors.

1975 US3858895A Ice Necleation by MICAS.

1975 US 3877642A Freezing nucleant.

1975 US3882393A Communication system utilizing modulation of the characteristic polarization of the IONISPHERE.

1975 US3887580A Method of crystallization of water in to super cooled clouds and fogs and reagent useful in said method.

1975 US3896993A Process for local modification of fog and clouds for triggering their precipitation and for hindering the development of hail producing clouds.

1975 US3899129A Apparatus for generating ice nuclei smoke particles for weather modification.

1975 US3915379A Method of controlling weather.

1976 US3940059A Method of fog dispersion.

1976 US3940060A Vortex ring generator.



1976 US3990987A Smoke generator.

1976 US3992628A Counter measure system for laser radiation.

1976 US3994437A Broadcast dissemination of trace quantities of biological active chemicals.

1977 US4042196A Method and apparatus for triggering a substantial change in earth characteristics and measuring earth changes.

1977 RE29142 Combustible composition for generating aerosols, particularly suitable for cloud modification and weather control and aerosolization process.

1977 US400982A Organic nucleating agent for both warm and cold clouds.

1977 US4035726 Method of controlling and/or improving high-latitude and other communications or radio wave surveillance systems by partial control of radio wave et al.

1982 US4362271A Procedure for the artificial modification of atmosphere precipitators as well as compounds with a dimethyl sulfoxide base for use in carrying out seed procedure.

1983 US4402480A Atmosphere modification satellite.

1983 US4412654A Laminar Microjet atomizer and method of aerial spraying of liquids.

1986 US4600147A Liquid propane generator for cloud seeding apparatus.

1987 US4653690A Method of producing cumulus clouds.

1987 US4643355A Method of and apparatus for modification of climate condition.

**1987 US468605A August 11, 1987 HAARP Patent/EASTUND Patent - method and apparatus for altering a region in the earth's atmosphere, ionosphere and/or magnetosphere.**

1989 US4873928A Nuclear-sized explosions without radiation.

1991 US5003186A Stratospheric Welsback seeding for reduction of global Warming.

- 1991 US5041834A Artificial ionospheric mirror composed of plasma layer which can be tilted.
- 1992 US5104069A Apparatus and method for ejecting matter from an aircraft.
- 1995 US5436039A Artificial snow in an aggregate form of snow granules.
- 1998 US5762298A Use of artificial satellites in earth's orbit adaptivity to modify the effect that solar radiation would otherwise have on earth's weather.
- 1999 US5984239A Weather modification by artificial satellites.
- 2001 20030085296 Hurricane and toronado control.**
- 2002 2002009338 Influencing weather patterns by way of altering surface or subsurface ocean water temperature.**
- 2008 US8043809A Sea water based carbon dioxide disposal.
- 2008 20080203328 Outer space sun screen for reducing global warming.
- 2008 US8012453A Carbon sequestration and production of hydrogen and hydride.
- 2010 US20100127224 Atmospheric injection for reflective aerosol for mitigating global warming.
- 2011 US8079545A Ground based manipulation and control over aerial vehicles during non-flying operations.
- 2012 20120024971 Method for environmental modification and climate control.
- 2012 US 0117003A Geoengineering method of Business using carbon counter balance credits.
- 2013 20130015250 January 17, 2013 - Concept and model for utilizing high frequency or radar or microwave producing or emitting devices to produce, effect, create or induce lightening or light speed or visible to naked eye electro-magnetic pulse or pulses, acoustic or ultrasonic shock waves or BOOM in the air, space enclosed or upon any object or mass, to be solely for or as part of a system, platform or device including weaponry and weather modification.**

- 2013 US8439278A Apparatus for producing a mass of water vapor, apparatus for producing, moving and climbing a mass of water vapor, and method of causing an artificial stimulation of rain.
- 2013 20130175352 Method to influence the **direction of travel of hurricanes.**
- 2013 20130186127 Ice floaters for facilitating ice freezing on water surface.
- 2013 20140055876 Controlling land surface temperatures using stratospheric airships and reflectors.**
- 2014 20140131471 Apparatus to channel large air masses for climate modification.
- 2014 20140145002 System for facilitating cloud formation and cloud precipitation.
- 2014 US8825241A Autonomous wave-powered substance distribution vessels for fertilizing plankton, feeding fish, and **sequestering Carbon from the atmosphere.**
- 2015 20150230415 Method of decreasing local temperature using high ALBEDO method.
- 2015 US8844363A Production or distribution of radiative forcing agents
- 2015 20150337224 Microwave acceleration of carbon gasification reactions.
- 2016 US9429348A Method and device for producing snow.
- 2016 US949111A Method for modifying environmental conditions while being comprised of magnetic material.
- 2017 US9589473A Method for automatically displaying flight path, seeding path and weather data.
- 2917 US9715039 Apparatus and systems for smart seeding within cloud formation.,
- 2017 20170217587 Vehicles and systems for weather modification.
- 2018 20180217119 Process and method for the enhancement of sequestering atmospheric carbon through ocean iron fertilization method for calculating net carbon capture from said process and method.
- 2019 US2019203461 Airships for Weather Manipulation.

- 2019 US1037590A Rain induced by **Supercontinuum laser beams**
- 2019 US10433408 Methods for affecting **spinning atmospheric phenomena.**
- 2019 US10435165A Electrically assisted propulsion control system.
- 2019 US9924640A Modifying sunlight scatter in the upper atmosphere.
- 2020 W02020148644A1 3D reduced Graphene Oxide/Sco2 composite for Ice Neucleation.**
- 2020 20200261939 Apparatus for generating and optically characterizing an aerosol.
- 2020 20200187430 Helical, artificial generator of tornados, hurricanes, yellow dust and typhoons.(June 18, 2020)**
- 2021 20200315104 Propagating sound through bodies of water to generate and Direct the wind for the purpose of moderating and Weather patterns.**
- 2021 20210037719 Planetary weather modification system.
- 2021 US1088051A Intelligent system for weather modification.
- 2021 2021063943 Bacterial preparations for ice nucleation.
- 2021 20210163157 Artificial ring, solenoid system to terraform.
- 2021 20210352856 Aerial electrostatic system for weather modification.
- 2021 20210329922 Composition and method of enhanced **CO2 capture and storage.**
- 2022 2022003028 Apparatus for precipitation of atmospheric water.
- 2022 20220113450 Calculation method of total artificial precipitation in seeding areas compared to non-seeding areas.
- 2022 US11274534A March 15, 2022 - Artificial rain to support water flooding in remote **oil fields.**
- 2023 20220268505 Method and apparatus for making falling snow.
- 2023 US11330768A System and method for producing rain clouds.

- 2023 20230075132 System for moderating energy absorption at the earth's surface with a programable forcing network of climate control panels.
- 2923 20230050373 Electro-magnetic system to modify weather.
- 2023 20230117390 System and method for proactive and reversible mitigation of storm/hurricane/typhoon/cyclone.
- 2023 20230126982 Method for analyzing effect of hygroscopic seeding material sprayed on ground aerosol concentration through airborne cloud seeding.
- 2023 20230141493 Device for unmanned aerial vehicle to deploy a **rainfall catalytic bomb.**
- 2023 2023014986 Coated Chloride salt particles and method of making and using the same.

COUNTY OF LOS ANGELES  
WEATHER MODIFICATION PROJECT



FINAL MITIGATED NEGATIVE DECLARATION

Proposed by: FWC by  
The County of Los Angeles Department of Public Works

October 6, 2009

ICAS Report No. 106  
November 1966

A Recommended National Program  
In Weather Modification

A Report to the  
Interdepartmental Committee for  
Atmospheric Science  
by  
Hector E. Acyell  
Summary also prepared for State Water and Air Resources  
National Resources & Planning Board  
Washington, D.C.  
Interdepartmental Committee  
for  
Atmospheric Science

Geoen지니어링: Science and Governance  
Environment Canada  
July 5, 2012

Aurora  
Engineering & Construction

Geoen지니어링 Cost Analysis

First Report

Prepared Under Contract to  
The University of Calgary

Contract Number: UCC015001

Aurora Report Number: ARI01302  
July 27, 2011

UNITED STATES  
DEPARTMENT OF WATER RESOURCES  
BULLETIN No. 1664  
WEATHER MODIFICATION  
OPERATIONS IN CALIFORNIA  
OCTOBER 1, 1963-SEPTEMBER 30, 1964

STATE OF CALIFORNIA  
DEPARTMENT OF WATER RESOURCES  
DIVISION OF WATER RESOURCES PLANNING

Report on  
WEATHER MODIFICATION OPERATIONS IN CALIFORNIA  
JULY 1962 - JUNE 1966

REPORT NO. 1664

WEATHER MODIFICATION OPERATIONS IN CALIFORNIA

OCTOBER 1, 1963-SEPTEMBER 30, 1964

U.S. GOVERNMENT PRINTING OFFICE: 1964

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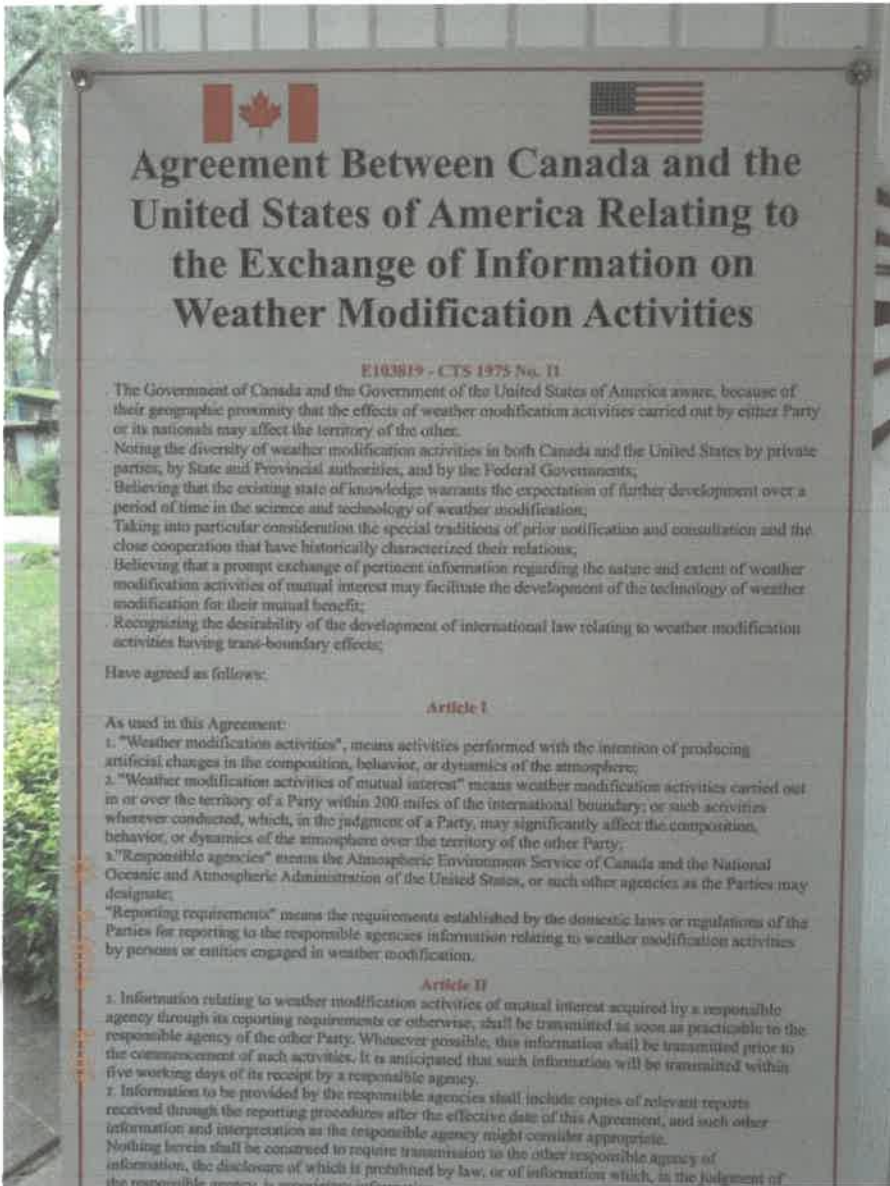
1664-100-0000

NEED PROOF?

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To be renewed every three years -  
 first signed 1974.



# Treaties

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## View Treaty - E103819

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[Print friendly version](#)

### Agreement Between Canada and the United States of America Relating to the Exchange of Information on Weather Modification Activities

**E103819 - CTS 1975 No. 11**

The Government of Canada and the Government of the United States of America,

Aware, because of their geographic proximity, that the effects of weather modification activities carried out by either Party or its nationals may affect the territory of the other;

Noting the diversity of weather modification activities in both Canada and the United States by private parties, by State and Provincial authorities, and by the Federal Governments;



Believing that the existing state of knowledge warrants the expectation of further development over a period of time in the science and technology of weather modification;

Taking into particular consideration the special traditions of prior notification and consultation and the close cooperation that have historically characterized their relations;

Believing that a prompt exchange of pertinent information regarding the nature and extent of weather modification activities of mutual interest may facilitate the development of the technology of weather modification for their mutual benefit;

Recognizing the desirability of the development of international law relating to weather modification activities having transboundary effects;

Have agreed as follows:

## Article I

As used in this Agreement:

- a. "Weather modification activities", means activities performed with the intention of producing artificial changes in the composition, behaviour, or dynamics of the atmosphere;
- b. "Weather modification activities of mutual interest" means weather modification activities carried out in or over the territory of a Party within 200 miles of the international boundary; or such activities wherever conducted, which, in the judgment of a Party, may significantly affect the composition, behaviour, or dynamics of the atmosphere over the territory of the other Party;
- c. "Responsible agencies" means the Atmospheric Environment Service of Canada and the National Oceanic and Atmospheric Administration

of the United States, or such other agencies as the Parties may designate;

- d. "Reporting requirements" means the requirements established by the domestic laws or regulations of the Parties for reporting to the responsible agencies information relating to weather modification activities by persons or entities engaged in weather modification.

## Article II

1. Information relating to weather modification activities of mutual interest acquired by a responsible agency through its reporting requirements or otherwise, shall be transmitted as soon as practicable to the responsible agency of the other Party. Whenever possible, this information shall be transmitted prior to the commencement of such activities. It is anticipated that such information will be transmitted within five working days of its receipt by a responsible agency.
2. Information to be provided by the responsible agencies shall include copies of relevant reports received through the reporting procedures after the effective date of this Agreement, and such other information and interpretation as the responsible agency might consider appropriate.
3. Nothing herein shall be construed to require transmission to the other responsible agency of information, the disclosure of which is prohibited by law, or of information which, in the judgment of the responsible agency, is proprietary information.

## Article III

The responsible agencies shall consult with a view to developing compatible reporting formats, and to improving procedures for the exchange of information.

## Article IV

In addition to the exchange of information pursuant to Article II of this Agreement, each Party agrees to notify and to fully inform the other concerning any weather modification activities of mutual interest conducted by it prior to the commencement of such activities. Every effort shall be made to provide such notice as far in advance of such activities as may be possible, bearing in mind the provisions of Article V of this Agreement.

## Article V

The Parties agree to consult, at the request of either Party, regarding particular weather modification activities of mutual interest. Such consultations shall be initiated promptly on the request of a Party, and in cases of urgency may be undertaken through telephonic or other rapid means of communication. Consultations shall be carried out in light of the Parties' laws, regulations, and administrative practices regarding weather modification.

## Article VI

The Parties recognize that extreme emergencies, such as forest fires, may require immediate commencement by one of them of weather modification activities of mutual interest notwithstanding the lack of sufficient time for prior notification pursuant to Article IV, or for consultation pursuant to Article V. In such cases, the Party commencing

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such activities shall notify and fully inform the other Party as soon as practicable, and shall promptly enter into consultations at the request of the other Party.

## Article VII

Nothing herein relates to or shall be construed to affect the question of responsibility or liability for weather modification activities, or to imply the existence of any generally applicable rule of international law.

## Article VIII

Each Party shall conduct an annual review of this Agreement while it remains in force, and shall inform the other of its views regarding the Agreement's operation and effectiveness and the desirability of its amendment to reflect the evolution of the science and technology of weather modification and of international law. The Parties shall meet periodically, by mutual agreement, or at the request of either, to review the implementation of this Agreement or to consider other issues related to weather modification.

## Article IX

This Agreement shall enter into force upon signature. It may be amended by mutual agreement of the Parties and may be terminated by either Party upon six months written notice to the other Party.

IN WITNESS WHEREOF the Representatives of the two Governments have signed this Agreement.

DONE in duplicate at Washington this twenty sixth day of March 1975 in English and French, each version being equally authentic.

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Jeanne Sauvé

For the Government of Canada

Christian A. Herter

For the Government of the United States of America

**WEATHER MODIFICATION AGREEMENT**

Convention on the Prohibition of Military or Any Other Hostile Use of  
Environmental Modification Techniques

Bureau of International Security and Nonproliferation

Signed in Geneva May 18, 1977  
Entered into force October 5, 1978

<https://2009-2017.state.gov/t/isn/4783.htm>

**Convention on the Prohibition of Military  
or  
Any Other Hostile Use of Environmental Modification  
Techniques**

Convention on the Prohibition of Military or Any Other Hostile Use of  
Environmental Modification Techniques Bureau of International Security and  
Nonproliferation

<https://2009-2017.state.gov/t/isn/4783.htm>

**Signed in Geneva May 18, 1977  
Entered into force October 5, 1978**

Use of environmental modification techniques for hostile purposes does not play a major role in military planning at the present time. Such techniques might be developed in the future, however, and would pose a threat of serious damage unless action was taken to prohibit their use. In July 1972 the U.S. Government renounced the use of climate modification techniques for hostile purposes, even if their development were proved to be feasible in the future.

Both the U.S. Senate and the House of Representatives held hearings, beginning in 1972, and the Senate adopted a resolution in 1973 calling for an international agreement "prohibiting the use of any environmental or geophysical modification activity as a weapon of war...." In response to this resolution, the President ordered the Department of Defense to undertake an in-depth review of the military aspects of weather and other environmental modification techniques. The results of this study and a subsequent interagency study led to the U.S. Government's decision to seek agreement with the Soviet Union to explore the possibilities of an international agreement.

During the summit meeting in Moscow in July 1974, President Nixon and General Secretary Brezhnev formally agreed to hold bilateral discussions on how to bring about "the most effective measures possible to overcome the dangers of the use of environmental modification techniques for military purposes." Three sets of discussions were held in 1974 and 1975, resulting in agreement on a common approach and common language.

In August 1975, the chief representatives of the U.S. and the Soviet delegations to the Conference of the Committee on Disarmament (CCD) tabled, in parallel, identical draft texts of a "Convention on the Prohibition of Military or any Other Hostile Use of Environmental Modification Techniques."

The Convention defines environmental modification techniques as changing -- through the deliberate manipulation of natural processes -- the dynamics, composition or structure of the earth, including its biota, lithosphere, hydrosphere, and atmosphere, or of outer space. Changes in weather or climate patterns, in ocean currents, or in the state of the ozone layer or ionosphere, or an upset in the ecological balance of a region are some of the effects which might result from the use of environmental modification techniques.

Intensive negotiations held in the CCD during the spring and summer of 1976 resulted in a modified text and, in addition, to understandings regarding four of the Treaty articles. These were transmitted to the U.N. General Assembly for consideration during the fall session.

Article I sets forth the basic commitment: "Each State Party to this Convention undertakes not to engage in **military** or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other State Party." An understanding defines the terms "widespread, long-lasting or severe." "Widespread" is defined as "encompassing an area on the scale of several hundred square kilometers"; "long-lasting" is defined as "lasting for a period of months, or approximately a season"; and "severe" is defined as "involving serious or significant disruption or harm to human life, natural and economic resources or other assets."

With regard to peaceful uses of environmental modification techniques, the convention provides that the parties shall have the right to participate in the fullest possible exchange of scientific and technological information.

In addition to the provision for mutual consultation regarding complaints and for resource to the Security Council, the revised draft establishes the framework for a Consultative Committee of Experts, which would meet on an ad hoc basis when so requested by a party, in order to clarify the nature of activities suspected to be in violation of the convention. Responding to the suggestion of many delegations, the revised text incorporates a provision for periodic conferences to review the Conventions operation.

During the 1976 fall session, the U.N. General Assembly held extensive debate on the draft Convention, including several resolutions relating thereto. On December 10, the General Assembly adopted a resolution by a vote of 96 to 8, with 30 abstentions, which referred the Convention to all member nations for



their consideration, signature, and ratification, and requested the U.N. Secretary-General to open the Convention for signature.

The U.N. Secretary-General officiated at the signing ceremony in Geneva on May 18. The United States joined 33 other nations in signing the Convention. The Convention entered into force on October 5, 1978, when the 20th state to sign the Convention deposited its instrument of ratification. President Carter transmitted the Convention to the Senate on September 22, 1978.

The Senate gave its advice and consent to ratification on November 28, 1979, by a vote of 98-0. The President ratified the Convention December 13, 1979. The Convention entered into force for the United States on January 17, 1980, when the U.S. instrument of ratification was deposited in New York.

#### Treaty Text

#### Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques

Signed in Geneva May 18, 1977

Entered into force October 5, 1978

Ratification by U.S. President December 13, 1979

U.S. ratification deposited at New York January 17, 1980

<https://2009-2017.state.gov/t/isn/4783.htm>

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No. 18881

UNITED STATES OF AMERICA and CANADA

No. 18881

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**UNITED STATES OF AMERICA  
and  
CANADA**

**Memorandum of Understanding on co-operation in a 1979  
High Plains co-operative experiment in weather  
modification. Signed at Ottawa on 11 June 1979 and at  
Washington on 20 June 1979**

*Authentic text: English.*

*Registered by the United States of America on 30 May 1980.*

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**ÉTATS-UNIS D'AMÉRIQUE**  
**et**  
**CANADA**

**Mémoire d'accord relatif à la collaboration dans le  
cadre du projet expérimental de coopération de 1979  
dans la région des Hautes Plaines. Signé à Ottawa le  
11 juin 1979 et à Washington le 20 juin 1979**

*Texte authentique : anglais.*

*Enregistré par les États-Unis d'Amérique le 30 mai 1980.*

Vol. 1180, I-18881

MEMORANDUM OF UNDERSTANDING<sup>1</sup> BETWEEN THE BUREAU OF RECLAMATION OF THE UNITED STATES OF AMERICA, THE ATMOSPHERIC ENVIRONMENT SERVICE AND THE NATIONAL RESEARCH COUNCIL OF CANADA ON COOPERATION IN THE 1979 HIGH PLAINS COOPERATIVE EXPERIMENT

The Bureau of Reclamation (BOR) of the United States Department of the Interior, the Atmospheric Environment Service (AES) and the National Research Council (NRC) of Canada affirm their mutual desire to cooperate in the field of weather modification research consistent with the spirit and applicable provisions of the Agreement between the United States of America and Canada relating to the Exchange of Information on Weather Modification Activities, signed March 26, 1975.<sup>2</sup>

Accordingly, AES, NRC and BOR agree that such cooperation will continue with Canadian participation in the 1979 High Plains cooperative experiment (HIPLEX) conducted by BOR.

1. The objective of this cooperative research is to study methods of increasing rainfall on the High Plains. The experiment and measurements will take place in the vicinity of Miles City, Montana.

2. In conducting the 1979 HIPLEX, BOR will use its best efforts to carry out the following responsibilities:

- (a) Involve AES and NRC in the research planning and data analysis for the 1979 HIPLEX;
- (b) Provide Canadian scientists with Montana HIPLEX data stored in the project data bank on a request basis;

- (c) Act as a liaison between Canadian scientists and the BOR contractors;
- (d) Provide office and, subject to availability, aircraft hangar facilities for Canadian personnel stationed in Miles City during the field programme.

3. In participating in the 1979 HIPLEX, AES and NRC will use their best efforts to carry out the following responsibilities:

- (a) Provide an NAE Twin Otter (CF-POK-X) equipped to make microphysical and dynamical measurements for cloud physics/weather modification research; the aircraft would be stationed in Miles City, Montana, for four weeks in June/July 1979;
- (b) Provide a ground based minicomputer system in Miles City, Montana, for the field period; this system would enable preliminary analysis and equipment checks to be performed;
- (c) Provide approximately five professional (scientific) and six technical personnel to direct the Canadian research component, operate equipment, and analyze data while the Twin Otter is stationed in Miles City;

<sup>1</sup> Came into force on 20 June 1979 by signature, in accordance with paragraph 10.  
<sup>2</sup> United Nations, *Treaty Series*, vol. 977, p. 385.

Vol. 1180, I-18881

- (d) Provide a preliminary report summarizing the Twin Otter data within three months of the completion of the field project and a detailed scientific analysis report within 18 months;
- (e) Organize and host a workshop during the 1979/80 winter to discuss and analyze results of the programme;
- (f) Provide data inventory information on data collected by the Canadian aircraft to the Bureau of Reclamation within 30 days following the end of the field season; provide, where possible, a copy of the final archived data, on 9-track magnetic tape in coded format with full documentation to the Bureau within 60 days following the end of the field season.

4. AES/NRC and BOR will use their best efforts to arrange free customs clearance for equipment required in this project, subject to the laws and regulations in force in their respective countries.

5. AES/NRC and BOR will cover the cost of their respective responsibilities including salaries, transportation of equipment and personnel travel. It is not envisaged that funds will be exchanged between the United States and Canadian sides.

6. Results of experimentation in this project will be made available in general through publication in appropriate journals or other established channels.

7. Each agency may release public information regarding its own portion of the project. With regard to portions of the project involving the other agencies, public information may be released only after suitable coordination amongst the agencies. Where possible, such releases will be exchanged prior to publication. It is understood that AES, NRC and BOR will each have the right to use, disclose or duplicate such releases for their own purposes.

8. It is understood that the ability of AES, NRC and BOR to carry out their responsibilities pursuant to this Memorandum is subject to the availability of appropriated funds.

9. The United States and Canadian sides will each designate an official who will coordinate participation in the 1979 HIPLEX.

10. This Memorandum will enter into force upon signature.

Signed at Wash., D.C., on June 20, 1979, in two copies, for the Bureau of Reclamation of the United States Department of the Interior:

Signed at Ottawa on June 11, 1979, in two copies, for the Atmospheric Environment Service and the National Research Council of Canada:

*Signature:* [Signed]

*Name:* R. KEITH HIGGINSON

*Title:* Commissioner of Reclamation

*Date:* June 20, 1979

*Signature:* [Signed]

*Name:* A. E. COLLIN

*Title:* Assistant Deputy Minister

*Date:* June 11, 1979

For the National Research Council:

*Signature:* [Signed—Signé]<sup>1</sup>

<sup>1</sup> Signed by F. R. Thurston—Signé par F. R. Thurston.

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## **Canada-US agreement on Weather and Climate Collaboration**

Government of Canada Weather Information service  
U.S. National Oceanic & Atmospheric Administration (NOAA)  
North American Climate Service Partnership website

Official title: Memorandum of Understanding between the National Oceanic and Atmospheric Administration U.S. Department of Commerce United States of America and the Department of the Environment Canada for Collaboration on Weather, Climate and Other Earth Systems for the Enhancement of Health, Safety and Economic Prosperity

<https://www.canada.ca/en/environment-climate-change/corporate/international-affairs/partnerships-countries-regions/north-america/canada-united-states-weather-climate-collaboration.html>

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In June 2021, Canada passed its own form of climate change legislation, the **Net-Zero Emissions Accountability Act**. Modeled after the U.K. Climate Change Act, Canada's legislation introduces a legal requirement for the country to achieve net-zero emissions by 2050, with mandatory target-setting and reporting processes.

It also introduces a requirement for an emissions reduction plan for 2030 and mandates "milestone years" in 2035, 2040 and 2045 — for which emissions reduction targets must be set at least 10 years in advance.

However, Canada's law does not enshrine sufficient interim targets and the first milestone year is delayed until 2030, several years after the next federal election (and a possible change in government). Moreover, these targets are set relative to only a 2005 baseline, instead of the U.K.'s, which are more stringent (relative to 1990).

Most importantly, Canada's law does not give sufficient independence or resources to the Net- Zero Advisory Body (NZAB), the expert panel that advises the government on climate policy.

Unlike the U.K. Climate Change Committee, the composition and terms of reference of the NZAB are established by the minister of environment and climate change. It is required to draw "logistical, administrative, and policy support" from within government departments instead of housing its own secretariat.

Some critics worry that this arrangement could impede accountability by weakening the NZAB's ability to perform independent analyses and criticize policy development — a function that has been a key factor in the U.K.'s success.

<https://policyoptions.irpp.org/magazines/august-2023/u-k-climate-change-act-lessons/>

#### Interdepartmental co-ordination

Another key lesson Canada can learn from the U.K. is the importance of fostering interdepartmental co-ordination mechanisms.

Since 2008, climate change in the U.K. has been elevated from being a niche



concern of a single government agency to the focus of a broadly cohesive, whole-of-government strategy, which has created a culture of accelerating ambition.

In addition to two central cabinet-level committees, including a climate action strategy committee chaired by the prime minister, the U.K. has a climate change national strategy implementation group and a net-zero steering board that liaise with, and collaborate with, department-level working groups at each ministry.

This complex structure helps create responsibility for climate action, while ensuring the adoption of detailed sectoral strategies to complement national targets.

The British government has also invested significant funds in improving the co-ordination function, with its Business, Energy and Industrial Strategy Department assigning 40 staff to oversee co-operation between departments.

This cross-department approach has meant that climate action has stopped being siloed and is instead viewed as a catalyst for economic transformation.

Since passage of the act, the U.K. has moved to unite energy and climate policymaking with broader economic and industrial strategy, moving beyond the false dichotomy of “economy versus environment” that has hampered other jurisdictions, including Canada.

### Green industrial strategy

With its 10-point plan for a green industrial revolution and its net-zero strategy, the U.K. aims to rapidly scale up climate solutions, phasing out diesel and gas vehicles, accelerating the adoption of heat pumps and fully decarbonizing by 2035.

Canada’s approach to green industrial policy is relatively scattershot by comparison.

Recent announcements have committed more than \$70 billion to support clean industries, but many investments represent little more than a handout to legacy industries, including massive tax credits for carbon capture, utilization and storage that benefit the fossil fuel sector.

Under hazy skies, opportunities for ground-up climate disaster policy changes Canada's flood-risk management needs stronger leadership

New research from Nature Climate Change, a monthly scientific journal, suggests Canada could face up to \$100 billion in stranded assets as early as 2036, without a rapid transition away from fossil fuels. Given the scale of the change that is required, Canada must increase its annual climate spending to two per cent of GDP in a way that will help reduce its share of global carbon emissions.

While Canada has recently implemented several promising climate policies, institutional innovations offered in the U.K. Climate Change Act could serve as important lessons to build stronger governance for climate success in Canada.

Policymakers could consider implementing interim targets prior to 2030, providing more independence to the NZAB, and enhancing cross-government co-ordination to build climate policy into a whole-of-government strategy.

<https://policyoptions.irpp.org/magazines/august-2023/u-k-climate-change-act-lessons/>

## WEATHER MODIFICATION CANADA AND USA

### Owning the Weather in 2025 Weather as a Force Multiplier

2025 is a study designed to comply with a directive from the chief of staff of the Air Force to examine the concepts, capabilities, and technologies the United States will require to remain the dominant air and space, force in the future. Presented on 17 June 1996, this report was produced in the **Department of Defense school environment of academic freedom** and in the interest of advancing concepts related to national defense. The views expressed in this report are those of the authors and do not reflect the official policy or position of the United States Air Force, Department of Defense, or the United States.

Owning the Weather in 2025 Weather as a Force Multiplier

<https://web.archive.org/web/20060221192253/http://csat.au.af.mil/2025/volume3/vol3ch15.pdf>

#### Executive Summary

**In 2025, US aerospace forces can “own the weather”** by capitalizing on emerging technologies and focusing development of those technologies to war-fighting applications. Such a capability offers the war fighter tools to shape the battle space in ways never before possible. It provides opportunities to impact operations across the full spectrum of conflict and is pertinent to all possible futures. The purpose of this paper is to outline a strategy for the use of a future weather-modification system to achieve military objectives rather than to provide a detailed technical road map.

A high-risk, high-reward endeavor, weather-modification offers a dilemma not unlike the splitting of the atom. **While some segments of society will always be reluctant to examine controversial issues such as weather-modification, the tremendous military capabilities that could result from this field are ignored at our own peril.** From enhancing friendly operations or disrupting those of the enemy via small-scale tailoring of natural weather patterns to complete dominance of global communications and counter space control, weather-modification offers the war fighter a wide-range of possible options to defeat or coerce an adversary. Some of the potential capabilities a weather-modification system could provide to a war-fighting commander in chief (CINC) are listed in table 1.

Technology advancements in five major areas are necessary for an integrated weather-modification capability: (1) advanced nonlinear modeling techniques, (2) computational capability, (3) information gathering and transmission, (4) a global sensor array, and (5) weather intervention techniques. Some intervention tools exist today and others may be developed and refined in the future.

<https://web.archive.org/web/20060221192253/http://csat.au.af.mil/2025/volume3/vol3ch15.pdf>

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## **The Environmental Modification Convention (ENMOD) Weather Warfare Ban**

**THIS PAGE IS ESPECIALLY FOR THOSE WHO THINK THAT CHEM TRAILS AND WEATHER MODIFICATION IS A JOKE - THIS IS TO WAKE THEM UP!**

**Please be sure to scroll to the bottom of the page of this link to see all the evidence presented in videos and copies of documentation.**

<https://climateviewer.com/environmental-modification-convention-enmod-weather-warfare-ban/>

**December 10, 1976 - January 17, 1980**

Last Updated: Wednesday, Jun 16, 2021

Geoengineering • Weather Modification • Space Weather Modification

The Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques

Parties to the Environmental Modification Convention undertake not to engage in military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other State Party.

In July 1972 the U.S. Government renounced the use of climate modification techniques for hostile purposes, even if their development were proved to be feasible in the future. On December 10, 1976 the General Assembly adopted a resolution by a vote of 96 to 8, with 30 abstentions, which referred the Convention to all member nations. The Senate gave its advice and consent to ratification on November 28, 1979, by a vote of 98-0. The President ratified the Convention December 13, 1979. The Convention entered into force for the United States on January 17, 1980, when the U.S. instrument of ratification was deposited in New York. - Federation of American Scientists [1]

The Convention was approved by the General Assembly of the United Nations in its resolution "31/72" 1 of 10 December 1976. In application of paragraph 2 of the said resolution, the Secretary-General decided to open the Convention for signature and ratification by States from 18 to 31 May 1977 at Geneva, Switzerland. Subsequently, the Convention was transmitted to the Headquarters of the Organization of the United Nations at New York, where it was open for signature by States until 4 October 1978. -

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United Nations [2]

Briefing Books | Prohibiting Environmental Warfare.

In the early 1970's, the Nixon administration confronted the potential implications of a burgeoning new field of technological development: environmental and weather modification, especially modifications that could be used for warfare, according to the May 2, 1972, National Security Decision Memorandum Number 165. The administration first addressed the issue in 1972, culminating in the 1972 Report of the National Security Council (NSC) Under Secretaries Committee on International Aspects of Weather Modification. Then, in August of 1973, the U.S. Senate passed a resolution calling for countries to pass a treaty prohibiting environmental or geophysical manipulation as a weapon of war.

For the second time during his administration, Nixon requested that the NSC Under Secretaries Committee take up the issue on April 26, 1974.

In the Committee, Bill Clements argued that the U.S. should maintain the ability to work on R&D related to environmental modification techniques, but supported the U.S. developing an international agreement to ban the use of such techniques in warfare.

On July 3, 1974, President Nixon and Soviet General Secretary Leonid Brezhnev released a joint statement advocating for "the most effective measures possible to overcome the dangers of the use of environmental modification techniques for military purposes." In that spirit, they decided to hold bilateral talks to outline a possible treaty.

Despite the upcoming bilateral talks on environmental warfare, the Soviets took the diplomatic initiative without American input. In August of 1974, Soviet Foreign Minister Andrei Gromyko sent a letter to the United Nations Secretary General Kurt Waldheim proposing that the General Assembly pass a resolution banning environmental warfare, according to a report on the Analysis of the Soviet Proposal and Key Questions.

In response, the Ford administration decided to push the Soviets to delay taking up the issue in the General Assembly until after the bilateral talks, according to a memo for Kissinger. Notably, the Ford administration was concerned that the Soviets were pushing for a ban on all environmental modification, not merely its military

application. The American government continued to argue that some techniques of environmental modification for civilian purposes, such as a fog dispersal in emergency rescues, should be allowed.

During a Senior Review Group Meeting on August 28, 1974, the policymakers decided that they would create a working group to prepare for the bilateral negotiations based on two premises: first, the administration would "accept prohibitions on any military use of environmental modification techniques having long-term, widespread or especially severe effects." Second, the Ford administration supported international guidelines and a mechanism for settling disputes when environmental modification was used for civilian purposes. President Ford approved this approach in October of 1974 with National Security Decision Memorandum 277.

The bilateral talks led to the decision to pursue an international treaty in 1975 through the Conference of the Committee on Disarmament. The Ford Administration negotiated the Environmental Modification (or ENMOD) Treaty with the Soviets over the course of 1976. After further interagency study of the legal and national security issues in the treaty, the United States supported the approval of a United Nations General Assembly resolution approving the Convention on Environmental Modification on December 10, 1976. Ford sent a letter to the Speaker of the House and President of the Senate on January 19, 1977, urging them to support the treaty. The treaty banned the "military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other State Party." President Carter signed the Treaty on the day it opened for signatures, on May 18, 1977, and the U.S. ratified the treaty on January 17, 1980.

Notably, the treaty addressed Bill Clements' concerns by allowing the continued research and development of environmental modification techniques for civilian purposes, so long as the techniques did not lead to widespread, long-lasting, or severe effects to the environment. [3]

FULL TEXT: Convention on the prohibition of military or any other hostile use of environmental modification techniques

(with annex). Adopted by the General Assembly of the United Nations on 10 December 1976

The States Parties to this Convention, Guided by the interest of consolidating peace,



and wishing to contribute to the cause of halting the arms race, and of bringing about general and complete disarmament under strict and effective international control, and of saving mankind from the danger of using new means of warfare,

Determined to continue negotiations with a view to achieving effective progress towards further measures in the field of disarmament,

Recognizing that scientific and technical advances may open new possibilities with respect to modification of the environment,

Recalling the Declaration of the United Nations Conference on the Human Environment (<https://legal.un.org/avl/ha/dunche/dunche.html>), adopted at Stockholm on 16 June 1972,2

Realizing that the use of environmental modification techniques for peaceful purposes could improve the interrelationship of man and nature and contribute to the preservation and improvement of the environment for the benefit of present and future generations,

Recognizing, however, that military or any other hostile use of such techniques could have effects extremely harmful to human welfare,

Desiring to prohibit effectively military or any other hostile use of environmental modification techniques in order to eliminate the dangers to mankind from such use, and affirming their willingness to work towards the achievement of this objective,

Desiring also to contribute to the strengthening of trust among nations and to the further improvement of the international situation in accordance with the purposes and principles of the Charter of the United Nations,

Have agreed as follows:

**Article I.**

1. Each State Party to this Convention undertakes not to engage in military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other State Party.



2. Each State Party to this Convention undertakes not to assist, encourage or induce any State, group of States or international organization to engage in activities contrary to the provisions of paragraph 1 of this article.

### **Article II.**

As used in article I, the term "environmental modification techniques" refers to any technique for changing-through the deliberate manipulation of natural processes-the dynamics, composition or structure of the earth, including its biota, lithosphere, hydrosphere and atmosphere, or of outer space.

### **Article III.**

1. The provisions of this Convention shall not hinder the use of environmental modification techniques for peaceful purposes and shall be without prejudice to the generally recognized principles and applicable rules of international law concerning such use.

2. The States Parties to this Convention undertake to facilitate, and have the right to participate in, the fullest possible exchange of scientific and technological information on the use of environmental modification techniques for peaceful purposes. States Parties in a position to do so shall contribute, alone or together with other States or international organizations, to international economic and scientific co-operation in the preservation, improvement and peaceful utilization of the environment, with due consideration for the needs of the developing areas of the world.

### **Article IV.**

Each State Party to this Convention undertakes to take any measures it considers necessary in accordance with its constitutional processes to prohibit and prevent any activity in violation of the provisions of the Convention anywhere under its jurisdiction or control.

### **Article V.**

1. The States Parties to this Convention undertake to consult one another and to co-operate in solving any problems which may arise in relation to the objectives of, or in the application of the provisions of, the Convention. Consultation and co-operation

pursuant to this article may also be undertaken through appropriate international procedures within the framework of the United Nations and in accordance with its Charter. These international procedures may include the services of appropriate international organizations, as well as of a Consultative Committee of Experts as provided for in paragraph 2 of this article.

2. For the purposes set forth in paragraph 1 of this article, the Depositary shall, within one month of the receipt of a request from any State Party to this Convention, convene a Consultative Committee of Experts. Any State Party may appoint an expert to the Committee whose functions and rules of procedure are set out in the annex, which constitutes an integral part of this Convention. The Committee shall transmit to the Depositary a summary of its findings of fact, incorporating all views and information presented to the Committee during its proceedings. The Depositary shall distribute the summary to all States Parties.

3. Any State Party to this Convention which has reason to believe that any other State Party is acting in breach of obligations deriving from the provisions of the Convention may lodge a complaint with the Security Council of the United Nations. Such a complaint should include all relevant information as well as all possible evidence supporting its validity.

4. Each State Party to this Convention undertakes to co-operate in carrying out any investigation which the Security Council may initiate, in accordance with the provisions of the Charter of the United Nations, on the basis of the complaint received by the Council. The Security Council shall inform the States Parties of the results of the investigation.

5. Each State Party to this Convention undertakes to provide or support assistance, in accordance with the provisions of the Charter of the United Nations, to any State Party which so requests, if the Security Council decides that such Party has been harmed or is likely to be harmed as a result of violation of the Convention.

## **Article VI.**

1. Any State Party to this Convention may propose amendments to the Convention. The text of any proposed amendment shall be submitted to the Depositary, who shall promptly circulate it to all States Parties.

2. An amendment shall enter into force for all States Parties to this Convention

which have accepted it, upon the deposit with the Depositary of instruments of acceptance by a majority of States Parties. Thereafter it shall enter into force for any remaining State Party on the date of deposit of its instrument of acceptance.

**Article VII.**

This Convention shall be of unlimited duration.

**Article VIII.**

1. Five years after the entry into force of this Convention, a conference of the States Parties to the Convention shall be convened by the Depositary at Geneva, Switzerland. The conference shall review the operation of the Convention with a view to ensuring that its purposes and provisions are being realized, and shall in particular examine the effectiveness of the provisions of paragraph 1 of article I in eliminating the dangers of military or any other hostile use of environmental modification techniques.

2. At intervals of not less than five years thereafter, a majority of the States Parties to this Convention may obtain, by submitting a proposal to this effect to the Depositary, the convening of a conference with the same objectives.

3. If no conference has been convened pursuant to paragraph 2 of this article within ten years following the conclusion of a previous conference, the Depositary shall solicit the views of all States Parties to this Convention, concerning the convening of such a conference. If one third or ten of the States Parties, whichever number is less, respond affirmatively, the Depositary shall take immediate steps to convene the conference.

**Article IX.**

1. This Convention shall be open to all States for signature.

Any State which does not sign the Convention before its entry into force in accordance with paragraph 3 of this article may accede to it at any time.

2. This Convention shall be subject to ratification by signatory States. Instruments of ratification or accession shall be deposited with the Secretary General of the United Nations.

3. This Convention shall enter into force upon the deposit of instruments of

ratification by twenty Governments in accordance with paragraph 2 of this article.

4. For those States whose instruments of ratification or accession are deposited after the entry into force of this Convention, it shall enter into force on the date of the deposit of their instruments of ratification or accession.

5. The Depositary shall promptly inform all signatory and acceding States of the date of each signature, the date of deposit of each instrument of ratification or accession and the date of the entry into force of this Convention and of any amendments thereto, as well as of the receipt of other notices.

6. This Convention shall be registered by the Depositary in accordance with Article 102 of the Charter of the United Nations. Article X. This Convention, of which the English, Arabic, Chinese, French, Russian and Spanish texts are equally authentic, shall be deposited with the Secretary-General of the United Nations, who shall send duly certified copies thereof to the Governments of the signatory and acceding States. IN WITNESS WHEREOF, the undersigned, being duly authorized thereto by their respective Governments, have signed this Convention, opened for signature at Geneva on the eighteenth day of May, one thousand nine hundred and seventy seven [4]

## SUPREME COURT PRESERVES PRINCIPLE

### THAT PROVINCES CANNOT BE COMPELLED TO ADMINISTER FEDERAL LAW

<https://theccf.ca/supreme-court-preserves-principle-that-provinces-cannot-be-compelled-to-administer-federal-laws/>.



Post published: February 9, 2024

OTTAWA: The Canadian Constitution Foundation (“CCF”) is pleased that the Supreme Court of Canada appears to have upheld the longstanding constitutional principle that **provinces cannot be compelled to administer federal laws or programs**, even though the court has found that provinces who choose to deliver child and family services to Indigenous peoples can be bound by these general national standards.

In Reference re An Act respecting First Nations, Inuit and Metis children, youth and families, the Attorney General of Quebec challenged the constitutionality of portions of a federal statute that established a “national standards” framework for Indigenous child and family services and that recognized a right of Aboriginal self-government in relation to child and family services.

The Attorney General of Quebec argued that sections of the Act dealing with national standards were invalid because they were inconsistent with Canada’s division of powers, and would compel provinces to administer federal laws or programs without the province’s consent. The Supreme Court disagreed, finding that the Act was a valid exercise of the federal government’s power to enact Indigenous child welfare legislation under section 91(24) of the Constitution Act, 1867, which gives Parliament jurisdiction over “Indians, and Lands reserved for the Indians.”

The CCF took the position that the federal government could constitutionally enact Indigenous child welfare legislation, but that it could not coerce the provinces into putting that law into operation. The CCF is of the view that if the federal government wants to implement and enforce its own laws for a purpose within its jurisdiction under the constitutional division of powers, it must use its own funds and public service to do so.

Friday’s Supreme Court decision found that the general national standards are within federal jurisdiction and can be binding on the provincial government when the provinces choose to deliver such services to Indigenous peoples. The effects on provincial public servants were held to be incidental in this particular case but the constitutional principle the CCF sought to

preserve remains intact.

“The bottom line is that the Court has not said that a province can be compelled to administer federal laws or programs,” said Jesse Hartery, who argued the case in the Supreme Court on behalf of the CCF. “The Court has said that a province can be required to comply with these general standards if it is choosing to provide these services, like all other service providers.”

CCF Executive Director Joanna Baron said she believes the CCF’s arguments appeared to make a difference and thanked Jesse Hartery, Simon Bouthillier and Allison Spiegel for their work on the intervention.

“We intervened on a narrow point of law in this case to preserve the constitutional division of powers and we are pleased that the court appears to have done so,” she added

<https://theccf.ca/supreme-court-preserves-principle-that-provinces-cannot-be-compelled-to-administer-federal-laws/>

11

**ALBERTA PREMIER TAKES A STAND  
AGAINST FEDERAL GOVERNMENT OVER REACH**

**Danielle Smith DESTROYS Trudeau, Tells Him HOW To Do HIS JOB**

<https://www.youtube.com/watch?v=uMlx0nxvOC4>

Bill 18

58

## Alberta taking back control of federal agreements

Alberta has introduced legislation requiring provincial entities to obtain approval before entering, amending, extending or renewing agreements with the federal government.



<https://www.alberta.ca/release.cfm?xID=90132E152A961-B149-82E8-7507FD2D7ECA566>

The introduction of the Provincial Priorities Act, 2024 will support Alberta's government in pushing back against the federal government's ongoing overreach into areas of provincial jurisdiction. Alberta's government will ensure federal funding is aligned with provincial priorities, rather than with priorities contrary to the province's interests. Under the legislation, agreements between the federal government and provincial entities, including municipalities, that have not received provincial approval would be invalid.

As an example, the federal government's unrelenting and ideological push toward electric buses in Canadian cities including Calgary does not acknowledge mounting evidence of significant problems with their effectiveness during harsh Alberta winters. Alberta's government believes the funds that Ottawa allocated for unreliable and impractical electric buses would have been better spent on Alberta priorities including strengthening the province's economic corridors with improved roads and commuter rail, or advancing the province's hydrogen strategy as an alternate clean-energy source for transportation.

If passed, the legislation would also support Alberta's government in getting its fair share of funding when it comes to roads, infrastructure, housing and other priorities. Nowhere is this more apparent than in housing. In summer 2023, Alberta received only 2.5 per cent of the total \$1.5 billion in federal housing funds, despite



having 12 per cent of the country's population and, by far, the fastest population growth.

The legislation would also work to prevent taxpayer dollars being wasted on duplicative programs like pharmacare and dental care when what the province really needs is envelope funding to expand existing provincial programs in these areas.

“It is not unreasonable for Alberta to demand fairness from Ottawa. They have shown time and again that they will put ideology before practicality, which hurts Alberta families and our economy. We are not going to apologize for continuing to stand up for Albertans so we get the best deal possible. Since Ottawa refuses to acknowledge the negative impacts of its overreach, even after losing battles at the Federal and Supreme Courts, we are putting in additional measures to protect our provincial jurisdiction to ensure our province receives our fair share of federal tax dollars and that those dollars are spent on the priorities of Albertans.”

Danielle Smith, Premier

Currently, the Government Organization Act requires intergovernmental agreements to be approved by the Minister of Intergovernmental Relations for Alberta government departments and some public agencies, such as Alberta Gaming, Liquor and Cannabis; Alberta Securities Commission; and Travel Alberta.

However, this requirement does not extend to all Alberta public agencies or broader public sector organizations including municipalities, public post-secondary institutions, school boards and health entities, which has created gaps that could result in federal agreements contradicting provincial priorities and investments. By introducing the Provincial Priorities Act, Alberta's government is working to close those gaps.

Under the proposed legislation, provincial entities include Alberta public agencies and Crown-controlled organizations, as well as public post-secondary institutions, school boards, regional health authorities, Covenant Health, municipal authorities and housing management bodies.

“For years, the federal government has been imposing its agenda on Alberta taxpayers through direct funding agreements with cities and other provincial organizations. Not only does Alberta not receive its per capita share of federal taxpayer dollars, the money we do receive is often directed towards initiatives that

(11)

don't align with Albertan's priorities. Albertans from all corners of the province expect our federal share of taxes for roads, infrastructure, housing and other priorities – not federal government political pet projects and programs in select communities.”

Ric McIver, Minister of Municipal Affairs

Currently, Quebec is the only other province or territory with similar legislation that requires provincial approval of intergovernmental agreements between a broad scope of public sector organizations and the federal government. During a federal-provincial-territorial meeting in November 2023, Premiers from across the country demanded that the federal government work with them, not around them when it came to agreements with municipalities. Additionally, the Premiers committed to exploring the need for provincial authorization on federal agreements.

<https://www.alberta.ca/release.cfm?xID=90132E152A961-B149-82E8-7507FD2D7ECAA566>

(61)

**Senate Energy, Ag., and Nat. Resources 1**

**Amendment No. 1 to SB2691**

**Southerland  
Signature of Sponsor**

**AMEND Senate Bill No. 2691**

**House Bill No. 2063\***

by deleting all language after the caption and substituting:

**WHEREAS**, it is documented that the federal government or other entities acting on the federal government's behalf or at the federal government's request may conduct geoengineering experiments by intentionally dispersing chemicals into the atmosphere, and those activities may occur within the State of Tennessee; and

**WHEREAS**, the risk to human health and environmental welfare from broad scale geoengineering is currently not well understood; and

**WHEREAS**, the Tennessee Department of Environment and Conservation is responsible for monitoring air, soil, and water quality, and regulating industrial and agricultural emissions into the air, soil, and water within the State of Tennessee to ensure the safety of the public, while not impeding agriculture or commerce within the state; and

**WHEREAS**, it is the intent of this General Assembly to protect the public health and welfare of Tennesseans while allowing all authorized activities permitted under state law; now, therefore,

**BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF TENNESSEE:**

**SECTION 1.** Tennessee Code Annotated, Title 68, Chapter 201, Part 1, is amended by adding the following as a new section:

The intentional injection, release, or dispersion, by any means, of chemicals, chemical compounds, substances, or apparatus within the borders of this state into the atmosphere with the express purpose of affecting temperature, weather, or the intensity of the sunlight is prohibited.

**SECTION 2.** This act takes effect July 1, 2024, the public welfare requiring it

[https://www.thegatewaypundit.com/2024/03/tennessee-state-senate-passes-bill-banning-chemtrail-spraying/?utm\\_source=rss&utm\\_medium=rss&utm\\_campaign=tennessee-state-senate-passes-bill-banning-chemtrail-spraying](https://www.thegatewaypundit.com/2024/03/tennessee-state-senate-passes-bill-banning-chemtrail-spraying/?utm_source=rss&utm_medium=rss&utm_campaign=tennessee-state-senate-passes-bill-banning-chemtrail-spraying)

to do this as quickly and safely as we can.”

Disturbingly, Make Sunsets made this attempt at solar geoengineering without informing the public or even attempting to engage scientists. Experts who spoke to MIT Technology Review uniformly condemned the move.

Despite these potential unintended consequences and repercussions to the scientific field, Make Sunsets is determined to cash in. They are already selling \$10 “cooling credits” for releasing just one gram of carbon into the stratosphere. But don’t worry, Iseman says, the company will act as responsibly as possible:

“What I want to do is create as much cooling as quickly as I responsibly can, over the rest of my life, frankly,” said Iseman. He added later that they will deploy as much sulfur in 2023 as “we can get customers to pay us” for.”

TGP also reported that scientists have proposed an audacious novel geoengineering technique: intentionally dehydrating the stratosphere.

A study published in Science Advances involves the ambitious and contentious idea of seeding the upper atmosphere with particles to prevent water vapor from entering the stratosphere.

Water vapor is important because it’s the most abundant greenhouse gas on Earth. The greenhouse effect occurs when gases in the atmosphere trap heat from the sun, keeping the planet livable. Water vapor is made up of complex molecules that absorb heat radiated from the Earth’s surface and re-radiate it back to the planet.

Also, George Soros wants humans to take control of Earth’s atmosphere to halt “climate change.”

This idea could create a global calamity resulting in the deaths of millions of humans and animals.

According to Fox News, Soros spoke to the Munich Security Conference in 2023 and boasted that he had discovered a process where white clouds are created to reflect sunlight away from warming areas to prevent ice sheets from melting. Ice sheets melting in Greenland in particular, he claimed, could doom human civilization.

The “plan” Soros and King are advocating for is called solar geoengineering. This idea will not save civilization but does have the potential to destroy it.

Klaus Schwab and his band of globalists are also toying with the idea of turning off the sun.

In a new dystopian video that was released by the WEF this month, the organization touted the use of futuristic “space bubbles” that could be used to effectively block out the sun, and thus, help reduce climate change. The “geoengineering” project would theoretically reflect a portion of solar radiation back into space in order to cool the planet, the video explains while highlighting a recent study about the project from the Massachusetts Institute of Technology (MIT).

The Tennessee State Senate has taken a definitive stance against the controversial topic of “chemtrails” by passing SB 2691/HB 2063.

[https://www.thegatewaypundit.com/2024/03/tennessee-state-senate-passes-bill-banning-chemtrail-spraying/?utm\\_source=rss&utm\\_medium=rss&utm\\_campaign=tennessee-state-senate-passes-bill-banning-chemtrail-spraying](https://www.thegatewaypundit.com/2024/03/tennessee-state-senate-passes-bill-banning-chemtrail-spraying/?utm_source=rss&utm_medium=rss&utm_campaign=tennessee-state-senate-passes-bill-banning-chemtrail-spraying)

The bill, which aims to ban the intentional release of chemicals into the atmosphere for geoengineering purposes, was sponsored by Representative Monty Fritts (R-Kingston) and Senator Steve Southerland (R-Morristown) and won approval in the Senate on Monday, The Tennessean reported.

The legislation is predicated on the claim that “it is documented the federal government or other entities acting on the federal government’s behalf or at the federal government’s request may conduct geoengineering experiments by intentionally dispersing chemicals into the atmosphere, and those activities may occur within the State of Tennessee.”

This new bill seeks to outlaw any such activities, stating that, “The intentional injection, release, or dispersion, by any means, of chemicals, chemical compounds, substances, or apparatus within the borders of this state into the atmosphere with the express purpose of affecting temperature, weather, or the intensity of the sunlight is prohibited.”

The passage of this bill marks a significant development in the ongoing debate over geoengineering and environmental manipulation. Proponents of the bill believe that it is a necessary step to safeguard the environment and public health from unregulated geoengineering practices.

The legislation is set to be enforced beginning July 1, 2024, indicating the urgency that the Tennessee Senate places on this issue for the “public welfare.”

Attention now turns to the House, where the bill is scheduled to be reviewed by the House Agriculture and Natural Resources Committee on Wednesday.

If the House passes the bill, Tennessee would become one of the first states to establish a legal framework explicitly prohibiting the spraying of chemicals for geoengineering purposes, potentially setting a precedent for other states to follow in addressing concerns around environmental and atmospheric manipulation.

Read the bill below:

The Gateway Pundit previously reported that a company called Make Sunsets has successfully launched weather balloons from Mexico that may have released sulfur particles into the atmosphere. Luke Iseman, the co-founder and CEO, claims that because climate change presents such an imminent threat, bizarre interventions like theirs are necessary:

“It’s morally wrong, in my opinion, for us not to be doing this,” said Iseman. “What’s important is

**CIA DIRECTOR ADMITS PLANS FOR GEO-ENGINEERING AKA CHEM TRAILS.**

**WATCH THE VIDEO**

Observe closely as the chemtrail plane switches off the sprayers once it completes delivering its payload

**WATCH THE SECOND VIDEO**

NASA's Cloud Machine

**WATCH THE THIRD VIDEO**

STOP Calling It Climate Change, Call It What It Really Is

Spraying Heavy Metals Into The Atmosphere Is Poisoning The Population & Environment.  
Cancer Rates Are Skyrocketing

- Geoengineering
- Chemtrails
- Weather Modification
- Weather Manipulation
- Climate Engineering

**WATCH FOURTH VIDEO**

<https://lionessofjudah.substack.com/p/its-not-climate-change-its-geoengineering>

# 14



CANADA

CONSOLIDATION

CODIFICATION

## Weather Modification Information Regulations

## Règlement sur les renseignements relatifs aux modifications du temps

C.R.C., c. 1604

C.R.C., ch. 1604

Current to March 20, 2024

À jour au 20 mars 2024

Published by the Minister of Justice at the following address:  
<http://laws-lois.justice.gc.ca>

Publié par le ministre de la Justice à l'adresse suivante :  
<http://lois-laws.justice.gc.ca>

<https://laws-lois.justice.gc.ca/PDF/C.R.C., c. 1604.pdf>

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CHAPTER 1604

WEATHER MODIFICATION INFORMATION ACT

Weather Modification Information Regulations

Regulations Prescribing the Registration and Provision of Information Respecting Weather Modification Activities within Canada and Canadian Waters

Short Title

1 These Regulations may be cited as the *Weather Modification Information Regulations*.

Interpretation

2 In these Regulations,

**Act** means the *Weather Modification Information Act*; (*Loi*)

**weather modifier** means any person who engages in any weather modification activity. (*agent de la modification du temps*)

Designation of Administrator

3 The Assistant Deputy Minister, Atmospheric Environment Service, Department of the Environment is designated Administrator for the purposes of the Act and these Regulations.

Information

4 (1) The information specified in Schedule I is hereby prescribed for the purposes of subsection 3(1) of the Act.

(2) The information specified in Schedule I shall be sent to the Administrator by registered mail at least 10 days before the commencement of the weather modification activity to which the information relates.

(3) Where a person who has provided the Administrator with information in accordance with subsection (2)

CHAPITRE 1604

LOI SUR LES RENSEIGNEMENTS EN MATIÈRE DE MODIFICATION DU TEMPS

Règlement sur les renseignements relatifs aux modifications du temps

Règlement concernant l'enregistrement et la communication de renseignements relatifs aux modifications du temps dans les limites du Canada et de ses eaux territoriales

Titre abrégé

1 Le présent règlement peut être cité sous le titre : *Règlement sur les renseignements relatifs aux modifications du temps*.

Interprétation

2 Dans le présent règlement,

**agent de la modification du temps** s'entend d'une personne qui exerce une activité visant à modifier le temps; (*weather modifier*)

**Loi** désigne la *Loi sur les renseignements relatifs aux modifications du temps*. (*Act*)

Désignation du directeur

3 Le sous-ministre adjoint, Service de l'environnement atmosphérique, ministère de l'Environnement, est désigné comme directeur aux fins de l'application de la Loi et du règlement.

Renseignements

4 (1) Les renseignements spécifiés à l'annexe I sont prescrits aux fins du paragraphe 3(1) de la Loi.

(2) Les renseignements spécifiés à l'annexe I doivent être envoyés au directeur, sous pli recommandé, au moins 10 jours avant le début de l'activité à laquelle ils se rapportent.

(3) Lorsqu'une personne a l'intention d'apporter un changement à une activité visant à modifier le temps, au



**OFFICIAL STATUS  
OF CONSOLIDATIONS**

Subsections 31(1) and (3) of the *Legislation Revision and Consolidation Act*, in force on June 1, 2009, provide as follows:

**Published consolidation is evidence**

**31 (1)** Every copy of a consolidated statute or consolidated regulation published by the Minister under this Act in either print or electronic form is evidence of that statute or regulation and of its contents and every copy purporting to be published by the Minister is deemed to be so published, unless the contrary is shown.

...

**Inconsistencies in regulations**

**(3)** In the event of an inconsistency between a consolidated regulation published by the Minister under this Act and the original regulation or a subsequent amendment as registered by the Clerk of the Privy Council under the *Statutory Instruments Act*, the original regulation or amendment prevails to the extent of the inconsistency.

**LAYOUT**

The notes that appeared in the left or right margins are now in boldface text directly above the provisions to which they relate. They form no part of the enactment, but are inserted for convenience of reference only.

**NOTE**

This consolidation is current to March 20, 2024. Any amendments that were not in force as of March 20, 2024 are set out at the end of this document under the heading "Amendments Not in Force".

**CARACTÈRE OFFICIEL  
DES CODIFICATIONS**

Les paragraphes 31(1) et (3) de la *Loi sur la révision et la codification des textes législatifs*, en vigueur le 1<sup>er</sup> juin 2009, prévoient ce qui suit :

**Codifications comme élément de preuve**

**31 (1)** Tout exemplaire d'une loi codifiée ou d'un règlement codifié, publié par le ministre en vertu de la présente loi sur support papier ou sur support électronique, fait foi de cette loi ou de ce règlement et de son contenu. Tout exemplaire donné comme publié par le ministre est réputé avoir été ainsi publié, sauf preuve contraire.

[...]

**Incompatibilité – règlements**

**(3)** Les dispositions du règlement d'origine avec ses modifications subséquentes enregistrées par le greffier du Conseil privé en vertu de la *Loi sur les textes réglementaires* l'emportent sur les dispositions incompatibles du règlement codifié publié par le ministre en vertu de la présente loi.

**MISE EN PAGE**

Les notes apparaissant auparavant dans les marges de droite ou de gauche se retrouvent maintenant en caractères gras juste au-dessus de la disposition à laquelle elles se rattachent. Elles ne font pas partie du texte, n'y figurant qu'à titre de repère ou d'information.

**NOTE**

Cette codification est à jour au 20 mars 2024. Toutes modifications qui n'étaient pas en vigueur au 20 mars 2024 sont énoncées à la fin de ce document sous le titre « Modifications non en vigueur ».

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**Règlement concernant l'enregistrement et la communication de renseignements relatifs aux modifications du temps dans les limites du Canada et de ses eaux territoriales**

1 Short Title

1 Titre abrégé

2 Interpretation

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3 Designation of Administrator

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4 Information

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**SCHEDULE I**

**ANNEXE I**

**SCHEDULE II**

**ANNEXE II**

**SCHEDULE III**

**ANNEXE III**

proposes to make a change in the weather modification activity to which the information relates, that person shall forthwith by registered mail provide the Administrator with appropriate changes in that information.

**(4)** Where a person who has provided the Administrator with information in accordance with subsection (2) decides to abandon the proposed weather modification activity to which the information relates, that person shall forthwith by registered mail notify the Administrator of his decision to abandon the proposed activity.

**(5)** Notwithstanding subsection (2), where in the opinion of the Administrator there is any reasonable cause why the information required by that subsection cannot be provided at least 10 days before the commencement of a weather modification activity, he may at his discretion waive the 10 days notice period.

## Records

**5** A daily record of a weather modification activity maintained pursuant to paragraph 4(1)(a) of the Act shall be maintained in the form and manner set out in Schedule II.

## Reports

**6 (1)** A report to be submitted to the Administrator pursuant to paragraph 4(1)(b) of the Act shall be submitted in the form and manner set out in Schedule III subject to such modifications as may be necessary in order for the form to contain any information or observations specified by the Administrator.

**(2)** Where more than one report is submitted to the Administrator pursuant to paragraph 4(1)(b) of the Act in respect of the same weather modification activity, any subsequent reports may be abbreviated by clear reference to any preceding reports in respect of any factual details that remain unchanged.

sujet de laquelle elle a fourni des renseignements au directeur conformément au paragraphe (2), elle doit immédiatement faire parvenir au directeur, sous pli recommandé, les changements apportés aux renseignements déjà fournis.

**(4)** Lorsqu'une personne décide d'abandonner son projet de se livrer à une activité visant à modifier le temps, au sujet de laquelle elle a fourni au directeur des renseignements conformément au paragraphe (2), elle doit immédiatement en informer le directeur par lettre recommandée.

**(5)** Nonobstant le paragraphe (2), lorsque le directeur juge qu'il y a motif suffisant pour ne pas fournir les renseignements requis par ledit paragraphe dans les 10 jours qui précèdent le début de l'activité visant à modifier le temps, il peut, à sa discrétion, exempter du préavis de 10 jours.

## Registre

**5** Le registre journalier d'une activité visant à modifier le temps, que l'alinéa 4(1)a) de la Loi prescrit de tenir, doit l'être en la forme et de la manière prescrites à l'annexe II.

## Rapports

**6 (1)** Le rapport que l'alinéa 4(1)b) de la Loi prescrit de soumettre au directeur doit être soumis en la forme et de la manière prescrites à l'annexe III, sous réserve de toutes modifications nécessaires pour qu'il renferme tous les renseignements et observations spécifiés par le directeur.

**(2)** Lorsque plusieurs rapports sont soumis au directeur conformément à l'alinéa 4(1)b) de la Loi à l'égard d'une même activité visant à modifier le temps, le deuxième rapport et les rapports subséquents peuvent être abrégés par renvoi au premier rapport ou aux rapports précédents pour ce qui concerne les détails inchangés.

## CANADIAN WEATHER MODIFICATION ACT

### Weather Modification Information Act

Weather modification includes any **activity intended to change the atmosphere** in order to **artificially influence weather conditions**. This Act allows the **federal government to set requirements for reporting** such activities.

Under this Act.

### Federal Sustainable Development Act

Under this Act, the Minister of the Environment and Climate Change is responsible for developing the Federal Sustainable Development Strategy, setting out goals and targets for all federal departments. The **first federal strategy was adopted in 2010**, and the Minister of Environment and Climate Change must provide progress reports every three years.

### Canada Foundation for Sustainable Development Technology Act

This act establishes the Canada Foundation for Sustainable Development Technology to fund the development of technologies that provide solutions to issues related to climate change, clean air, water and soil quality. The Ministers of the Environment and Climate Change, Industry and Natural Resources recommend members to the board of directors. This section provides more information on Environment and Climate Change Canada's role.

<https://www.canada.ca/en/environment-climate-change/corporate/transparency/acts-regulations/acts-administered.html>

### Weather Modification Information Act R.S.C., 1985, c. W-5

An Act to provide for the obtaining of information respecting weather modification activities.

1 This Act may be cited as the Weather Modification Information Act.  
1970-71-72, c. 59, s. 1

### Interpretation

Marginal note:Definitions

2 In this Act,

Administrator means such member of the public service as may be designated by the Governor in Council;(directeur)

Weather Modification activity includes any action designed or intended to produce, by physical or chemical means, changes in the composition or dynamics of the atmosphere for the purpose of increasing, decreasing or redistributing precipitation, decreasing or suppressing hail or lightning or dissipating fog or cloud.

<https://laws-lois.justice.gc.ca/eng/acts/w-5/page-1.html>

## **Weather Modification Information Regulations (C.R.C., c. 1604)**

HTMLFull Document: Weather Modification Information Regulations (Accessibility Buttons available) | XMLFull Document: Weather Modification Information Regulations [35 KB] | PDFFull Document: Weather Modification Information Regulations [240 KB]

### **Regulations are current to 2024-01-14**

**Enabling Act: WEATHER MODIFICATION INFORMATION ACT**

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<https://laws-lois.justice.gc.ca/eng/regulations/C.R.C., c. 1604/index.html>

### Weather Modification Information Act

R.S.C., 1985, c. W-5

An Act to provide for the obtaining of information respecting weather modification activities

1 This Act may be cited as the Weather Modification Information Act.

1970-71-72, c. 59, s. 1

Interpretation

Marginal note:Definitions

2 In this Act,

Administrator means such member of the public service as may be designated by the Governor in Council; (directeur)

weather modification activity includes any action designed or intended to produce, by physical or chemical means, changes in the composition or dynamics of the atmosphere for the purpose of increasing, decreasing or redistributing precipitation, decreasing or suppressing hail or lightning or dissipating fog or cloud. (essais de modification du temps)

R.S., 1985, c. W-5, s. 2 2003, c. 22, s. 225(E)

Previous Version Information

Marginal note:Administrator to be informed

3 (1) Where any person proposes to engage in weather modification activities in Canada, that person shall, in such form and manner as may be prescribed, submit to the Administrator such information as may be prescribed respecting that person and the weather modification activities in which it is proposed to engage.

Marginal note:Idem

(2) Before commencing any weather modification activity, the person proposing to carry out the activity shall inform the Administrator in writing of

(a) the date and time when and the place where the activity is to be carried out;

- (b) the names and addresses of the persons by and for whom the activity is to be carried out;
- (c) the purpose of the activity;
- (d) the equipment, materials and method to be used; and
- (e) the geographic area that may be affected.

1970-71-72, c. 59, s. 3

Records and Reports

Marginal note: Requirement to maintain daily records and submit report

4 (1) Every person who carries out any weather modification activity shall, in such form and manner as may be prescribed,

(a) maintain a daily record of the activity, in which shall be included detailed information relating to

- (i) the location and operation of any equipment used,
- (ii) any meteorological observations made in the geographic area affected or intended to be affected by the activity, and
- (iii) the chemical nature, physical properties and quantities of any substances emitted into the atmosphere for the purposes of weather modification; and

(b) within fifteen days from the end of the month in which the activity was carried out, submit to the Administrator a report specifying

- (i) the date when the activity was carried out,
- (ii) the nature and scope of the activity,
- (iii) any meteorological observations that were made, and
- (iv) such other information and observations relevant to the activity as may be specified by the Administrator or an authorized representative of the Administrator.

Marginal note: Availability of records

(2) Any person who has custody of a record referred to in paragraph (1)(a) shall, at such reasonable times as may be specified by the Administrator or an authorized



representative of the Administrator, make that record available for inspection by the Administrator or the representative.

1970-71-72, c. 59, s. 4

Disclosure

Marginal note:Disclosure of information

5 Any information obtained by the Administrator or an authorized representative of the Administrator pursuant to this Act may be made public or made available on request to any member of the public.

1970-71-72, c. 59, s. 5

Regulations

Marginal note:Regulations

6 The Governor in Council may make regulations prescribing any matter or thing that by this Act may be prescribed.

1970-71-72, c. 59, s. 6

Offence and Punishment

Marginal note:Offence and punishment

7 (1) Any person who fails to comply with any provision of this Act is guilty of an offence and liable on summary conviction to a fine not exceeding one thousand dollars or to imprisonment for a term not exceeding six months or to both.

Marginal note:Officers, etc., of corporations

(2) Where any corporation commits an offence under this Act, any officer, director or agent of the corporation who directed, authorized, assented to or acquiesced in the commission of the offence is a party to and guilty of the offence and is liable on summary conviction to the punishment provided by subsection (1) whether or not the corporation has been prosecuted or convicted.

1970-71-72, c. 59, s. 7



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FILE NAME WEATHER MODIFICATION COMPANY CANADA USES FOR WEATHER MODIFICATION  
MANIPULATION

**FILE NAME WEATHER MODIFICATION  
COMPANY CANADA USES FOR  
WEATHER MODIFICATION MANIPULATION**

**Weather Modification, Inc**

**3802 20th Street North,**

**Fargo, ND 58102**

**[http://www.weathermodification.com/meteorological-  
services.php](http://www.weathermodification.com/meteorological-services.php)**

## WEATHER MODIFICATION - CANADIAN

In Canada weather modification began in 1948 with a federal government experiment that used dry ice dispersed into clouds to stimulate rainfall. Under appropriate conditions, rainfall did result. However, as with most weather modification projects, the question of what would have happened naturally could not be properly answered. A randomly selected control population of unseeded clouds was not available for comparison with the population of seeded clouds. Nonetheless, in spite of scientific uncertainties, the 1950s saw a blossoming of rainmaking activities on the prairies for agricultural purposes, and in eastern Canada for forestry and hydroelectric power. Silver iodide was the seeding agent, dispersed variously from ground-based and airborne generators. These operations **were not designed as scientific experiments, and later analyses were inconclusive.** **OBSERVATION: Why not or was the results so negative it was discarded??????**

In 1959 one of the first of a series of international statistical rainmaking experiments was mounted by the federal government in northeastern Ontario and northwestern Québec using aircraft to seed clouds with silver iodide. The outcome of **this 4-year** experiment on large-scale storm systems was an overall small decrease in rainfall. The decrease was not statistically significant and could have been the result of chance. However, **an operational rainmaking project in the Lac Saint-Jean area, Qué,** was perceived by residents as having been very successful - so successful, in fact, that **"Operation Umbrella"** was mounted and mothers petitioned the Québec government for vitamins for their children because of lack of sunshine. In **1965 the Québec** minister of natural resources ordered **all rainmaking activities** in the province to cease.

In general, rainmaking declined throughout Canada during the 1960s. The exception was Alberta, where the interest in weather modification remained high and operational and research projects to suppress hail and increase rainfall continued into the 1980s.

### Challenges

Weather modification projects usually have objectives that do not satisfy everyone. For example, farmers might want more rain while tourists would prefer more sunshine. **In addition, although a target area is usually selected, the possibility exists the effects might be felt in nearby communities, provinces or countries.** Consequently, some provinces and the federal government have legislation that

enables them to monitor, and in some cases, licence, anyone attempting to modify the weather.

There have been very few demonstrated successes in weather modification around the world. Some Canadian advances have been the ability to monitor the change in cloud properties due to ice nucleants, and to numerically simulate with computers the possible changes in clouds. Elsewhere, certain techniques have been generally effective in clearing fogs, and a procedure to produce more snowfall from clouds forming over mountains also shows some promise. There have also been a few reported successful experiments to produce rainfall. There have been no hail suppression experiments that the scientific community has fully accepted.

Randomized tests are scientifically considered the best method for evaluating weather modification. Considering the natural variability of precipitation and the generally low values of expected effects (10-20%), randomized tests would generally need to be conducted for 5-10 years before statistically significant results are obtained. This makes weather modification research costly and difficult to perform. There are also many unknowns concerning cloud microphysical processes and the generation of cloud systems. Consequently, much more work remains to be done before the **weather can be modified in a controlled manner.**

<https://www.thecanadianencyclopedia.ca/en/article/weather-modification>

**NOTE Great strides have been made in the area of Weather Modification Manipulation since the 1950's and 60's. They are now able to total control the weather and it is being used as a bioweapon in warfar. See further documents in this PDF file to confirm the statement.**



**File Name: Weather Modification Canada We've been cloud seeding for decades, but now we finally know it works**

Researchers were able to track 3 attempts at cloud seeding from start to finish

CBC Radio · **Posted: Feb 28, 2020** 1:47 PM PST | Last Updated: February 28, 2020

<https://www.cbc.ca/radio/quirks/feb-29-coronavirus-containment-window-closing-whale-skin-care-ginkgo-trees-eternal-youth-and-more-1.5479343/we-ve-been-cloud-seeding-for-decades-but-now-we-finally-know-it-works-1.5479347>

On a cold winter day in Idaho in 2017, a light dusting of snow fell from the sky. For the first time, scientists are able to say with certainty that it fell because humans made it happen.

"We were really, really excited," atmospheric scientist Katja Friedrich told Quirks & Quarks host Bob McDonald. "We got really hooked on this idea of, OK, we can do it one day, we can do it the next day."

The team of researchers were testing cloud seeding, a technology designed in 1946 by chemist Vincent Schaefer, which involves infusing clouds with particles to turn lightweight water droplets into heavy droplets of rain or snow. Cloud seeding is used as a part of weather modification programs in countries around the world to attempt to do things like steering precipitation to drought-prone areas, or to enhance snowpack on ski hills. In Canada, it's often used to try to lessen the impact of hailstorms.

But the problem is that until now, scientists hadn't come up with a way to prove that cloud seeding actually worked outside of the lab.

"We had difficulties distinguishing what is generated naturally and what is generated by humans," said Friedrich, an associate professor in the Department of Atmospheric and Oceanic Sciences at the University of Colorado Boulder.

This is the first time that scientists have definitively been able to accurately measure the amount of snow produced through cloud seeding. The researchers published their findings in the journal PNAS.

'Nature usually does not produce zigzag lines'

Over three days in January 2017, the team of researchers tracked three separate

cloud seeding events from start to finish. They used the "Doppler on Wheels" ground-based radar system, as well as the University of Wyoming's King Air research plane, which is outfitted with radar and LIDAR systems to peer into atmospheric formations.

The research plane mapped the natural clouds first. Then, another plane flew through those clouds, using a series of flares to inject particles of silver iodide inside. Researchers used a variety of tools, including this 'Doppler on Wheels' radar dish, to track cloud seeding events. (Joshua Aikins)

Immediately the researchers saw something strange in the clouds forming in the sky behind the seeding airplane.

"We suddenly saw these zigzag lines, and we were very puzzled because nature usually does not produce zigzag lines. So in this case we thought, OK these need to be seeding lines," said Friedrich.

Seeing the same developments the second day confirmed their suspicions.

"The second day, we saw these same seeding lines, and on that day we could even see individual flares ... and then we were totally hooked," she said.

The University of Wyoming's King Air research aircraft prepares for flight from Boise Airport to participate in the SNOWIE Project. (Jeff French)

The team was able to watch as the liquid water inside the clouds turned into ice, and the snow started to fall. It wasn't much — about a tenth of a millimetre of snow — but covering an area of 80 by 80 kilometres, that ended up being the water equivalent of 282 Olympic-sized swimming pools.

"At the beginning, we were not quite sure whether that is us and whether this is really from cloud seeding. But then once we could reproduce those results several times, then we actually got more confident," she said.

"So if we hadn't seeded the cloud there would not have been any precipitation on the ground."

Potential Downsides

Cloud seeding is still a controversial technology for some.

"There are some potential downsides that we don't think about too much," Robert

Jackson, Stanford University's Earth Sciences Chair said in a 2017 interview on The Current. "One issue is where the rain would have fallen if you hadn't cloud seeded. Does a cloud seeding event in Alberta keep a farmer in Saskatchewan from getting rain that he or she might have received?"

"So you're extracting moisture from the atmosphere. That's absolutely correct. However, these clouds would not precipitate in the area," said Friedrich. "They can evaporate and maybe they fall down as precipitation over the ocean."

"On the other hand, the snowpack in the mountains is really important, and millions of people and industries depend on this snowpack."

She adds that in drought-stricken areas, every drop of water helps, even if that drop is human-made.

"I always say it depends on the cost of water. So if you're in an area that's very arid and dry and you're under drought conditions, then every drop counts. So then why not do cloud seeding?"

Produced and written by Amanda Buckiewicz

<https://www.cbc.ca/radio/quirks/feb-29-coronavirus-containment-window-closing-whale-skin-care-ginkgo-trees-eternal-youth-and-more-1.5479343/we-ve-been-cloud-seeding-for-decades-but-now-we-finally-know-it-works-1.5479347>



Caldeira's "study" of course did not mention **legal actions which are already in process to expose climate engineering that are already underway in Canada and the US.**

<https://www.geoengineeringwatch.org/ken-caldeira-david-keith-and-carnegie-science-face-of-the-criminal-climate-engineering-cover-up/>

Dane Wigington geoengineeringwatch.org

The power structure's propaganda machine has been put into high gear in a last ditch desperate attempt to hide the ongoing geoengineering planetary omnicide till the last possible moment. Geoengineer Ken Caldeira and Carnegie "Science" have teamed up on a "peer reviewed "study/survey" to "prove" "chemtrails" are not real.

The key image in the science diagram above is the jet spraying "reflective particles" shown in the upper left. Though ocean iron fertilization is also a catastrophic form of geoengineering that is ongoing, the other images (space mirrors and artificial trees) are completely implausible and meant to distract from the reality of the actual geoengineering programs.

The science terms for what is occurring in our skies were of course completely avoided by Caldeira and Carnegie "Science" as such terms would lead people to hard science data and that was of course NOT the goal of the "study/survey". This "peer reviewed" study claims that the vast majority of scientists agreed "chemtrails" were not real (again, the scientists were not asked about the geoengineering/climate modification subject). So, in addition to the inaccurate terms in the "survey", did the vast majority of scientists surveyed really confirm that "chemtrails" were not real? NO, here are the real numbers from the "survey", 475 scientists were solicited for this survey, only 78 responded, that is only just over 16%. Why didn't the rest of the scientists excuse themselves from the survey? Keep reading and find out.

When the climate engineering crimes are fully exposed to populations around the globe (once and for all), a complete overturning of our paradigm will commence and those in power know it. The ongoing weather warfare that has been carried out for over 70 years has equally and irreparably harmed every person on the planet along with the entire web of life. The 2 minute video below shows up-close from directly behind a jet aircraft what is inarguably atmospheric spraying occurring. This is only one shocking example, there are countless others.

The power structure and the criminals who serve them are completely committed to hiding the geoengineering/solar radiation management/climate intervention programs

from the public for as long as possible. The effort to bring the climate engineering insanity to light is gaining ground rapidly. This has caused the global controllers to push back with a pathetic piece of total propaganda that does not in any objective way, shape, or form, address the mountain of material facts which conclusively confirm that global climate engineering has long since been deployed.

The propaganda "study" in question (which attempts to dispute the geoengineering reality based on the "opinions" of selected academicians) has been republished and reposted by numerous corporate controlled "media" sources that are clearly tasked with serving the global power structure. Who is a primary face that we can place on the machine of criminal deception regarding the ongoing illegal geoengineering assault? Internationally recognized geoengineer Ken Caldeira has been playing a central role in the ongoing public propaganda and deception for a very long time (along with geoengineer David Keith). Caldeira and Keith are clearly heavily committed to the effort to hiding the ongoing climate engineering assault by any means possible.

Caldeira has long since teamed up with Carnegie "Science" which has known connections to the defense industry.

**A look into Caldeira's past government defense department employment is shocking and revealing. In the damning 2 minute video below you can hear Caldeira describe in his own words what he worked on while employed by the US government.**

Internationally known geoengineer Dr. David Keith is in the same business as Caldeira, public deception. The 5 minute video below (which features Dr. David Keith, Ken Caldeira, and Obama science advisor, John Holdren), is very revealing and especially damning for geoengineer, Dr. David Keith.

Dr. David Keith was also very effectively exposed by Stephen Colbert in this next 6 minute video.

Caldeira's "report" of the "survey" he spearheaded is so full of omissions and completely skewed information that it is difficult to find a starting point with setting the record straight.

1. Science terms were systematically avoided in the propaganda "report" pieced together by Caldeira, Keith, and company. If readers were shown terms like "solar radiation management" (SRM), "stratospheric aerosol geoengineering" (SAG), "cloud

albedo enhancement" (CAE), "Stratospheric aerosol injection" (SAI), inquiring individuals might actually investigate the issue and find there is a mountain of science facts to back up claims that climate engineering has long since been fully deployed. Instead (and not surprisingly), Caldeira and crew exclusively used the "chemtrails" term (with one exception) which is not a science term and by design does not lead to credible data.

2. Why didn't Ken Caldeira and associates disclose the fact that not only do all US government scientists have no first amendment protection (which means they are not at liberty to speak openly), but there is actually an ILLEGAL FEDERAL GAG ORDER ON ALL NATIONAL WEATHER SERVICE AND ALL NOAA EMPLOYEES. Are we to believe that any scientists are truly free to speak openly on a subject that is clearly a national security issue at a time when any and all whistleblowers are being relentlessly prosecuted? The ONLY scientists that might be willing to speak out under such circumstances are those that know full well they will be rewarded for supporting the official propaganda and deception.

3. Why didn't Caldeira and his associates bother to mention massive historical senate documents, presidential reports, and military statements of objective that make clear climate engineering is not just theory or conjecture, but has long since been verifiable fact.

4. Why didn't Caldeira make mention of the extensive list of geoengineering patents that describe exactly what we can see with our own eyes occurring in the skies above?

5. Why didn't Caldeira cover the design characteristics of the "high bypass turbofan jet engine"? This engine is mounted on ALL military tankers and ALL commercial carriers and is by design nearly incapable of creating any condensation trails except under the rarest and most extreme circumstances.

6. Why didn't this report from Caldeira and Carnegie "science" address the fact that there are retrofit spray nozzles mounted on the aircraft pylons directly above the jet exhaust stream? This is to create appearance of "condensation trails" when in fact what we are seeing are sprayed particulate trails.

7. Caldeira's report omitted any reference to the critical issue of a rapidly worsening "global dimming" scenario which is the direct objective of the ongoing geoengineering SRM programs (to block the sun's direct rays with light scattering

particles).

8. Caldeira's "study" claims that the massive amounts of aluminum showing up in precipitation tests could not be accurate.

Yet, we have geoengineers like Dr. David Keith stating on the record the goal of spraying 10,000,000 to 20,000,000 tons of aluminum nanoparticulates in to the atmosphere annually. Much of the precipitation testing that reveals massive amounts of aluminum in the breathable air column has been done by highly credentialed former government scientists/biologists who have done such testing for decades. Globally recognized medical experts like Dr. Russell Blaylock acknowledge the severe human health dangers from such aluminum exposure. Recent peer reviewed science studies have now proven that massive aluminum exposure is also killing our bees.

9. Yet another issue of critical importance that is completely omitted from the Caldeira study is the extreme ozone layer destruction that is occurring around the globe. Available science study makes clear that geoengineering will destroy the ozone layer and that is exactly what is occurring.

10. The Caldeira/Carnegie "report" did not mention the recent statement made about geoengineering by the head of the CIA, John Brennan, in front of the Council on Foreign Relations.

11. Finally, and most crucial of all, the biosphere is free falling into a state of total meltdown with massive methane releases occurring from Earth's strata and is possibly even pushing us toward a scenario known as Venus syndrome. Are we to believe that the US military would first ask our permission before engaging in climate engineering when the top US military leadership has long since stated on the record that the disintegrating climate is the greatest and most immediate national security threat of all?

12. Caldeira's "study" of course did not mention **legal actions which are already in process to expose climate engineering that are already underway in Canada and the US.**

Click the link below to go directly to the LASG website

[stopgeoengineeringlegalalliance\\_button](#)

So what is the bottom line with the Caldeira/Carnegie "study"?

The unspun truth is this, there were no relevant facts in Caldeira's purely propaganda piece, none.

Only the opinions of selective individuals that have no choice but to repeat the official government narrative of climate engineering denial. To do otherwise would lead to the loss of their careers or worse. The Caldeira/Carnegie "science study" has completely omitted mountains of relevant data (some of which has already been cited), but the "study" in question has also not made any reference to the on the record testimony of numerous experts who have stated conclusively that global climate engineering is an absolute real and ongoing reality. **These expert testimonies include former US government scientists, union of concerned scientist members, former pilots, former defense industry technicians, and physicians.**

Caldeira's final statement from the "study" is below, does anyone see a single fact cited in Caldeira's rant?

“Despite the persistence of erroneous theories about atmospheric chemical spraying programs, until now there were no peer-reviewed academic studies showing that what some people think are ‘chemtrails’ are just ordinary contrails, which are becoming more abundant as air travel expands. Also, it is possible that climate change is causing contrails to persist for longer periods than they used to.” Caldeira said. “I felt it was important to definitively show what real experts in contrails and aerosols think. **We might not convince die-hard believers that their beloved secret spraying program is just a paranoid fantasy, but hopefully their friends will accept the facts.**”

Caldeira states above "it is possible that climate change is causing 'contrails' to persist for longer periods than ye used to". Lets examine this statement. For "condensation trails" to increase and last longer there **MUST BE more relative humidity in the atmosphere**, but is this the case? The global RH graph below could not be more clear, atmospheric RH has been **going down for over 60 years.**

**Atmospheric RH began to drop in direct correlation with the initial deployment of climate engineering programs in the mid to late 1940's.** The climate engineering materials are dessicants and create an **overall drying effect on the atmosphere.** The

global dimming effect of SRM programs further dries out the atmosphere overall (though record deluges will continue to increase as the planet rapidly warms and/or due to climate engineering/weather warfare). Again, **Mr. Caldeira, when atmospheric RH is dropping radically, why would "condensation trails" increase radically?**

If you think Ken Caldeira and David Keith should be exposed to the public at large for their part in the **criminal climate engineering cover-up**, tell them so yourself and share their contacts and this post with others so they can do the same (Keith's and Caldeira's contacts are hyperlinked to their names above). Such communications should be done in a professional, articulate, and peaceful manner. **Attaching credible informational links** to any communications sent is also important. Anyone and everyone that is actively or passively participating in the criminal cover-up of the global climate engineering assault should be publicly exposed in the same manner.

**It is rationally incomprehensible that we now live in a global society in which so many in academia are in one way or another muzzled, or outright lying in an apparent attempt to secure their paychecks and pensions.**

**Climate engineering is obviously, undeniably, and verifiably occurring in skies all over the globe. The creation of "Weather Made To Order" has been openly discussed by scientists since the 1950s.**

The public is finally starting to look up and thankfully beginning to re-activate their sense of reason and logic. The climate engineering/weather warfare assault cannot be hidden in plain sight for much longer. Once fully exposed populations around the globe will unite in a shockwave of anger and outrage at what their governments have done to them (and to the planet's life support systems as a whole). This anger and outrage from global populations will certainly extend to all those in academia and the media who have made themselves accessories to the climate engineering crimes by actively or passively participating in the ongoing cover-up. Make your voice heard, we must all do our part in the most critical effort to expose the truth, our time is running out.

**May be freely reprinted**, so long as the text is unaltered, all hyperlinks are left intact, and credit for the article is prominently given to [geoengineeringwatch.org](http://geoengineeringwatch.org) and the article's author with a hyperlink back to the original story.

123 Responses to Ken Caldeira, David Keith, And Carnegie "Science", The Face Of The Criminal Climate Engineering Cover-up



## **NOW DO YOU BELIEVE IN CHEM TRAILS???????**

Please pay attention to the points in this video

Date on documentation July 22, 1974 - Year USA and Canada signed Weather Modification Agreement with their headquarters and planes located in Montana, USA

Heads of various countries - try and identify the man in this tour of the airplane

Merkle at that young age, leader of Germany for many years.

List of chemicals used on copy of document

Notice area under the wing where the one man is standing to left of picture - Sign reads "Blast area, stand clear" Those are the sprayer jets.

CHEM TRAIL SPRAYERS - NOW DENY THIS???????

<https://drive.google.com/file/d/1KleeUHi3mjDXm4zekTm1O5anT8HanJH/view>

**WHO NOW WILL DISPUTE  
THE DISTRIBUTION VIA CHEMTRAILS  
HOW ELSE WOULD THEY DO IT????**

Weather Modification Information Act

<https://laws-lois.justice.gc.ca/eng/acts/W-5/page-1.html?txthl=act>

Requirement to maintain daily records and submit report

4 (1) Every person who carries out any weather modification activity shall, in such form and manner as may be prescribed,

(a) maintain a daily record of the activity, in which shall be included detailed information relating to

(i) the location and operation of any equipment used,

(ii) any meteorological observations made in the geographic **area affected or intended to be affected by the activity**, and

(iii) **the chemical nature, physical properties and quantities of any substances emitted into the atmosphere for the purposes of weather modification**; and

(b) within fifteen days from the end of the month in which the activity was carried out, submit to the Administrator a report specifying

(i) the date when the activity was carried out,

(ii) the nature and scope of the activity,

(iii) any meteorological observations that were made, and

(iv) such other information and observations relevant to the activity as may be specified by the Administrator or an authorized representative of the Administrator.





<https://climateviewer.com/2019/05/22/five-types-of-real-chemtrail-just-the-facts/>

Geoengineering • Weather Modification • Space Weather Modification

FAQ: #CirrusCloudsMatter: The Shady Truth About Chemtrails

<https://climateviewer.com/cirruscloudsmatter/>

Ten Technologies to Own the Weather Today!

<https://climateviewer.com/2017/11/07/ten-technologies-to-own-the-weather-today/>

“Ten Technologies to Own the Weather Today!” • Watch this Video on YouTube

Aluminum, Barium, and Chemtrails Explained – JUST THE FACTS

<https://climateviewer.com/2015/03/15/aluminum-barium-and-chemical-trails-explained-just-the-facts/>

My Speech to the EPA about Flight Pollution

<https://climateviewer.com/2015/08/09/my-speech-to-the-epa-about-flight-pollution/>

“EPA Hearing on Jet Pollution and Geoengineering - August 11, 2015” • Watch this Video on YouTube

Project AZURE Sounding Rocket Chemtrails from Space!

<https://climateviewer.com/2019/04/06/project-azure-sounding-rocket-chemtrails-from-space/>

“Project AZURE Sounding Rocket Chemtrails from Space!” • Watch this Video on YouTube

“Andøya Space Center / NASA Rocket launch - Azure Programme April 5th 2019” • Watch this Video on YouTube

Artificial Gravity Waves, Barium Clouds, & Chemical Trails From Space!

<https://climateviewer.com/2018/06/16/artificial-gravity-waves-barium-clouds-chemical-trails-from-space/>

“Artificial Gravity Waves, Barium Clouds, & Chemical Trails From Space! - August 11, 2015” • Watch this Video on YouTube

PRESENTATION: Ionospheric Heaters - Space Weather Control and Geophysical Warfare

<https://climateviewer.com/2018/11/14/ionospheric-heaters-space-weather-control-geophysical-warfare/>

“Ionospheric Heaters - Space Weather Control and Geophysical Warfare” • Watch this Video on YouTube

Biological Weapons, Calmatives, and Terrorism

<https://climateviewer.com/2015/01/29/biological-weapons-calmatives-and-terrorism/>

It was a conspiracy! Military experiments on unsuspecting public

<https://climateviewer.com/2013/11/17/it-was-a-conspiracy-military-experiments-on-unsuspecting-public/>  
The CIA, Weather Warfare, and Climate Terrorism

<https://climateviewer.com/2015/02/22/the-cia-weather-warfare-and-climate-terrorism/>  
Henry Kissinger, the CIA, and Weather Warfare

<https://climateviewer.com/2018/05/24/henry-kissinger-the-cia-and-weather-warfare/>  
"Henry Kissinger, the CIA, and Weather Warfare" • Watch this Video on YouTube  
Weather Modification History - Interactive Timeline 1800 - Present

<https://climateviewer.com/interactive-timeline/>  
PRESENTATION: Geoengineering, Weather Modification, and Weaponizing Nature

<https://climateviewer.com/2016/12/09/geoengineering-weather-modification-and-weaponizing-nature/>  
"Geoengineering, Weather Modification, and Weaponizing Nature" • Watch this Video on YouTube  
PRESENTATION: The Climate Changers and Water Wars: Technocracy, Geoengineering, and Replacing the Water Cycle

<https://climateviewer.com/2018/08/01/climate-changers-water-wars-technocracy-geoengineering-replacing-water-cycle/>  
"The Climate Changers and Water Wars: Technocracy, Geoengineering, and Replacing the Water Cycle" • Watch this Video on YouTube  
PRESENTATION: **The Environmental Modification Accountability Act #ENMODAA**

**An Act To End Atmospheric Experimentation Without Notification**

<https://climateviewer.com/enmod/>

**Tags**

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- Hands Off Mother Earth Manifesto: A Permanent Ban on Geoengineering
- The Environmental Modification Accountability Act #ENMODAA

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Jim Lee, ClimateViewer News  
Jim Lee  
Creator of ClimateViewer News

"I am forever a Boy Scout, lifetime artist, nocturnal programmer, music is my life, love is my religion, and I am the luckiest husband and father on Earth. I speak for the trees. I have a passion for mapping, magnets, and mysteries."

About Jim Lee

## INVESTIGATE THE SUBSTANCES BEING SPRAYED INTO OUR AIRSPACE AND THEIR HEALTH IMPACTS.

[https://www.change.org/p/investigate-the-substances-being-sprayed-into-our-airspace-and-their-health-impacts?utm\\_content=cl\\_sharecopy\\_37899243\\_en-CA%3A5&recruiter=1018458709&recruited\\_by\\_id=32ba3290-05be-11ea-8b47-db747977f1b9&utm\\_source=share\\_petition&utm\\_medium=copylink&utm\\_campaign=psf\\_combo\\_share\\_initial&utm\\_term=psf\\_combo\\_share\\_initial&share\\_bandit\\_exp=initial-37899243-en-CA](https://www.change.org/p/investigate-the-substances-being-sprayed-into-our-airspace-and-their-health-impacts?utm_content=cl_sharecopy_37899243_en-CA%3A5&recruiter=1018458709&recruited_by_id=32ba3290-05be-11ea-8b47-db747977f1b9&utm_source=share_petition&utm_medium=copylink&utm_campaign=psf_combo_share_initial&utm_term=psf_combo_share_initial&share_bandit_exp=initial-37899243-en-CA)

February 21, 2024 Why this petition matters Started by Kerry Monteith

I am a resident of Grande Prairie, AB, Canada. My community and I have noticed an increase in diseases such as multiple sclerosis, Parkinson's, Alzheimer's among us. We strongly believe that this could be linked to substances being sprayed into our airspace.

The World Health Organization states that air pollution is a major environmental risk to health and by reducing air pollution levels can reduce the burden of disease from stroke, heart disease, lung cancer, chronic and acute respiratory diseases (source: WHO). While we do not have direct evidence linking these substances to our health issues yet, we need transparency about what is being sprayed in our airspace.

We are calling on local authorities for an immediate investigation into what these substances are and how they might be affecting our health. This investigation should include rigorous testing of the airborne particles in question as well as comprehensive studies on their potential impacts on human health.

Our right to clean air should not be compromised. We deserve to know what we're breathing in every day so that we can take steps towards ensuring a healthier future for ourselves and generations to come.

Please sign this petition urging local authorities in Grande Prairie to investigate these concerns immediately!

[https://www.change.org/p/investigate-the-substances-being-sprayed-into-our-airspace-and-their-health-impacts?utm\\_content=cl\\_sharecopy\\_37899243\\_en-CA%3A5&recruiter=1018458709&recruited\\_by\\_id=32ba3290-05be-11ea-8b47-db747977f1b9&utm\\_source=share\\_petition&utm\\_medium=copylink&utm\\_campaign=psf\\_combo\\_share\\_initial&utm\\_term=psf\\_combo\\_share\\_initial&share\\_bandit\\_exp=initial-37899243-en-CA](https://www.change.org/p/investigate-the-substances-being-sprayed-into-our-airspace-and-their-health-impacts?utm_content=cl_sharecopy_37899243_en-CA%3A5&recruiter=1018458709&recruited_by_id=32ba3290-05be-11ea-8b47-db747977f1b9&utm_source=share_petition&utm_medium=copylink&utm_campaign=psf_combo_share_initial&utm_term=psf_combo_share_initial&share_bandit_exp=initial-37899243-en-CA)

## **'CLIMATE ENGINEERING'**

### **Environment Canada wants to save the climate by blocking the sun Climate Analytics**

Jen Hodgson Published on: 22 Feb 2024, 2:57 pm

Environment Canada proposes to spend taxpayer dollars on “climate-altering” technologies that alter the earth’s atmosphere and block the sun.

This comes on the heels of Environment Minister Steven Guilbeault’s declaration that Canada doesn’t need any more roads built.

Environment and Climate Change Canada (ECCC) recently released its five-year plan, Science Strategy 2024 to 2029, with objectives “to better reflect the current context” as pertains to Canada's specific environment and to better respond to “urgent environmental challenges” through “climate engineering.”

“It identifies forward-looking directions for our science,” Environment Canada wrote. “These reflect and emphasize the horizontal nature of the Department’s work and the efforts needed for continuous improvement.”

“This renewed Science Strategy is an important statement of support for the scientific integrity, rigour and innovative spirit of our people who, collectively, drive ECCC’s science agenda forward.”

The updated Science Strategy “brings us to the next level, with an ambitious agenda for departmental science that keeps pace with the rapidly changing environmental context.”

With the Trudeau Liberals’ goal of achieving net-zero by 2035 in mind, this “ambitious agenda” entails investigating techniques that intervene with the natural climate system.

Environment Canada wants to “improve the understanding of climate-altering technologies in the Canadian context.”

The government’s objective is to “understand the potential for climate engineering and determine the implications of technologies that aim to deliberately alter the climate system, typically to counteract climate warming (e.g., solar radiation modification, marine geoengineering, carbon dioxide removal techniques),” and plans to “conduct scientific assessments of climate-altering technologies and impacts on Canada.”

According to the UN Environment Programme, solar radiation modification is a

“technology designed to cool the planet.”

Its chief method is stratospheric aerosol injection, which “involves injecting aerosols into the stratosphere, so a small amount of sunlight is deliberately reflected into space to cool the planet.”

Further methods involve cloud seeding, which is a weather modification technique that “improves a cloud’s ability to produce rain or snow by introducing tiny ice nuclei into certain types of subfreezing clouds,” according to Desert Research Institute, and marine cloud brightening, which is the “seeding of low marine clouds” to “enhance their albedo (the fraction of sunlight that is diffusely reflected by a body), thus reflecting more solar radiation back to space,” according to Science Direct.

Critics warn interventions such as stratospheric aerosol injections could lead to unexpected consequences, such as making climate change worse, damaging the ozone layer, and causing health problems for people.

“Depending on the materials it uses, it could damage the ozone layer. This can cause health and environmental problems,” warns the Carnegie Climate Governance Initiative. “Stopping it suddenly could cause rapid temperature rise that would be disruptive to human society and be dangerous for many species.”

<https://www.westernstandard.news/news/climate-engineering-environment-canada-wants-to-save-the-climate-by-blocking-the-sun/52620>

## **WEATHER MODIFICATION PLAN BENEFITS AND NEGATIVES**

**Higher carbon-dioxide levels will be beneficial.**

Future **CO2 increases will boost agricultural productivity and improve drought resistance**, thereby **bolstering food security and contributing to a greener, lush planet.**

**What are the advantages and disadvantages of CO2?**

Carbon dioxide is an important greenhouse gas that helps to trap heat in our atmosphere. Without it, our planet would be **inhospitably cold.**

**What are the benefits of CO2 for humans?**

CO2 is transported in the bloodstream to the lungs where it is ultimately removed from the body through exhalation. CO2 plays various roles in the human body including regulation of blood pH, respiratory drive, and affinity of hemoglobin for oxygen (O2).

**What are five benefits of carbon dioxide?**

The main points are listed below:

**More CO2 makes plants grow faster and with less stress.**

**Forests are growing faster in response to increasing CO2.**

**The more CO2 stimulates the growth of beneficial bacteria in both soil and water.**

**CO2 fertilization, leading to more plant growth, means less erosion of topsoil.**

**What are the advantages and disadvantages of CO2?**

Carbon dioxide is an important greenhouse gas that helps to trap heat in our atmosphere. Without it, our planet would be inhospitably cold. However, an increase in CO2 concentrations in our atmosphere is causing average global temperatures to rise, disrupting other aspects of Earth's climate.

**Why is carbon dioxide CO2 important to life?**

How CO2 supports life. **Carbon helps form the protein and DNA found in living**



things. In the atmosphere, it combines with two oxygen molecules to form carbon dioxide. Carbon dioxide is a crucial ingredient in photosynthesis, the process by which plants turn energy from the sun to turn water and carbon dioxide into sugar

**What is CO2 in your body?**

Carbon dioxide is an odorless, colorless gas. It is a waste product that your body makes when it uses food for energy. Your blood carries carbon dioxide to your lungs. When you exhale, you breathe out carbon dioxide. Having too much or too little carbon dioxide in your blood can be a sign of a health problem

**Do humans need CO2 breathing?**

The human breathing mechanism actual revolves around CO2, not oxygen. Without carbon dioxide, humans wouldn't be able to breathe.

**What are the disadvantages of CO2?**

Exposure to CO2 can produce a variety of health effects. These may include headaches, dizziness, restlessness, a tingling or pins or needles feeling, difficulty breathing, sweating, tiredness, increased heart rate, elevated blood pressure, coma, asphyxia, and convulsions.

**How can I increase carbon dioxide in my blood naturally?**

Eating more fruits and vegetables and alternate nostril breathing can increase CO2 in blood naturally.

**Where does CO2 come from?**

Natural sources of carbon dioxide include most animals, which exhale carbon dioxide as a waste product. Human activities that lead to carbon dioxide emissions come primarily from energy production, including burning coal, oil, or natural gas.

**What are 5 facts about carbon dioxide?**

CARBON DIOXIDE EXISTS NATURALLY IN THE ATMOSPHERE. ...

CARBON DIOXIDE HAS NO TASTE, COLOUR OR SMELL. ...

CARBON DIOXIDE CAN BE USED TO INCREASE GROWTH OF FLOWERS, FRUIT AND VEGETABLES. ...

CARBON DIOXIDE AND CARBON MONOXIDE ARE TWO VERY DIFFERENT THINGS. ...



DRY ICE IS MADE OF CARBON DIOXIDE.

### **What level of CO2 is safe for humans?**

What levels of CO2 are considered safe? Carbon dioxide is not generally found at hazardous levels in indoor environments. The MNDOLI has set workplace safety standards of 10,000 ppm for an 8-hour period and 30,000 ppm for a 15 minute period.

### **How can I increase CO2 in my body?**

CO2 Tolerance: Why It's Important + 9 Ways to Increase Yours

Opting to breathe through your nose with your mouth closed throughout the day, while asleep, or during training is another great way to build up your tolerance. Breathing through the mouth can cause a reduction in the CO2 levels in the body, so nasal breathing can help to correct this.

### **What foods contain carbon dioxide?**

Carbon Footprint of Food | Green Eatz

Meat, cheese and eggs have the highest carbon footprint. Fruit, vegetables, beans and nuts have much lower carbon footprints. If you move towards a mainly vegetarian diet, you can have a large impact on your personal carbon footprint.

### **Do we need carbon dioxide to live?**

Carbon dioxide is essential for internal respiration in a human body. Internal respiration is a process, by which oxygen is transported to body tissues and carbon dioxide is carried away from them. Carbon dioxide is a guardian of the pH of the blood, which is essential for survival.

### **Why is carbon important to life?**

Carbon is the chemical backbone of life on Earth. Carbon compounds regulate the Earth's temperature, make up the food that sustains us, and provide energy that fuels our global economy. Most of Earth's carbon is stored in rocks and sediments. The rest is located in the ocean, atmosphere, and in living organisms.

### **What are the largest natural sources of CO2?**

Oceans provide the greatest annual amount of CO2 of any natural or anthropogenic source. Other sources of natural CO2 include animal and plant respiration, decomposition of organic matter, forest fires, and emissions from volcanic

eruptions.

**What does lack of CO2 cause?**

Low CO2 levels may trigger several changes in the lungs, such as narrowing of the airways, otherwise known as bronchoconstriction. These effects on the lungs may negatively impact health, especially those with asthma [10]

What happens when your body is low on CO2?

Lower levels of carbon dioxide may mean you have: Metabolic acidosis, or your blood is too acidic. Addison disease, an adrenal gland problem. Ketoacidosis (this is a complication of type 1 and type 2 diabetes)

**Where is CO2 produced in the body?**

Carbon dioxide is produced by cell metabolism in the mitochondria. The amount produced depends on the rate of metabolism and the relative amounts of carbohydrate, fat and protein metabolized.

**Does exercise increase CO2 in blood?**

When you exercise and your muscles work harder, your body uses more oxygen and produces more carbon dioxide.

**(Guess they will close down all those gyms and work out places - humans producing too much CO2, more than cows???)**

**Do we exhale 100% CO2?**

CO2 is expelled upon exhalation and the cycle begins anew. Humans do not absorb all of the inhaled O2 for metabolism; inhaled air contains 21% O2 while exhaled breath contains approximately 16% O2 and 5% CO2.

**How much CO2 are humans responsible for?**

A net 5 billion metric tons of human-produced carbon remain in the atmosphere each year, raising the global average carbon dioxide concentrations by about 2.3 parts per million per year. Since 1750, humans have increased the abundance of carbon dioxide in the atmosphere by nearly 50 percent.

**(Guess this is why the WEF have to depopulate the world down to 500 million people only by 2050 not 2035???)**

**How much CO2 is safe for Earth?**

350 ppm

Countless scientists, climate experts, and governments officials agree that 350 ppm is the “safe” level of carbon dioxide. Since the beginning of human civilization, our atmosphere contained about 275 ppm of carbon dioxide.

**What are the top 3 human activities that increase CO2 levels?**

Burning fossil fuels, releasing chemicals into the atmosphere, reducing the amount of forest cover, and the rapid expansion of farming, development, and industrial activities are releasing carbon dioxide into the atmosphere and changing the balance of the climate system.

(Guess this why they are attacking farming, they are not attacking the BUSINESS side of the pollution problem, the manufacturers, the de-forestation of our country, burning it up instead and logging old growth forests, etc. and the Weather Modification chemicals that they are spewing by the millions of gallons into our atmosphere, not pick on the resident human beings????)

**What are five natural sources of CO2?**

Doesn't carbon dioxide in the atmosphere come from natural sources, yes.

Yes, there are natural sources of atmospheric carbon dioxide, such as outgassing from the ocean, decomposing vegetation and other biomass, venting volcanoes, naturally occurring wildfires, and even belches from ruminant animals.

(Guess is does not come from Arson Set Wildfires which outnumber the Natural set wildfires???)

**Why is CO2 the best?**

The carbon dioxide considered the best fire extinguisher to put off fires caused by burning of inflammable liquids such as petrol or oil because carbon dioxide stops the influence of oxygen because it decreases the oxygen present in that fire which leads to the fallout of fire.

(Guess without the CO2 our forests will just burn at will????)

**Do trees grow faster with more CO2?**

As Carbon Dioxide Grows More Abundant, Trees Are Growing faster and more abundant.

**More abundant CO2 accelerates photosynthesis, causing plants to grow faster, a phenomenon known as "carbon fertilization."** The findings were published in the journal Nature Communications.

**Which vegetable has the most carbon?**

Fruits and vegetables, on the whole, have a lower carbon footprint to animal products. A kilogram of potatoes, the most carbon-intensive plant-based food, are responsible for 2.9kg of emissions. Lentils come in even lower at 0.9kg.

(Guess potatoes will be the next on the list to deny the residents, along with meat and eggs???)

**Do eggs have carbon dioxide?**

Fresh eggs tend to have a higher carbon dioxide content and some of this gas dissolves in the egg's moisture to form carbonic acid. As an egg ages, the carbon dioxide diffuses out and the contents become more alkaline.

(Guess that is why they want to curtail the amount of chickens providing eggs?)

**What is the most essential element to life?**

The four most essential elements of life are:

- Oxygen (O)
- Carbon (C)
- Hydrogen (H)
- Nitrogen (N)

**What is the difference between carbon and carbon dioxide?**

Carbon is a chemical element which is present in many gases and compounds. For example, carbon combines with oxygen to make carbon dioxide (CO2), and combines with hydrogen to make methane (CH4).

**Why is CO2 not environmentally friendly?**

The problem is that carbon dioxide is tipping the greenhouse effect out of balance.

Before the 1700s, the Earth was happily regulating the greenhouse effect – absorbing solar energy and emitting greenhouse gases at a steady rate. Then, the Industrial Revolution happened.

**(Guess they won't believe the Scientists once again??? Proven statistics that our CO2 has risen very insignificantly over the last 2 thousand years and is well below the panic button mark and will not be rising any time soon.???)**

**How much does a tree reduce CO2?**

According to the Arbor Day Foundation , in one year a mature tree will absorb more than 48 pounds of carbon dioxide from the atmosphere and release oxygen in exchange.

**How many trees are equivalent to a tonne of CO2?**

In summary, it can be concluded that the annual CO2 offsetting rate varies from 21.77 kg CO2/tree to 31.5 kg CO2/tree. To compensate 1 tonne of CO2, 31 to 46 trees are needed.

**What tree absorbs the most CO2?**

The live oak is the most efficient carbon capturing tree, it being able to sequester some 10,994 CO2 equivalent over its lifetime. Ranking second is the East Palatka holly, with a lifelong carbon fixation of 7,321 CO2 equivalent. Mar 9, 2023

**How accurate is the Government of Canada's date regrading our forest land and CO2 recovery by the trees? Check other sites on that one for answers. And see information provided below).**

**2.2 High levels of uncertainty**

Forest carbon numbers in Canada’s national GHG inventory are subject to very high uncertainty. The latest edition **estimates that net CO2 removals** from forest land in 2019, reported as **134 Mt** (see Section 1.1), **could actually range from 112 to 185 Mt (95% probability range)**, and that **“not all sources of uncertainty have been captured”**; the report also mentions that **“a 50% uncertainty about biomass increment** [the rate of tree growth] is assumed”.<sup>10</sup>

The inventory’s estimated uncertainty in emissions from harvested wood is variously stated as ±10%<sup>11</sup> and ±24%<sup>12</sup>.

More physical measurement and improved scientific understanding (see Section 2.3) could help make **forest carbon flows less uncertain**, but a large degree of uncertainty is unavoidable, especially for large land areas, because of the



complexity of the biological and chemical processes involved.

**Debatable accounting choices** then add considerable extra uncertainty to the numbers. For example, countries have wide discretion regarding the size of the “managed forest” – land on which all emissions and removals are to be included in their national inventory, according to IPCC guidelines (see Section 4.1 for further discussion of this).

The high uncertainty arising from both quantification and accounting means that Canada’s forest carbon statistics should always be presented with appropriate caveats, and policy decisions based on them should, in our view, apply a precautionary approach in which climate.

<https://naturecanada.ca/wp-content/uploads/2021/10/Canadas-Approach-to-Forest-Carbon-Quantification-and-Accounting.pdf>

### Who is the number 1 polluter in the world?

#### *Global largest CO<sub>2</sub> emitters 2021 | Statista*

#### **China**

China was the biggest emitter of carbon dioxide (CO<sub>2</sub>) emissions in 2021, accounting for nearly **31 percent of the global emissions**. The world's top five largest polluters were responsible for roughly 60 percent of global CO<sub>2</sub> emissions in 2021.

The last report of the World Meteorological Organization (WMO) pointed out that during the last year recorded (2020), the concentration of CO<sub>2</sub> in the atmosphere broke another record, despite a drop in fossil fuel emissions during the Covid-19 pandemic. **Specifically, the concentration reached 413 parts per million (ppm) in 2020, 149% more than pre-industrial levels (before 1750).**

#### **Top 10 polluters**

However, most of this pollution comes from just a few countries: **China**, for example, generates around **30%** of all global emissions, while the United States is responsible for almost **14%**. In the ranking below you can find the 10 countries that produce the most emissions, measured in millions of tons of CO<sub>2</sub> in 2019.

**China**, with more than **10,065 million tons** of CO<sub>2</sub> released.

United States, with 5,416 million tons of CO<sub>2</sub>

India, with 2,654 million tons of CO<sub>2</sub>

Russia, with 1,711 million tons of CO<sub>2</sub>

Japan, 1,162 million tons of CO<sub>2</sub>

Germany, 759 million tons of CO<sub>2</sub>

Iran, 720 million tons of CO<sub>2</sub>

South Korea, 659 million tons of CO<sub>2</sub>

Saudi Arabia, 621 million tons of CO<sub>2</sub>

Indonesia, 615 million tons of CO<sub>2</sub>

**(Guess they have to come after Canada at 2% - sure makes sense to me????)  
How much pollution is caused by Canada?**

Source: World Resources Institute (2022) Climate Watch Country Historical Greenhouse Gas Emissions.

In 2019, Canada's share of global emissions **decreased from 1.8% in 2005 to 1.5% in 2019.** Aug 25, 2022

(Guess someone is lying, as Canada is not listed in the top ten in the one document and I chose to believe that the World Resources Institute to have accurate data???)

### **Reaching carbon neutrality**

**These countries won't be able to reach carbon neutrality only by reducing their domestic emissions.**

They will need to offset much of their carbon footprint on international carbon markets.

This is what **ClimateTrade** is about: our marketplace makes it easy for anyone to offset their greenhouse gas emissions by supporting certified projects around the world. Contact our team of specialists to know more.

### **What is Canada's highest polluter?**

In Canada, mining was responsible for more than half (54 per cent) of all reported industrial pollutants in 2020, trailed by **oil and gas extraction (16 per cent),**

**utilities (7 per cent)**, primary metal manufacturing (6 per cent) and **petroleum and coal products manufacturing (five per cent)**. May 2, 2023,

**(Guess Canada has to shut down those 15 mines, even though other countries have the following numbers??)**

Here's a small sample of how many coal plants there are in the world today.

The **EU** has **468** plants, building 27 more for a total of **495**.

**Turkey** has **56** plants, building 93 more total **149**.

**South Africa** has **79**, building 24 more total **103**.

**India** has **589**, building 446 more total **1036**.

**Philippines** has **19**, building 60 more total **79**.

**South Korea** has **58**, building 26 more total **84**.

**Japan** has **90**, building 45 more total **135**.

**AND**

**CHINA** has **2363**, building 1171 total **3534**.

Here come our **CANADIAN** politicians that are going to shut down our **15** remaining plants and save the planet!

A total of **5615 worldwide** at least, and we will **shut down 15** Canadian Plants to save the world.

**How big are Canada's emissions?**

A region's available fuel mix, climate, average household size, and average household income all influence per capita emissions. In 2020, Canada's per capita household GHG emissions **decreased by 12.0% to 3.2 tonnes** per person following a small decrease of **3.4% in 2019**. Feb 16, 2023

**How big are Canada's carbon emissions?**

According to the Government of Canada, Canada's total GHG emissions in **2020** were **672 megatonnes** of carbon dioxide equivalent (MtCO<sub>2</sub>e). Globally, **Canada's share of GHG emissions is less than 1.5%**.

**(Guess we have to basically shut our country Canada down to save 1.5% emissions, you got to be kidding me???)**



**Does Canada pollute more than China?**

China has over 1.3 billion more people than Canada, yet the average Canadian emits far more greenhouse gas emissions – by 24 metric tons in 2014. America comes in a close second, burning 20 metric tons per person, followed by Russia with 14 metric tons of carbon dioxide. Aug 15, 2018

**(Guess because Canada has less of a population, they claim via carbon footprint for each individual we contribute more Carbon Dioxide, this is a Climate Activists left side brain way of thinking???)**

## NEGATIVE EFFECTS OF CO<sub>2</sub> ABUNDANCE

### What are the health effects of CO<sub>2</sub>?

Exposure to CO<sub>2</sub> can produce a variety of health effects. These may include headaches, dizziness, restlessness, a tingling or pins or needles feeling, difficulty breathing, sweating, tiredness, increased heart rate, elevated blood pressure, coma, asphyxia, and convulsions.

## EARTH'S OZONE LAYER WILL COLLAPSE DOES THE SUN FEEL SCORCHING HOT?

<https://www.youtube.com/watch?v=c8BxcL2kjl4&t=1s>

**Ongoing covert climate engineering (modification) programs are by far the most damaging. Please view this alarming report on rapidly increasing UV levels.**

A former aerospace avionics engineer who worked with NASA has been conducting testing for Geoengineering Watch with state of the art UV metering equipment supplied by GeoengineeringWatch.org.

The objective is to measure the dangerously high UV radiation that is now saturating the surface of our planet. Those who are most aware of their surroundings have long since taken note of the growing intensity of the sun. This change is **not due** to increased solar activity, it is a dire symptom of **Earth's rapidly disintegrating ozone layer**. Though there are many anthropogenic factors negatively impacting our essential ozone layer, **ongoing covert climate engineering programs are by far the most damaging**. Please view this alarming report on rapidly increasing UV levels.

Many mainstream and "official sources" falsely claim that the southern hemisphere ozone hole is "recovering" (**in order to pacify populations**), however, **available data does not support the "ozone recovery"** official narrative.

Since the start of this century UV levels comparable to the surface of Mars have been recorded. The same sources of false "ozone layer recovery" data don't even mention the massive and growing northern hemisphere ozone hole.

**If the ozone layer completely collapses, all exposed life forms will collapse with it. Climate intervention operations are decimating the ozone layer, life on Earth is in the balance.**

All are needed in the critical battle to wake populations to what is coming, we must make every day count. Share credible data from a credible source, make your voice heard. Awareness raising efforts can be carried out from your own home computer.

Dane Wigington

For more information go to the full Geoengineering Watch article:

<https://www.geoengineeringwatch.org/imminent-ozone-layer-collapse-a-dire-warning-from-a-former-nasa-contract-engineer/>

To support Geoengineering Watch: <http://www.geoengineeringwatch.org/support/>

To receive Geoengineering Watch updates, please sign up for our mailing list:

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Must view, THE DIMMING, the most comprehensive climate engineering documentary:

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<https://youtu.be/rf78rEAvhY>

Geoengineering Watch Vs. The "Fact Checker", Lawsuit Filed:

<https://youtu.be/sMedYDBFGOI>

The Catastrophic Consequences Of Climate Engineering: <https://youtu.be/kyxmrwbTKoM>

To see firsthand film footage of the climate engineering impact on our forests and its vanishing inhabitants, view the new series: "Into The Wild, With Dane Wigington":

<https://www.youtube.com/playlist?list=PLwfFtDFZDpwvtAJ2yrKO3idEKDP3miLq9>

In the attempt to answer as many questions as possible on the dire issue of climate engineering, Geoengineering Watch is producing a weekly "Climate Engineering News Q and A": <https://www.youtube.com/playlist?list=PLwfFtDFZDpwsQyIUkWcYJzaarFt40K1KM> By submitting a question to this email [questions@geoengineeringwatch.org](mailto:questions@geoengineeringwatch.org) you are granting permission for your question and your first name to be read online. If you do not want your first name mentioned, please state that you wish to remain anonymous.

Geoengineering Watch has conducted our first ever high altitude particulate testing. Film footage of the flight and lab testing processes are featured in "The Dimming", a groundbreaking documentary that is currently in production. This is a new 12+ minute insight segment on the upcoming film. <https://youtu.be/4x3z35HA6JQ>

This is a 4+ minute trailer of the groundbreaking documentary "The Dimming":

<https://youtu.be/nT8OR1im-FA>

The latest and most effective GeoengineeringWatch.org awareness raising materials can be found at the links below:

2 sided color glossy informational flyers: <http://www.geoengineeringwatch.org/ads/>

20 page fact and photo summary booklets: <http://www.geoengineeringwatch.org/climate-engineering-fact-and-photo-summary/>

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## THE AUTHOR BIO

Rosalie Bertell was born in the U.S. in 1929, and passed in 2012, at the age of 83, at her Order "The Grey Nuns of the Sacred Heart" in Pennsylvania. She received her PhD in biometrics from the Catholic University of America, Washington, in 1966. She was awarded nine PhD honoris causa and many awards, among others the Right Livelihood Award in 1986. She was the co-founder of the International Institute of Concern for Public Health (iicpc) in Toronto (1984) and the International Physicians for Humanitarian Medicine in Geneva (1999). She is the author of *No Immediate Danger?* *Prognosis for a Radioactive Earth* (Women's Press, 1985) and *Planet Earth: The Latest Weapon of War* (Women's Press, 2000).

She was a consultant to the U.S. Nuclear Regulatory Commission, the U.S. Environmental Protection Agency, and to **Health Canada**. Since 1990, she was a member of the U.S.-Canada International Joint Commission (ijc). She has conducted research with institutions in Japan, Germany, popular ecological organizations on the Marshall Islands, in Malaysia, India, and the Philippines. She was also a member of the Permanent Tribunal of Peoples, the International Medical Commission of Bhopal, and the International Commission of Physicians for Chernobyl in Viena (1996).

1 Plasma is a fourth state of matter. Starting with the solid state, followed by the more energetic liquid then gaseous states, plasma is even more energetic and contains molecules that are dissociated into positive and negative ions. For example, water molecules in air can be converted into  $\text{H}_2\text{O}^+$  and  $\text{H}^-$ , positive and negative ions. An example of plasma is lightening.

2 The Nasa/U.S. Air Force press 1990 Press Kit outlines an atmospheric NASA testing program (linked to HAARP and the U.S. Air Force, that could produce the Vibrant Spectrums (auroras) (cited in Peterson).

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## SLOWLY WRECKING THE PLANET

by Ms Rosalie BERTELL, from Toronto (Canada),

VOLUME 31, NUMBERS 1,2113

This is the last **article Rosalie Bertell wrote in 2011 before she passed in 2012**. In this article, her aim is to gather the most important results of her research about the development of a secret “geo-warfare” that is threatening, and has already partly destroyed, the life systems of our planet. Increasing freak weather conditions, climate changes, and seemingly “natural” catastrophes around the world are the possible result of these undertakings by the military worldwide. Further, a recently appearing civil science of “geo-engineering” today presents itself as the “saviour” of a planet under stress, paradoxically propagating the same measures that may be at the root of the current climate crisis. A public debate of the background and development of these new technologies has not yet taken place. We are all children of the universe. Billions of years before we were born, the furnace of the stars made, in prolific abundance, the basic chemicals that are needed for all of life, and the supernovas gave up their lives to make all of the heavier chemicals and trace metal that our bodies need to properly function. More than four billion years ago our planet earth was formed. Not too close or too far from our planet’s sun, so that our temperature was just right to support life. Our planet formed a moon, to rule over the night, the water waves and life-giving cycles.

Water covered our early planet, forming a chemical soup in which long molecules including the proteins of life were formed of the elements made in the stars. Then the waters receded to the places of oceans and the dry land flourished into grasses, trees, flowers, insects, butterflies, birds, amphibians, animals of all sorts, and humans. How grateful we must be for this magnificent gift of life and all we have needed to sustain it over the last hundreds of thousands of years! Yet, today it is under threats never felt before in its entire unfolding journey.

While the earth’s human civic community has been trying to rid itself of nuclear weapons over the last 65 years, some economically developed nations have quietly moved into the realm of geo-warfare. **Geo-weaponry has recently been introduced to the public as a “new” high-tech way to mitigate the effects of global warming, and it is being called “geoengineering.”**

**Geoengineering is defined as planetary-scale environmental engineering of our atmosphere: that is, manipulating our weather, our oceans, and our home planet itself.**

The methods that are being proposed in geoengineering are already a reality without public participation in debate, prior public notification, or democratic oversight. They are based on



a deep understanding of the earth system, learned through space exploration, and are staggering

in number and scope.

**114 CANADIAN WOMAN STUDIES/LES CAHIERS DE LA FEMME**

**Why have these plans not been announced to the public and openly discussed, even in so-called democracies, although geo-experiments have been taking place since the post-World War II period?** This question was answered by a geoengineer at the February 2010 meeting of the American Association for the Advancement of Science (aaas):

...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..." [my emphasis]

Likely the legal reasons have to do with the fact that no one owns the atmosphere above the earth, and environmental impact studies for atmospheric manipulation are not required by law. One might add that military secrecy is also an essential part of military culture. The implications of these global experiments involve profound impacts on life itself. **Clearly the public and their life support system are under attack and no one has clearly considered, laid out and admitted to the potential consequences, nor have they sought a formal permission from the at-risk public.**

**The Background**

Since the Nuremberg trials after World War II, the legal principles guiding experimentation with human beings have been clearly stated. Its very first principle is:

Persons involved should have legal capacity to give consent; and should be so situated as to be able to exercise free power of choice, without the intervention of any element of force, fraud, deceit, duress, overreaching, or other ulterior form of constraint or coercion; and should have sufficient knowledge and comprehension of the elements of the subject matter involved as to enable him/her to make an understanding and enlightened decision. This latter element requires that before the acceptance of an affirmative decision by the experimental subject there should be made known to him/her the nature, duration, and purpose of the experiment; the method and means by which it is to be conducted; all inconveniences and hazards reasonable to be expected; and the effects upon his/her health or person which may possibly come from his/her participation in the experiment.

**(Trials of War Criminals)**

It seems quite clear to me (although I do not know the legal opinion) that experimentation with one's life support system, the earth itself, is an experiment that fits this definition and requires informed consent.

As early as **1946**, the General Electric Company discovered that by dropping dry ice in a cold room one could "create" ice crystals similar to those in clouds. Within months of this discovery **they were dropping dry ice from planes into cumulus clouds, converting the water droplets into ice crystals, and then watching them drop onto the earth like snow.**

By 1950 industry

researchers had found that silver iodide had the same effect. The era of weather modification had begun and no one considered the people's right to know and accept this experimentation. Of course, rain was natural, so there was no reason to bother getting permission. The original expressed purpose of rain-making was to make the dry areas of the plain states more fruitful. It is said that Russia used rain-making to cause the fall-out from Chernobyl to drop before reaching Moscow.

**The Escalation**

In the race to the moon, early in 1958, both the U.S. and the U.S.S.R. cosmonauts discovered the Van Allen Belts, magnetic belts protecting the earth from the destructive solar wind's charged particles. Between August and September 1958, in Project Argus, the U.S. Navy **exploded three fission type nuclear bombs 480 km (300 miles) above the South Atlantic Ocean in the lower Van Allen belt.** The U.S. Atomic Energy Agency called it "the biggest scientific experiment ever undertaken" (Baldwin). **The "experiment" caused worldwide effects creating new artificial aurora borealis. Long-term effects of this incredible destruction, that occurred before the protective function of the VanAllen belts was understood, have never been declassified.**

This "great" experiment was repeated a second time over the Pacific Ocean on 9 July 1962 in Project Starfish.

Three nuclear "devises," one kiloton, one megaton, and one multi-megaton, were exploded, seriously disturbing the lower Van Allen belt and altering its shape and intensity.

Scientists predicted that the belts would not return to their original formation for a hundred years (which may be wishful thinking) (Comptons 1996, 1998; Microsoft

Encarta, 1999). This so disturbed the Queen's Astronomer in the U.K., Sir Martin Ryle, that he became a staunch anti-nuclear critic.

By **1962**, the U.S. military was using electronic beams to ionize and de-ionize areas of the atmosphere in imitation of lightning. In the same year **Canada** began launching satellites

into the earth's ionosphere and chemically simulating the plasma.<sup>1</sup>

Later in 1962, the U.S.S.R. undertook similar planetary "experiments," creating three new radiation belts

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Between 7000 and 13000 km (4300 and 8100 miles) above the earth. The electron fluxes in the Van Allen belts have change markedly since this event and have never returned to their former state (Keesings Historisch

Archief; Harle).

Zhigniew Brazinski, advisor on Foreign Affairs to Presidents John F. Kennedy and Lyndon Johnson during the Viet Nam War, discussed, **investigating ways of using artificial lightning as a weapon in Project Skyfire and hurricanes in Project Stormfury.**

According to Lowell 2000 kg (**4400 pounds**) of chemicals were dumped into the atmosphere including **1000 kg (2200 pounds) of barium and 100 kg (220 pounds) of lithium.** Lithium is a **highly reactive toxic chemical** easily ionized by the sun. This increases the density of the lower ionosphere and creates free radicals capable of causing further chemical changes (Begich and Manning). Although these experiments are clearly a part of the military desire to control weather as a weapon, reports of their environmental impact are non-existent in the public sector. Instead ozone depletion was Ponte, author of The Cooling, the military also investigated the **possibility of destroying the ozone layer over North Vietnam with lasers or chemicals, causing damage to crops and humans.**

### The Effects

The United Nations General Assembly became so alarmed by these activities that on December 10, 1976, they approved a Convention on the Prohibition of Military or **Any Other Hostile Use of Environmental Modification Techniques.** However, they failed to exclude "peaceful projects" such as "pure research," solar energy projects or industrial resource development. No thought was given to informed consent of the public. Governments merely changed their public relations posture. **As an example, the U.S. began weather research to increase the output of food in the North American plains.** Russia was carrying on comparable research to increase food production.

For over 50 years atmospheric modification experiments have been undertaken either by adding chemicals to the atmosphere causing reactions that may or may not be seen from earth, such as **artificial aurora borealis ("Northern Lights Thrill")**, or wave experiments using heat or electro- magnetic force,<sup>2</sup> or even nuclear atmospheric explosions.

These latter interrupt or distort the normal wave motion of the upper atmosphere, often effecting weather changes in the troposphere.

Chemicals dumped into earth's atmosphere **included barium azide, barium chlorate, barium nitrate, barium perchlorate, and barium peroxide. All are combustible** and destructive of the ozone layer. In 1980 alone, about blamed on under arm deodorant and cologne, atomizers and asthma medicine dispensers.

Actually, it became evident in the early **1970s that the 300 megatons of atmospheric nuclear bomb testing by the U.S., U.K. and U.S.S.R. between 1945 and 1963 had depleted the ozone layer by four percent** and had seriously damaged human embryos, fetuses, children, adults, and the whole living environment (Long-term effects).

Supersonic military planes and rockets also damage the ozone layer and cause atmospheric changes. This was made public in the evening news during the '70s, and probably influenced the decision of commercial airlines to decline supersonic flight, with the exception of the Concord.

However, the public soon looked the other way and forgot the supersonic flight problem and atmospheric nuclear testing when refrigerators were blamed for the serious ozone hole damaging human health and crops in various parts of the world, especially the southern tip of South America. Civilian uses of cfc's exasperated the problem, but were not likely the first cause.

By 1974, U.S. research into heating the lowest edge of the ionosphere first undertaken at the Pennsylvania State University; moved to Plattsville, Colorado; Arecibo, Puerto Rico; and Armidale, New South Wales, Australia.

This prompted the U.S. Senate to introduce legislation that would bring all military experimentation in weather modification under the control of a civilian oversight committee. Unfortunately, **the bill failed to pass Congress.**

In 1981, the Plattsville Ionospheric Heater moved to the Poker Flats rocket launch site in Alaska. A second Plasma Physics Laboratory (exploring the ionosphere) is located at Two Rivers, Alaska, and is called hipas (High Although these experiments are clearly a part of the military desire to control weather as a weapon, reports of their environmental impact are non-existent in the public sector. Instead ozone depletion was blamed on under arm deodorant and cologne, atomizers and asthma medicine dispensers.

Power Auroral Stimulation). In the foothills of the Rocky Mountains, near Gacona, Alaska, a massive array of transmitters has been erected, called haarp (High Frequency Active Auroral Research Program) by the U.S. Army and Navy. It now contains 180 transmission towers in grid

formation, although it began operation in a modular form of a 48-tower grid in 1994. There is reason to believe haarp may further expand to 384 or 720 transmission towers. This powerful synchronized transformer is accompanied by a series of Superdarns (Dual Auroral Radar

climate change.” Those who watch the military prepare for a weather war are alarmed. Most recently, on September 19, 2010, the U.S. Navy undertook an artificial cloud study called care (Charged Aerosol Releases Experiment). The Naval Research Laboratory and the Department of Defense Space Test Program used a nasa four-stage Black Brant xii suborbital

sounding rocket from Wallops Island, Virginia, to dump aluminum oxide and chaff, creating an artificial cloud in the earth’s outer atmosphere at 280 km (174 miles) above Networks) that continuously monitors the effects on the earth’s surface of manipulations of haarp on the earth’s ionosphere (Bertell 119-128).

It now appears to be possible to “steer” the jet stream, deciding the line between warm and cool air in geographic regions; or manipulate the large vapor rivers that move the rain from the tropics to the temperate zones, causing draught or floods. **Natural occurrences or instabilities like monsoons, hurricanes, tornados, etc., in the atmosphere can be made more severe by “adding energy.”** Insertion of oil in tectonic faults, or creating **artificial earth vibrations with electromagnetic pulses can cause earthquakes.**

This is not to say that military experimentation causes all atmospheric events and ultimately climate change. I am just saying that it is difficult in each case to separate out the military geo-experiments from the genuine heaving’s of the planet. The increase in violent weather is obvious to everyone. Is Mother Earth try to send us a message of distress? Is only the civilian economy responsible for climate change? I think not!

**The Future**

The U.S. is not the only country involved with this high tech assault on the earth system. At least Russia, China, the U.K., Australia, **Canada**, and Japan are also involved.

The geo-warriors are, I believe, wishing to go public with even more risky experiments, with public approval, and maybe even become “climate change heroes.” **At the United Nations Conference on Climate Change in Copenhagen, in 2010, geo-warriors made their most public pitch under the guise of “geoengineering” as a “solution to global the surface (normal clouds are at a maximum of about 80.5 km (50 miles) above the surface in the**

mesosphere).

**The cloud was designed to glow in the dark.** The aluminum will, of course, eventually drop into the ocean or on farmland polluting crop and food supplies. The tests may damage the various atmospheric boundaries that protect life on earth and no one knows what they will do to climate, agriculture, and human health, or if they will alter infrared or uv radiation reaching the planet. The U.S marine breeding habitats, including the National Marine Sanctuary, are at risk from this experiment. **Apparently this artificial cloud shading of the U.S. East Coast in the fall of 2009 brought on unusual snow and wintry weather.**

What else it caused is not reported (Moscovitz; Bernhardt; Peterson; "Night Clouds").

Similar Naval experiments include: the Unified Aerosol Experiment (uae 2) in the United Arab Emirate in 2004 and Seven South East Asian Studies conducted from Singapore in 2007. The earth has already become a **"research victim" of militarism** and it **is time to stop geoengineering** as a cruel farce and crime against life itself. Civil society should clearly not give the geo-warriors a public blessing to do more planetary damage.

Shall we place the healing of our earth in the hands of those who have for over 65 years shown the grossest carelessness of its well-being? Shall we throw away this magnificent planet, like we do cheap plastic trinkets? It is time to honour and protect planet earth as the Indigenous people have done for thousands of years. We must acknowledge our philosophy of life to be faulty since it has brought us to this crisis. It is time to question patriarchy, which implies domination over all living things, and raw Shall we place the healing of our earth in the hands of those who have for over 65 years shown the grossest carelessness of its well-being?

Shall we throw away this magnificent planet, like we do cheap plastic trinkets? It is time to honour and protect planet earth as the Indigenous people have done for thousands of years

**VOLUME 31, NUMBERS 1,2117**

Capitalism that requires excessive military force to guard its greedy hoarding of natural resources. We sorely need a critical plan for a more intelligent, feminized, and humanized future.

There is great need to stimulate a sober look at our global life style, philosophy, and social planning so that humans, all life, and planet earth may have a long and fruitful era of peace and prosperity. Our sun has some four to five billion more years to bless us with its energy—let's not squander it.

## **Climate Engineering under the Paris Agreement**

### **A Legal and Policy Primer**

**A. Neil Craik and William C.G. Burns**

#### **SPECIAL REPORT**

2 Climate Engineering Technologies

4 The Paris Agreement and Climate Engineering

12 The Paris Institutions

13 Conclusions

14 About CIGI / À propos du CIG

<https://www.cigionline.org/static/documents/documents/GeoEngineering%20Primer%20-%20Special%20Report.pdf>

#### **Climate Engineering Technologies**

Climate engineering (sometimes referred to as “climate geoengineering”) is an umbrella term for a broad constellation of proposed technologies that are directed toward counteracting the climatic impacts of a build-up of greenhouse gases (GHGs) in the atmosphere. CDR technologies are designed to remove carbon dioxide directly from the atmosphere and store it terrestrially or in the world’s oceans. These options include BECCS, ocean iron fertilization, accelerated terrestrial or ocean mineral weathering and direct air capture, as well as land management to enhance natural sinks. SRM technologies seek to reflect incoming solar radiation away from the earth in order to reduce global average temperatures.



Geoengineering Watch Global Alert News, March 16, 2024, #449

**Honesty has a power that Makes a lot of people uncomfortable**

"Severe storms bring heavy snow to the Rockies and baseball-sized hail to the Midwest" (NBC News).

**Chemical ice nucleation cloud seeding operations are a core component for unstable air masses and massive hail.**

Late this week snow was also falling in Arizona at above freezing temperatures while it was raining in north eastern Canada. Does that make any sense from a meteorological perspective? The short answer is no, it doesn't, unless geoengineering is considered. "Fruit chaos is coming", that new headline from the Atlantic is referring to the crop crushing effect of record warm temperatures immediately followed by freak flash freezes.

This devastating scenario is occurring all over the world. Is it just the result of nature? Or something else altogether? How soon till the food shelves empty out? The latest installment of Global Alert News is below.

Geoengineering Watch Global Alert News, March 16, 2024, #449  
( Dane Wigington )

All are needed in the critical battle to wake populations to what is coming, we must make every day count. Share credible data from a credible source, make your voice heard.

Must view, THE DIMMING, the most comprehensive climate engineering documentary:  
The Dimming, Full Length Climate Engineering Documentary

**Full article:**

<https://www.geoengineeringwatch.org/geoengineering-watch-global-alert-news-march-16-2024-449/>

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## WHAT TO KNOW ABOUT CLOUD SEEDING

<https://www.webmd.com/a-to-z-guides/cloud-seeding#1-2>

Medically Reviewed by Neha Pathak, MD, FACP, DipABLM on **March 15, 2022**

Written by Alexandra Benisek

When Did Cloud Seeding Start?

How Does Cloud Seeding Work?

What Are the Benefits of Cloud Seeding?

Does Cloud Seeding Have an Impact on Health and the Environment?

Cloud seeding is a scientific process that improves a cloud's ability to make rain or snow, as well as control other weather events. The technique, which experts also call weather modification, can really help in areas that don't have a big enough supply of natural water. After cloud seeding, precipitation (rain or snow) will fall from the clouds onto the ground.

### **When Did Cloud Seeding Start?**

This method started in 1946 by scientists at the General Electric Research Laboratory. They discovered that they could use silver iodide -- an inorganic compound -- and dry ice to improve the creation of ice crystals in clouds.

Today, cloud seeding still involves silver iodide and dry ice. But in the last 60 years, experts have learned a lot more about this method. This has since boosted the understanding of rain and snow processes and improved seeding methods.

### **How Does Cloud Seeding Work?**

Not all clouds create rain. Even if they do make rainwater, only a few clouds are able to produce enough moisture that allows for large raindrops.

This may happen because there aren't enough ice particles within a cloud. Because of this, there aren't enough cloud droplets to combine

and make raindrops. Another reason that certain rainclouds may struggle to make rain is that some don't last long enough to have cloud droplets gather to create rain.

Cloud seeding gives these clouds a lot more ice crystals (or cloud nuclei). If experts complete seeding at the right time, it leads to more moisture supply, which will eventually create rainwater.

Experts use silver iodide because its structure is very similar to natural ice crystals. When they put silver iodide in the top part of a growing cloud, the silver iodide crystal grows quickly once exposed to the cloud's moisture. Right after, the ice crystal becomes a heavy, large raindrop. It will then fall through the cloud and onto the ground. Just 1 gram of silver iodide can create up to 10 trillion artificial ice crystals.

Scientists have found two main ways to conduct cloud seeding:

Release silver iodide particles from below the cloud base. Pyrotechnics (or flares) on the wings of planes burn silver iodide from below the clouds. The updraft from the cloud takes the particles high into the center of the cloud.

Drop silver iodide particles from above the cloud. Planes can also let off electrical pyrotechnics over the top of clouds. The flares become ignited once they fall off the plane and onto the cloud.

Sometimes, silver iodide may not be the best option. In droughts, clouds may not be able to create cloud droplets with this approach. But the clouds still have a lot of water in them, it's just in tiny droplets. If this is the case, a hygroscopic material (like regular salt) might be a better option to cloud seed with.

Experts may also use liquid propane, dry ice (solid carbon dioxide), and other salt compounds to "seed" clouds.

In 2021, the United Arab Emirates began to experiment with the use of aerial drones for cloud seeding. The new twist on the old concept uses drones to cast an electric charge. This "zaps" clouds with a laser beam, which causes water droplets to combine and leads to rainfall.

### **What Are the Benefits of Cloud Seeding?**

Cloud seeding can help in many ways. It can:

Create more winter snowfall and lead to more mountain snowpack

Enhance the natural water supply to communities

Lessen hailstorms by reordering water vapor in clouds, which breaks down large hailstones

### **Does Cloud Seeding Have an Impact on Health and the Environment?**

So far, experts haven't found any harmful effects of cloud seeding with **silver iodide** on the environment. The concentration of silver in a storm from cloud seeding is far below the accepted limit of **50 micrograms per liter**. There is a lot more **iodine** in iodized salt (the salt that humans eat) than there is **in this form of rainwater**.

Even in projects that have lasted 30 to 40 years, researchers haven't found any major concerns in cloud seeding processes.

Rainwater from seeding clouds doesn't taste or smell any different than regular rainwater. You wouldn't be able to tell the difference between the two.

While **we don't know specifically if cloud seeding poses a threat, some experts believe** that it **could lead to silver toxicity and environmental concerns** if the practice becomes common on a **much larger scale**. Similarly, people worry that cloud seeding **could throw off earth's natural balance of moisture**. They fear that this could have effects on evaporation and precipitation.

File Name: Weather Modification Aircraft Cloud Seeding over Northern California.

**Aircraft 'cloud seeding' was done over NorCal this morning.**

**Here's what that is and how it can he...VIDEO**

**Mar 15, 2022**

For the first time in over two months, measurable rain fell this morning in California's Central Valley. At the same time, a special aircraft was navigating the gray skies releasing flares into the clouds below. Those flares contained a chemical solution that acts as "cloud seeds." The concept of cloud seeding has been used off and on, mainly by militaries, since the 1940s. It is a type of weather modification that can boost the productivity of rain or snow-producing clouds. Here's the basic science.

<https://www.youtube.com/watch?v=BEIzrnuskq8>

Phase 2 - block the sun and destroy farmers

<https://www.youtube.com/watch?v=PbWKHKZYT5c>

**BELOW ARE INDIVIDUAL COMMENTS BY INDIVIDUALS**

Phase 2 - block the sun and destroy farmers

When BC has lots of forest fire why they did not use this cloud seeding and bring more artificial rain to stop the fire.

Why do the experts not cloud seed over forest fires?

Won't this increase the amount of metal in air?

Forget weather, this has massive potential to be used as a bio/geo weapon.

They've been able to do this since the 1970s as far as I'm aware.

'm fairly convinced this is one of the root causes for these increasing droughts. China is conducting this technique to green it's deserts across an area of 5.5 million km<sup>2</sup>. If you make it rain artificially here, then that rain will not fall where it was supposed to fall, given those clouds are gone. This likely has a significant impact on global weather patterns and global wind currents.

Also, if we can affect the climate with these geo-engineering techniques to reverse 'climate change', then it's entirely possible to affect the climate in such a way that it appears as though the climate is rapidly changing. They're using climate change to reduce the freedom of everyone, while making the people pay for things unnecessary/damaging for the sake of evermore power and profit.

I used to believe the whole climate change issue, but seeing how they claim they're going to tackle the problem really made me wonder whether any of it is actually true. None of the proposed measures will have the proclaimed effect. If things really are as dire as they say, I'd imagine they'd actually try to remedy the problem instead of imposing the useless/damaging measures we see and hear today. Do we emit too much CO<sub>2</sub>? Absolutely. But not in the way they claim. Carbon is a vital, nay THE vital ingredient in ALL living things we can see and touch. the problem is imbalance. We cut down trees and poison the oceans while emitting increasing amounts of CO<sub>2</sub>. That has to change. How? Farming procedures must be altered to heal the land instead of destroying it. We must stop the all-for-profit-industries. Stop producing these utterly useless gadgets & gizmos that break down the moment you unbox it. Or things that are completely unnecessary to begin with.

The real problem is the poisoning/polluting of land, air and water, and thereby all other living things on this planet. PFAS, phthalates, and many other chemicals humans invented and are now seeping into everything we eat, drink, breathe, ...

'Climate change', the excess of CO<sub>2</sub> in the air, is an easy fix compared to the continuous pollution with manmade forever-chemicals. The latter is likely impossible to fix at all. We can only prevent it from getting worse. That's what we should do...but we don't...because it's inconvenient and "not economically viable".

Insurance companies seed cloud seeding projects in alberta \*

Why couldn't this be Used to help the fires in Cali, Brazil and Australia...we lost so much forest and animals. I don't understand

Think this out if control, crazy floods everywhere

That's not true at all, it doesn't have to be cloudy. They use it in the clear Middle East to rain daily

Ok, cloud seeding, seems harmless enough.. fly a plane, drop some frozen water- it combines with the moisture in the air & POOF; Rain. We as a society accept this & who's to say 1 in 10 of those planes aren't dropping carcinogens or poisonous chemicals, hard metals - whatever.. we truly are down a sketch road.

Its great in theory but the chemicals they really use for cloud seeding can be toxic to life,

human and animal life, and plants, and it makes Bush fires so much more flammable and the smoke more toxic to breathe in..

You didn't talk about the enormous flooding it can cause and destruction of property. I remember when cloud seeding was considered a conspiracy theory.

Remember the movie, Forest Gump? when he was in Vietnam and it rained for FOUR MONTHS? that was Military Modification (weapon) tactics, to slow down the Vietcong or disrupt them for lack of a better word. The U.S Military has weapons beyond our knowledge. Hugo Chavez wasn't too far off when he said that the earthquake in Haiti was intended for Venezuela but somehow it backfired and that the (USA) has weather modification weapons that (maybe) in a hundred years from now will be known. Just think about this "cloud seeding" science in the 1960s Vietnam era most folks couldn't understand this science (used for military purposes first!!)

Next to admit is dynamite which is used to make it not rain.

Queensland 2022. I've seen a lot of small airplanes the past couple of weeks and there has been non stop rain

"He that controls the weather will control the world."

Germany and Europe and China July 2021.

So this is what hit us in Texas smh.

Dubai has cloud seeding last week and it's cold as hell rn, coz it's raining lol

What about creating hurricanes, tornados to destroy cities? Patent US20030085296A1

"What are the negative effects of cloud seeding? Risks or concerns like unwanted ecological changes, ozone depletion, continued ocean acidification, erratic changes in rainfall patterns, ..." Forbes - 22 Jun 2017. Silver Iodide can also cause miscarriages and fetal abnormalities, as well as other symptoms. Just google it.

After calling people crazy for decades, they finally tell us it's true

This is about controlling people and dollars, if you control the weather you control the food

Cloud seeding is just a cutesy name for weather manipulation. If only the masses could watch this and really understand what they're doing.

So they finally admit that they can control the weather. I hate our government more and more everyday

They were seeding clouds back in the Vietnam war.

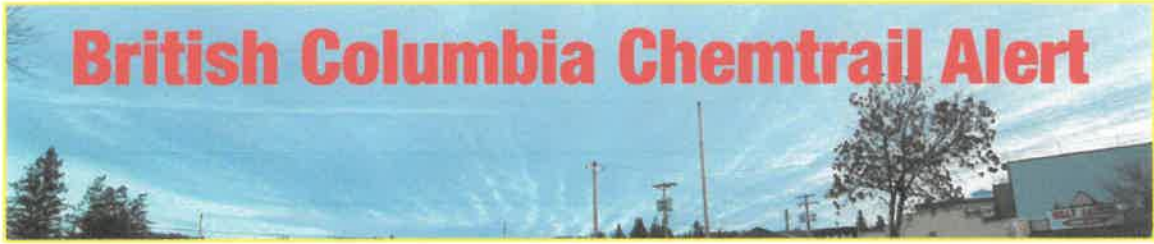
I remember in 3rd or 4th grade (early 80's, late 70's) reading a 'recommended' book called, "My Dad, the weatherman" or something similar (can't seem to find book now) and it was a story about a little girl's Dad, a weatherman, who told his daughter about how "rain can be made". Beginning of story went into how she and her friend were complaining about how hot it is. Then, her Dad went into detail about how rain can be "made" through the use of airplanes...intro into geo-engineering ...I dismissed it but now, later on, I see that this has been going on for quite some time now. People want to easily label others as "conspiracy theorists" yet, the truth comes out in the end. Why mess with Mother Nature to begin with in the first place? What else is going on up there?

Definitely wondering if this is what's currently caused the extreme weather conditions hitting Australia right now

I am here after a week of rain and hail in the uk in May! Crazy weather!

We could only have wished this technology was used over Lahaina to save lives & prevent it from devastation when their officials turned off all water supply causing firetrucks unable to fill up & sprinkler systems from serving purpose all for excuse water shut off was needed for watering crops instead of used for fighting the fire +saving lives.

[https://www.youtube.com/watch?v=bU4z8ZiX\\_eA](https://www.youtube.com/watch?v=bU4z8ZiX_eA)



<https://britishcolumbiachemtrailalert.ca/2011/04/25/chemtrails-over-the-okanagan-region-of-b-c/>

**ANYTHING YOU WANT TO KNOW ABOUT CHEMTRAILS GO TO THIS SITE.**



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## Aluminum Dust from Chemtrail Spraying Fuelling Super Wildfires

<https://britishcolumbiachemtrailalert.ca/2023/08/31/aluminum-dust-from-chemtrail-spraying-fuelling-super-wildfires/>

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**CLIMATE CHANGE WEATHER MODIFICATION  
MANIPULATIONS  
ALUMINUM LEVELS SHOCKING**

<https://www.facebook.com/reel/3646995918920918>

## **WEATHER MODIFICATION 10000000 TONS of Aluminum DUMPED On Us.**

**Experts ADMIT The Consequences UNKNOWN**

**You Are Not Sick. You Are Being POISONED**

January 28, 2023

10 Megatons of Aluminum... Multiple health problems including respiratory diseases and flu-like illnesses are certainly problems caused by poisoning.

WATCH THE VIDEO

SECRET HISTORY: Military Spraying the Flu, RULE 23 and BIO WARFARE on Citizens

Aligning the CDC "50 yrs of Vaccine Progress" timeline with known military spraying experiments and disease outbreaks

A Must-Watch 17 min. video: Aligning the CDC "50 yrs of Vaccine Progress" timeline with known military spraying experiments and disease outbreaks.

This is some pretty wild stuff.

I do realize that (supposedly) there were flu epidemics prior to the 1900s, however, they were not declared "epidemics" until the 1900s. Additionally, the "evidence" of these supposed epidemics of the 1800s is sketchy, at best.

<https://www.congress.gov/bills/110/7th-congress/house-bill/2977/text>

(I) through the use of any of the means described in clause (i) or subparagraph (B);

(II) through the use of land-based, sea-based, or space-based systems using radiation, electromagnetic, psychotronic, sonic, laser, or other energies directed at individual persons or targeted populations for the purpose of information war, mood management, or mind control of such persons or populations; or

(III) by expelling chemical or biological agents in the vicinity of a person.

(B) Such terms include exotic weapons systems such as--

(i) electronic, psychotronic, or information weapons;

(ii) chemtrails;

(iii) high altitude ultra low frequency weapons systems;

(iv) plasma, electromagnetic, sonic, or ultrasonic weapons;

(v) laser weapons systems;

(vi) strategic, theater, tactical, or extraterrestrial weapons; and

(vii) chemical, biological, environmental, climate, or tectonic weapons.

(C) The term "exotic weapons systems" includes weapons designed to damage space or natural ecosystems (such as the ionosphere and upper atmosphere) or climate, weather, and tectonic systems with the purpose of inducing damage or destruction upon a target population or region on earth or in space.

(b) Scope: Inclusive of solar radiation management (SRM), carbon dioxide removal (CDR), and other techniques, hazardous emissions activities are diverse, varying greatly in their characteristics and consequences. Included herein are anthropogenic atmospheric activities, and may involve ground-based, underwater, and atmosphere-based activities, including, without limitation, aerosol injection, cloud-seeding and other deployments by facilities such as aircraft, rockets, unmanned aerial vehicles (UAVs) and drones of all sizes down to large pico balloons, wireless infrastructures, ships and submarines.

(c) Scope of regulatory authority: All atmospheric activities require state licensing.

(d) SRM activities include, without limitation, aerosol injection such as:

(1) Solar shields or atmospheric sunscreens where reflective materials are injected into the stratosphere with the intention of increasing albedo. These include, without limitation, sulfur dioxide (SO<sub>2</sub>), sulfuric acid (H<sub>2</sub>SO<sub>4</sub>) and aluminum oxide (Al<sub>2</sub>O<sub>3</sub>);

Atmospheric injection of reflective aerosol for mitigating global warming

Abstract

Abstract: A global warming abatement strategy that involves injecting reflective aerosols into the stratosphere to reduce solar radiation reaching the Earth's surface is a promising approach to mitigate global warming. This paper presents a comprehensive review of the current state of research on this topic, including the physical and chemical processes involved, the potential benefits and risks, and the challenges associated with implementation. The review highlights the need for further research to better understand the complex interactions between the atmosphere and the surface, and the importance of developing robust models and monitoring systems to assess the effectiveness and safety of such a strategy.

Images (6)



Classifications



Keywords

Wide-area applications

View all

Application ID: 0520100177724A1

2020-09-20	Document created
2020-09-20	Document updated
2020-09-20	Document deleted
Status	Archived

## About the Chemtrails Manual Cover

- The Air Force Academy **Chemtrails** manual cover shows a flame from a Bunsen burner that appears to be producing two "trails".
- The title of the manual "**Chemtrails**" is printed between the two "trails".
- Considering the intentional graphic depicting "trails" it's possible the Bunsen burner represents a jet engine producing "chemically" induced, *persistent contrails*.
- A **Bunsen burner** is a common piece of laboratory equipment that produces a single open gas flame which is used for heating, sterilization, and combustion.
- A test tube filled with a liquid is emptying contents into a flask.
- The remaining graphic appears to be a chemical representation for "methane" (CH<sub>4</sub>). Since Natural gas contains mostly "methane" it's possible this symbol alludes to the fuel providing the flame to the Bunsen burner. (Natural Gas)



## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

### Styrene

Version number: GHS 1.0

Date of compilation: 2019-10-10

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

<b>1.1 Product identifier</b>	
Identification of the substance	Styrene
Registration number (REACH)	this information is not available
CAS number	100-42-5
Alternative name(s)	ethenylbenzene
Article number	A0001745
<b>1.2 Relevant identified uses of the substance or mixture and uses advised against</b>	
Relevant identified uses	General use
<b>1.3 Details of the supplier of the safety data sheet</b>	
Chemos GmbH & Co. KG	
Sonnenring 7	
84032 Altdorf	
Germany	
Telephone: +49 871-966346-0	
Telefax: +49 871-966346-13	
e-mail: <a href="mailto:chemos@chemos.de">chemos@chemos.de</a>	
Website: <a href="http://www.chemos.de/">http://www.chemos.de/</a>	
e-mail (competent person)	<a href="mailto:chemos@chemos.de">chemos@chemos.de</a>



## WEATHER MODIFICATION CANADIAN ACTIVITIES

### When did Canada start cloud seeding?

What is Cloud Seeding? | Let's Talk Science

Cloud seeding was first used in Canada in 1956. Back then, the goal was to protect crops in Alberta from hail damage. Jul 23, 2019

What are the weather modification activities?

Weather modification activity includes any action designed or intended to produce, by physical or chemical means, changes in the composition or dynamics of the atmosphere for the purpose of increasing, decreasing or redistributing precipitation, decreasing or suppressing hail or lightning or dissipating fog or cloud.

**What is weather modification effect?**

Weather modification is the act of intentionally manipulating or altering the weather. The most common form of weather modification is cloud seeding, which increases rain or snow, usually for the purpose of increasing the local water supply.

**What was the weather modification in 1948?**

In Canada weather modification began in 1948 with a federal government experiment that used dry ice dispersed into clouds to stimulate rainfall. Under appropriate conditions, rainfall did result. Feb 7, 2006

**What are the negative effects of cloud seeding?**

Environmental and Health Concerns of Cloud Seeding

This can lead to health problems for humans, such as respiratory issues, skin irritation, and gastrointestinal problems. Furthermore, cloud seeding has been blamed for natural disasters like floods, tsunamis, droughts, earthquakes, tornadoes, plagues, and famines, which can cause serious harm to human health. Apr 25, 2023

**How does cloud seeding affect the weather?**

Without these particles, known as condensation or ice nuclei, raindrops or snowflakes cannot form and precipitation will not occur. Cloud seeding is a weather modification technique that improves a cloud's ability to produce rain or snow by introducing tiny ice nuclei into certain types of subfreezing clouds.

**Who invented cloud seeding?**

Vincent Joseph Schaefer (July 4, 1906 – July 25, 1993) was an American chemist and meteorologist who developed cloud seeding.

**What is the history of cloud seeding?**

The first experiments with cloud seeding were conducted in 1946 by American chemist and meteorologist Vincent J. Schaefer, and since then seeding has been performed from aircraft, rockets, cannons, and ground generators. Jan 11, 2024

**Is cloud seeding real?**

This rain-inducing technique, called cloud-seeding, has been around for more than 60 years. The process involves “seeding” existing clouds with a harmless substance called silver-iodide to give water droplets a particle to converge around, allowing them to form an ice crystal. Mar 15, 2023

**Is it natural rain or cloud seeding?**

Cloud seeding is also referred to as man made precipitation and artificial rain making. The United Arab Emirates is one of the first countries in the Persian Gulf region to use cloud seeding technology.

**How does cloud seeding affect hail?**

What impact does cloud seeding have on hail? Though very little research on hail suppression has been done in Texas, we do know from sound research conducted in other parts of the U. S. that seeding for enhancing rainfall very likely lessens the amount, and size, of hailstones.

**Is artificial rain harmful?**

Environmental concerns The use of chemicals like silver iodide raises questions about the long-term effects on ecosystems. While silver iodide is considered relatively low in toxicity, its accumulation in the environment and possible effects on wildlife and water quality are areas of ongoing research. Nov 28, 2023

**Is silver iodide toxic to humans?**

Unfortunately, the use of silver iodide has been linked to numerous health risks, including toxicity, reproductive disorders, developmental defects, and cancer. Symptoms of silver iodide toxicity include coughing, wheezing, and difficulty breathing. May 4, 2023

**Can rain be made artificially?**



What is cloud seeding (or artificial rain)?

Cloud seeding creates artificial rain by injecting substances such as silver iodide, potassium iodide, dry ice (solid carbon dioxide), liquid propane, or salt into clouds in order to induce precipitation. Nov 28, 2023

**How to change the weather**

Cloud Seeding is a method of weather modification: Seeding agents are dispersed into clouds in a controlled manner. These materials then alter microphysical processes within the cloud, for example by providing additional condensation / ice nuclei or altering relative humidity by introducing hygroscopic particles.

These techniques can be used to increase or decrease precipitation (rain- or snowfall) in a certain area. Cloud seeding can also be applied to suppress or mitigate hail.

Our client's objectives include water supply management, Both the seeding agents and the means of deployment have to be selected depending on the type and temperature of clouds, the desired effect, terrain and circumstances.

Our product range covers all common scenarios. Using our technology you can seed warm and cold clouds. Our seeding materials can be deployed by aircraft or ground based generators.

Logo of Cloud Seeding Technologies

Cloud Seeding - Use Cases

We provide best-in-class cloud seeding technologies that enable you to fulfill your individual weather modification needs.

How to change the weather

Cloud Seeding is a method of weather modification: Seeding agents are dispersed into clouds in a controlled manner. These materials then alter microphysical processes within the cloud, for example by providing additional condensation / ice nuclei or altering relative humidity by introducing hygroscopic particles.

These techniques can be used to increase or decrease precipitation (rain- or snowfall) in a certain area. Cloud seeding can also be applied to suppress or mitigate hail.

Our client's objectives include water supply management, preventing hail stone damage to crops or industrial facilities and improving weather conditions for winter sports and other events. Both the seeding agents and the means of deployment have to be selected depending on the type and temperature of clouds, the desired effect, terrain and circumstances.

Our product range covers all common scenarios. Using our technology you can seed

warm and cold clouds. Our seeding materials can be deployed by aircraft or ground based generators.

Cloud Seeding in cold clouds

Cloud Seeding in warm clouds

#### Top Seeding by Aircraft

Seeding agent is deployed above or inside cloud. Adequate products are both burn-in-place or ejectable flares. Aircraft-mounted generators or – when seeding warm clouds – hygroscopic systems may also be used for this type of seeding.

Icon for Top-Seeding by Aircraft

#### Below-cloud Seeding by Aircraft

Seeding agent is deployed below the cloud and then naturally distributed by updrafts or thermals. Burn-in-place flares, aircraft-mounted generators or hygroscopic systems may be utilized to achieve this.

#### Ground-based Seeding by Generators, Balloons & Drones

Especially for seeding low-hanging, cold clouds (e.g. in mountainous terrain) ground based seeding techniques may be used to economically deploy the seeding agent.

Icon for Ground-based Generator

Icon for Balloon Seeding

Icon for Drone Seeding

Common Use Cases

Icon for Hail Suppression

Hail Suppression

Prevent damage to crops, buildings, machinery, cars or industrial products by reducing large hail stone formation in storms.

Alter the amount of precipitation to supply fresh water, support plant growth or for recreational purposes.

Significantly increase the amount of natural snowfall to enhance fresh water reserves or improve conditions for winter sports. Reduce snow pack to prevent damage to buildings or mitigate avalanche risks.

Improve visibility and ensure safe operation of airports, roads, tunnels and industrial facilities by clearing fog and low-hanging clouds.

#### Scientific Research

Our elite team of researchers has been studying mesoscale meteorology and cloud microphysics for decades.

Based on our extensive research and practical experience, we have developed completely new chemical compounds which are significantly more effective than traditional cloud seeding materials.

At the same time we were able to make our products more economic and environmentally friendly.

Our advanced deployment systems – pyrotechnical and pneumatic flares, particle ejectors and ground based generators – are specifically engineered so they are safe, reliable and easy to use.

Comparative studies have proven the advantages of our groundbreaking technology; references are available on request.

Photo of Cloud Seeding Flare Testing in Climate Chamber

Testing of Flares in Climate Chamber

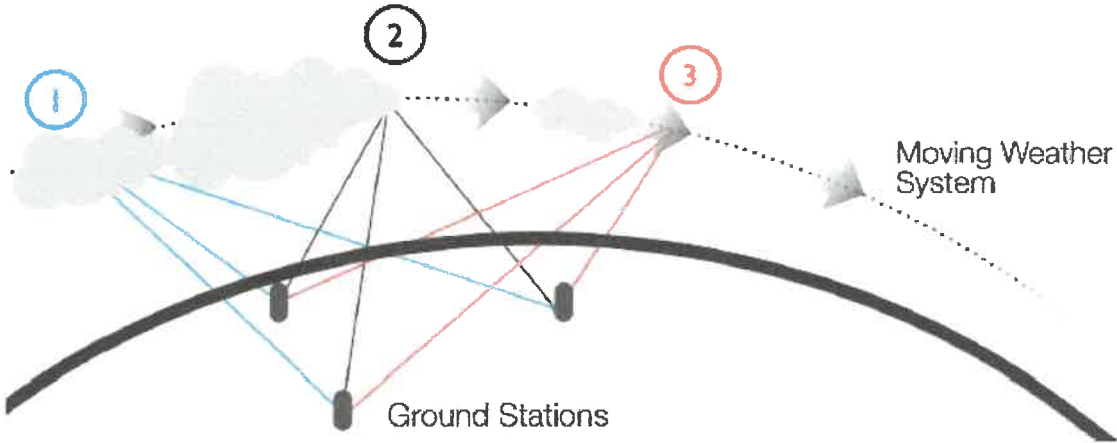
Our Approach

We provide both the technology and the know-how to make your weather modification program successful.

<https://www.cloud-seeding-technologies.com/use-cases/>

<https://climateviewer.com/2019/10/04/shocking-electric-weather-modification-companies-in-2019/>

Signals are launched from ground based servers, to adjust flight paths of weather systems



Aquiess has intervned in over 40 rainfall projects, many on massive scale.

## ELECTROMAGNETIC WEATHER CONTROL IS HERE!



“Fresh water has been dubbed “Blue Gold” in many publications as potable water will be to this century what oil was to the last century.

While large efforts and money are being allocated for localized weather modification, SciBlue is looking to use the tropospheric rivers to deliver rain to parched areas of the world now and possibly abatement operations of severe weather in the near future.”

David Kutchinski,  
CEO Sciblue, Inc.  
US. Air Force Company  
La Junta, Colorado, USA

### U.S. Drought Monitor

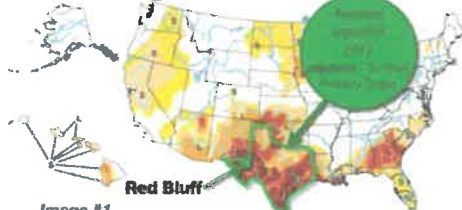
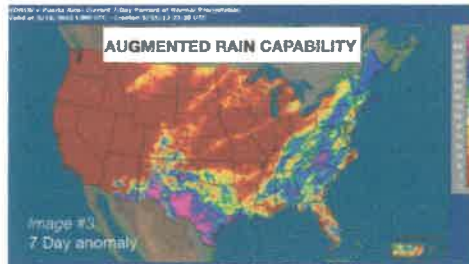
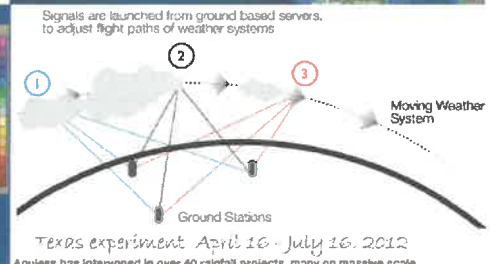


Image #1  
Primary Target Red Bluff, Secondary Target: Texas



Project Start  
18th April 2012

The proprietary weather modification system operates by utilizing 'resonance' signals to divert oceanic atmospheric-rivers into areas experiencing severe drought



**aquiess is offering sovereign states an augmented rainfall capability as part of its new regional 'tool-box' - to strengthen economies, replenish dry-land agriculture and improve food security - David Miles CEO**

[www.terraforminginc.com/the-blue-gold-rush-using-the-rivers-of-the-troposphere](http://www.terraforminginc.com/the-blue-gold-rush-using-the-rivers-of-the-troposphere)

[www.manta.com/c/mmp3r5x/us-air-force](http://www.manta.com/c/mmp3r5x/us-air-force)

[www.aquiess.com](http://www.aquiess.com)

Climate Global Control Trading LLC

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## Modification of cirrus clouds to reduce global warming

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2009 Environ. Res. Lett. 4 045102

(<http://iopscience.iop.org/1748-9326/4/4/045102>)

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## **UPROOTING THE DAVID SUZUKI FUND CORPORATE CONNTECTIONS GEORGE SOROS FUNDED – FOLLOW THE MONEY**

To read complete document click on link.

<http://blog.friendsofscience.org/2018/07/17/uprooting-the-david-suzuki-fund-corporate-connections/>

On July 10, 2018, David Suzuki launched a blistering attack against Friends of Science Society and a handful of other groups, like the tiny Rally4Resources, the Canadian Taxpayers Federation and other groups made up of out-of-work oil patch employees and their supporters – most of whom advocate for common sense in support for the Canadian energy industry and rational economic policies. Dr. Suzuki claimed that we and others were a fake front “astroturf” for oil interests, not grassroots at all and our connections should be ‘uprooted.’

This is an absurd claim in context because Friends of Science Society operates as a non-profit on a member-funded budget of about \$150,000 a year compared to that of the tax-subsidized David Suzuki Foundation (DSF) charity which has \$19 million in assets. Friends of Science has no Ottawa lobbyists – DSF has several. Suzuki Fund also has an endowment fund that earns them some \$600,000 a year in interest, and Vivian Krause reports that DSF has reportedly received millions in funding from offshore billionaire philanthropies. If Big Oil is funding us, as Dr. Suzuki claims, they are very cheap.

Let’s uproot Suzuki’s corporate roots. They go way back to the days of Elaine Dewar’s 1995 book “Cloak of Green” – a meticulously researched tome that traces the connections between big corporations, big green and big government. Suzuki was saving rainforests at the time while hobnobbing with various large corporate interests, as Dewar reported. Puzzled, she followed the money. Don’t let me give away the spoiler.

We did the due diligence on David Suzuki Fund’s claims about renewables. As Google engineers found out, renewable is not so doable.

Time to uproot the rot at ENGOs astrotufing for corporate, institutional Investor and offshore billionaire agendas. No need for Canadians to become modern-day serfs to large pension funds with gold-plated benefits for everyone but you.



By contrast to the David Suzuki Fund, our group started off in 2002 as a self-funded retirement project for several earth, atmospheric and solar scientists. They used to meet in someone's basement to share thoughts on various peer-reviewed science papers around the time of the Kyoto Accords. Our founders opposed Kyoto on scientific and economic grounds.

As Enron documents ultimately revealed, Kyoto was not about saving the planet – it was all about the money to be made in emissions trading. Today, Enron lives on through ENGOs and the various corporate/institutional investor interests that fund them.

As most Canadians know, David Suzuki Foundation and Dr. Suzuki himself have been on the front lines of blocking oil pipelines in Canada. So, it is certainly curious that one of the board members of the David Suzuki Fund is a senior person with the Desjardins group. Desjardins is one of the financiers of Kinder Morgan's Trans Mountain pipeline. Desjardins often does joint ventures with Caisse de Depot et Placement du Quebec.

“Caisse de Depot et Placement du Quebec, Canada's second-largest pension fund, last month disclosed holdings of 10.2 million shares in Kinder Morgan Canada, making it the largest investor outside of its parent company”

According to an article in Medium, Caisse de Depot et Placement has invested a lot of money into Power Corporation.

Suzuki Fund and Dr. Suzuki himself have been virulent opponents of the pipeline. Why would such organizations continue to fund an ENGO that is vociferously blocking one of their own investments?

DSF and Dr. Suzuki himself are loud advocates of wind farms. Power Corporation, listed as the 358th largest corporation in the world by Forbes in 2017, reported in its 2017 CDP report that it had been funding DSF since 2007 and had extended that funding to 2020 (amount unstated). DSF submitted a large wind proposal to the Alberta Climate Panel (#398) in 2015.

Et voila! Power Corporation subsidiaries are building a wind farm in Jenner, Alberta. Another DSF board member is a CEO with a subsidiary of OMERS – Ontario Municipal Employees Retirement System – which is one of Canada's defined benefit pension plans with \$95 billion in net assets (Dec. 31, 2017). When recently asked if OMERS might be interested in buying Kinder Morgan's Trans Mountain pipeline to take it off the federal government's hands, the answer was maybe.

So, why would their sponsored green social influencer, David Suzuki Fund, be blocking a Kinder Morgan pipeline when Caisse de Depot is already a major investor in the company and an investee of one of DSF's long-term funders? Is this a way to force a 'savior' project for the new Infrastructure Bank of Canada, a bank we believe to be fraught with conflicts of interests.

At the recent G7 meeting, OMERS and Desjardins were there as sponsors, with five other big pension funds, all pushing gender, opportunities for women in finance, and of course, climate risk disclosure. We see the push for climate risk disclosure as destructive to the Canadian economy and have written the Ontario Securities Commission about it.

Was Friends of Science Society represented at the G7? Canadian Taxpayers Federation? Rally4Resources? Unemployed oil workers? No. Only the multi-billion-dollar institutional investors who are climate obsessed and driven to foist climate risk reporting on all corporations. Why? Because this reporting becomes a great lever for also forcing corporations into cap and trade and renewables, the ultimate objective of a global project by ClimateWorks billionaires. Never mind that no one ever authorized these unelected, unaccountable billionaire funds to interfere in national domestic climate and energy policies. Starting over a decade ago, they just simply funded an assortment of ENGOs to the tune of some \$600 million a year world-wide to agitate locally for climate and energy policy changes. It's all here in these Wikileaks documents and their own plan on line "Design to Win."

#### ClimateWorks Foundation – WikiLeaks

As 'eco-pragmatist' Ted Nordhaus writes in Foreign Affairs, the Paris Agreement 2°C target that David Suzuki is always rattling on about is a delusion. He also puts Suzuki's notion of Friends of Science as an industry front to bed with this rational thinking.

"Climate advocates have persistently blamed the failures of climate policy on the corrupting political power of the fossil fuel industry. Industry-funded "merchants of doubt," as the historians Naomi Oreskes and Erik Conway originally dubbed them, together with heavy political spending, have stopped climate mitigation efforts in their tracks. But those claims are U.S.-centric. Climate skepticism and denial have not found anywhere close to the same level of political traction outside the United States. Exxon and the Koch brothers have no political franchise in the German Bundestag, the Chinese Central Committee, or most other places outside Washington. And yet those nations have had no more success cutting emissions than has the United States. To



the contrary, U.S. emissions have fallen faster than those of almost any other major economy over the last decade.

The alternate explanation is rather less dramatic. Decarbonization is hard. Fossil fuels continue to bring substantial benefit to most people around the world, despite the significant environmental consequences.” (bold added)

In the meantime, institutional investors like OMERS and corporate bodies like Power Corp, will continue to rake in guaranteed, subsidized 20-40 year profits and other benefits from wind and solar farms, by backing ENGOs who demand “climate action” through fear-mongering.

The following claim by Suzuki is the ultimate in fake news:

“The 21st Conference of the Parties (COP21) may have been our last chance for a meaningful agreement to shift from fossil fuels to renewable energy before ongoing damage to the world’s climate becomes irreversible and devastating.”

Recent climate science shows that most of the warming since 1950 has been driven by natural forces. Carbon dioxide is not the control knob that can control climate. As Canadian climate scientist Dr. Madhav Khandekar explains, the uncertainties that were evident in greenhouse gas induced climate change in 2000 are still the same today.

As Google engineers found out, renewable wind and solar do not address climate change and cannot compete with affordable coal. As Ireland found out, adding more wind to the grid radically increases costs and does not reduce carbon dioxide – so it’s not a planet-saving solution (if you are one who is convinced that carbon dioxide is the problem). As Prof Michael J. Kelly of Cambridge explains, it is total madness to keep building wind and solar farms because neither can support even basic society. As the IEA reports, the world runs on fossil fuels and will do so for many decades. Only Canada is being cut out of the global market.

The Competition Bureau just posted on their twitter feed, social media influencers like David Suzuki (ranked #140 in the world) should “clearly disclose material connections, disclose connections in each post, ensure that the representations aren’t false or misleading, verify that influencers aren’t making performance claims – unless based on adequate and proper testing.”

We did the due diligence on David Suzuki Fund’s claims about renewables. As Google engineers found out, renewable is not so doable.

Time to uproot the rot at ENGOs astrotufing for corporate, institutional investor and offshore billionaire agendas. No need for Canadians to become modern-day serfs to large pension funds with gold-plated benefits for everyone but you.

<http://blog.friendsofscience.org/2018/07/17/uprooting-the-david-suzuki-fund-corporate-connections/>

## Five Eyes STONEGHOST Surveillance Network

Combine this map with any of our other maps via ClimateViewer 3

<https://climateviewer.org/history-and-science/government/maps/five-eyes-stoneghost-surveillance-network/>

### Big Brother Is Watching!

Please scroll to the very bottom of this link page to see the videos and verifying documentation provided. <https://climateviewer.org/history-and-science/government/maps/five-eyes-stoneghost-surveillance-network/>

This map covers government surveillance facilities, signals intelligence networks (SIGINT), AUSCANNZUKUS, and The Five Eyes of the New World Order.

War leads to the erosion of liberty for the benefit of the military-industrial complex. World War II set in motion the destruction of privacy and the formation of an Orwellian Police State controlled by the National Security Agency (NSA) of the United States of America. Under the guise of cooperation and mutual respect, countries signed secret agreements with the NSA to share signals intelligence (SIGINT) which in layman's terms means your phone calls, instant messages, and more. Shortly after World War II, the United States and its allies built the ECHELON system to spy on land and satellite-based communications worldwide. Their closest allies, dubbed The Five Eyes (FVEY), received privileged treatment from the NSA community wherein these five countries share resources on a grand scale. The Five Eyes are also known as AUSCANNZUKUS, short for AUStrelia, CANada, New Zealand, UK, and US. As time progressed the Five Eyes added two more tiers to their club: the Nine Eyes and Fourteen Eyes. The Fourteen Eyes are officially known as SIGINT Seniors Europe, or "SSEUR" but I think we can unofficially call them: The New World Order.

#### 5 EYES

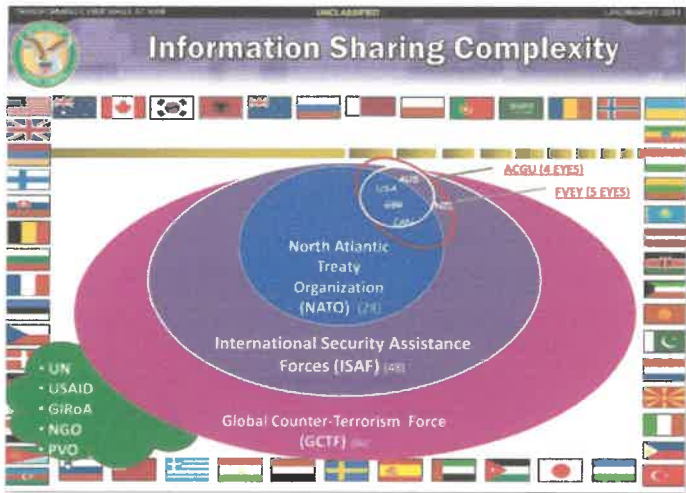
- Australia
- Canada
- New Zealand
- United Kingdom
- United States

#### 9 EYES

- Denmark
- France
- the Netherlands
- Norway

#### 14 EYES

- Germany
- Belgium
- Italy
- Spain
- Sweden



<https://climateviewer.org/history-and-science/government/maps/five-eyes-stoneghost-surveillance-network/>

## HEAT WAVE WAS 'TRULY AMAZING'

EDMONTON (CP) — David Phillips loves to ask people whether Canada, Venezuela, Lebanon, Cuba or Bangladesh has had the highest recorded temperature.

For Phillips, a senior climatologist with the Meteorological Service of Canada, the best part of the question is watching people's reactions to his answer: Canada, with a record of 45° C set on July 5, 1937, in Yellowgrass.

But that one sweltering day was nothing compared with the heat wave the year before, explains Phillips.

Seventy years ago this week, a two-week heat wave across much of Canada claimed the lives of almost 800 people, destroyed crops, killed livestock and even prompted the authorities to allow topless bathing suits on men.

From July 5-17, 1936, the country baked from Alberta to Ontario, with temperatures soaring as high as 44.4° C in St. Albans, Man.

Winnipeg faced lows of 28.3° C, and an Ontario provincial record was set with a temperature of 42.2° C in Atikokan.

In total, the heat wave killed 780 Canadians and was linked to another 400 indirect casualties, including several drownings.

In Toronto alone, over 225 people succumbed to temperatures reaching as high as 41.1° C.

Phillips calls the 1936 hot spell the "granddaddy" of all Canadian heat waves.

"We are a cold country, the second-coldest in the world, and yet the greatest loss of life (due to weather conditions) was from a 10-day heat wave in July of '36."

Phillips says modern inventions such as air conditioning make it unlikely Canada will ever see the same loss of life from a heat wave as it did during those two weeks.

"When I look back and I try and see what effect it had on people, it was truly amazing because there was no escaping," he explained.

"Now we tell people that when you want to get away from the heat wave, you go to malls and shows or you turn on your air conditioning, you

drive your air-conditioned cars or go to your air-conditioned offices.

“But back then, my gosh, people would do things like reverse the flow on their vacuum cleaner just to get a bit of a breeze.”

Horses drawing carriages were known simply to drop dead in the street because of the heat, fruit literally baked on the trees and transients were recruited directly off trains to help fight forest fires.

“We talk about climate change and conditions being warmer now, but they aren’t nearly as intense as they were back in ’36,” said Phillips, who has authored several books on Canada’s climate.

He added that while hot spells in Canada over the last 70 years haven’t come close to 1936 in terms of duration, severity and geographical extent, that doesn’t mean global warming is not a reality.

“There’s probably as many (hot days) now as there were back then, but what’s different is the night time temperatures. We don’t cool off at night as much as we did back then . . . and that’s because more of the heat is trapped in at night,” said Phillips, adding that Canadian winters have also warmed up more than our summers.

But Tim Ball, an environmental consultant based in Victoria and one of the first Canadians to receive a PhD in climatology, contends that what may appear to be global warming is simply a natural fluctuation.

“Climate change is all the time, always has been, always will be, and the idea that climate change is something new is part of the attempt to mislead people,” said Ball, who questions the tendency to blame any environmental extremes on human action.

While Ball said Canadian climate records don’t go back far enough to accurately assess climate change, he said the extremes seen in 1936 do show that natural fluctuations have always existed.

“I could pick any period at any time and I can show you greater extremes, lower extremes,” said Ball. “The climate is changing all the time, and what’s going on right now is well within natural variability.”

## WEATHER MODIFICATION GRAPHENE RAIN

### ARE CLIMATE ENGINEERING OPERATIONS THE SOURCE?

By Dane Wigington GeoengineeringWatch.org July 13, 2023

<https://lionessofjudah.substack.com/p/climate-engineering-must-stop-or>

What aren't we being told? A highly credentialed scientist provides extensive analysis, this is a must-watch report.

All are needed in the critical battle to wake populations to what is coming, we must make every day count. Share credible data from a credible source, and make your voice heard.

**March 12, 2023**

#### **Climate Engineering Must Stop or Humanity is Finished - Dane Wigington**

**“We have to stop climate engineering statistically and mathematically or we are done in the very near term...”**

Climate engineering researcher Dane Wigington says the extreme drought conditions that have plagued the Western U.S. are being turned around by more climate engineering. California has been in the bullseye. It's not good news because it's from one destructive extreme to another.

Wigington explains, “We know the technology exists and is being used to steer upper-level wind currents and, thus, steer moisture currents, and they are directing moisture into where they have engineered back-to-back snow storms. There is no question that it is being engineered. . . .

People act like this is some sort of fringe theory, and it's hard science. We can test the snow and find the same things in climate engineering patents. We find aluminum, barium, manganese, polymer fibers, graphene and surfactants as well. All of these are found in our snow. . . . The directing of this moisture flow without chemical nucleation on top of this chemically frozen nucleated material is creating flooding right now as we speak. This is not debatable. . . . Whatever a person's perspective is, can there be any legitimate discussion about the climate without addressing climate engineering first and foremost? The answer is patently NO.”

Wigington goes on to warn, “We have to stop climate engineering statistically and mathematically or we are done in the very near term. Stopping these operations are weather warfare. They only serve the masters by masking the true severity of damage done to the climate while using weather as a weapon at the same time. . . .

By itself, climate engineering is the largest single factor, and it's not just destroying the planet's life support system, agricultural production, the Ozone layer, it's also, and this is key and critically important, it's contaminating every single breath we take. . . .

There is likely 60 to 70 million tons being dispersed in our skies annually of these particulates. It's not even factored into the dire warnings of how toxic the air we are breathing. It's an incredible lethal brew we are breathing in. Nobody is looking for these nanoparticles even though they are the most harmful of all."

Wigington says, ". . . Ecosystem collapse is happening all over the globe. At GeoEngineeringWatch.org, our mission is to expose this biggest hole in the bottom of the boat. . . . Critical mass of awareness is the only way out. . . .

Climate engineering is pounding nails into all of our collective coffins. We have to plant the seed of awareness. . . .

When you arm yourself with credible data and you wake those people around you, they begin to wake others. Now, they realize they do have power if they focus what is in their power. . . . they can move this fight forward."

There is much more in the 35-minute interview.

Join Greg Hunter of USAWatchdog.com as he goes One-on-One with climate researcher Dane Wigington, founder of GeoEngineeringWatch.org, with an update to the ongoing global drought to flood calamity for 3.11.23.



## Canada unveils 'Carbon Management Strategy' to achieve cap on oil and gas production

By Alex Dhaliwal | September 27, 2023 | News

On September 28, Natural Resource Minister Jonathan Wilkinson introduced Canada's 'carbon management strategy,' with the goal of achieving a 40% to 45% reduction in emissions from 2005 levels by 2030.

### Canada unveils 'carbon management strategy' to achieve cap on oil and gas production

#### THE CANADIAN PRESS

Ottawa continues to challenge the resilience of its resource-based economies as Natural Resource Minister Jonathan Wilkinson commits to implementing a cap on oil and gas production, anticipated in the near future.

On September 28, Wilkinson spoke to delegates at the Paris-based International Energy Agency (IEA), where he unveiled Canada's 'carbon management strategy.'

"Alongside rising carbon prices, increasingly stringent emissions standards — such as the Clean Electricity Regulations, Clean Fuel Regulations and the emissions cap for the oil and gas sector — will further encourage adoption of carbon management technologies," Natural Resource Canada penned in a joint policy statement with the IEA.

While the cap remains "under development," Wilkinson said to expect legislation soon to advance their 'net-zero' objectives through a series of five-year interim targets.

Canada hopes to achieve 'net-zero' starting with a preliminary 40% to 45% reduction from 2005 levels by 2030.

Amid a political firestorm on 'net-zero' electricity and phasing out 'unabated' fossil fuels, Environment Minister Steven Guilbeault is off to China to combat 'climate change' with the world's largest industrial polluter.

<https://t.co/fo1OUIhcNy> [pic.twitter.com/zAnA67d43u](https://pic.twitter.com/zAnA67d43u)

— Rebel News (@RebelNewsOnline) August 17, 2023

On Tuesday, the IEA released updated its Net Zero Roadmap that predicts fossil fuel demand to peak this decade.

The organization insists a “policy-driven” pursuit of renewable energy projects will drive fossil fuel demand 25% lower by 2030 and 80% by 2050.

By the first interim target, they expect global renewable power to triple owing to greater electric vehicle sales and methane emission reductions of 75%.

“As a result, no new long-lead-time upstream oil and gas projects are needed. Neither are new coal mines, mine extensions or new unabated coal plants,” said the IEA. Alberta Premier Danielle Smith told the World Petroleum Congress last week that estimates of global oil demand falling below 25 million barrels a day by 2050 is “a fantasy.”

Environment Minister Steven Guilbeault is moving forward on draft regulations for 'net-zero' electricity without overwhelming consensus from the provinces and territories.<https://t.co/M6vMaGauNZ>

— Rebel News (@RebelNewsOnline) August 13, 2023

But Wilkinson and Environment Minister Steven Guilbeault said Wednesday the use of carbon management technologies can decarbonize Canada’s heavy industries “in the global race to net zero by 2050.”

“The International Energy Agency, and other experts have been clear about the need for countries to rapidly develop and deploy carbon management technologies, and Canada is leading the way,” they said in a joint statement.

According to the ‘carbon management strategy,’ the Western Canada Sedimentary Basin (WCSB) — which covers Alberta, Saskatchewan and Manitoba — contains one-seventh of the world’s active carbon capture projects.”

While the document acknowledges that carbon capture is “essential” to reaching ‘net-zero,’ it contends that “technologies to reduce, remove or reuse CO2 from the atmosphere is not a silver bullet for addressing the climate crisis.”

“This means scaling carbon management alongside ongoing efforts to meet Canada’s primary goal to aggressively reduce absolute emissions” through the proposed electricity draft regulations and an emissions cap.

**EXCLUSIVE:** Minister @rebeccaschulz affirmed that the Alberta government would absolutely not agree to the existing 2035 net-zero terms and conditions being pushed by Minister of Environment and Climate Change Steven Guilbeault.

FULL REPORT by @ATSoos: <https://t.co/qtDfPdeWqF>

[https://www.rebelnews.com/canada\\_unveils\\_carbon\\_management\\_strategy\\_to\\_achieve\\_cap\\_on\\_oil\\_and\\_gas\\_production](https://www.rebelnews.com/canada_unveils_carbon_management_strategy_to_achieve_cap_on_oil_and_gas_production)

## **Whoever Is In Charge Of Geoengineering Operations Needs To Be Prosecuted For Crimes Against Humanity ~~And Our~~**

### **What is weather modification effect?**

Weather modification is the act of intentionally manipulating or altering the weather. The most common form of weather modification is cloud seeding, which increases rain or snow, usually for the purpose of increasing the local water supply.

### **What countries are doing weather modification?**

A wide variety of scientific tests and operational weather modification projects have been performed in many countries. The largest programs have been in the United States, the former Soviet Union, Australia, and France. Most weather modification programs in the United States have dealt with rain or snow. Jan 11, 2024

### **What are the weather modification activities?**

weather modification activity includes any action designed or intended to produce, by physical or chemical means, changes in the composition or dynamics of the atmosphere for the purpose of increasing, decreasing or redistributing precipitation, decreasing or suppressing hail or lightning or dissipating fog or cloud.

### **What was the weather manipulation in the Vietnam War?**

Operation Popeye's goal was to increase rainfall in carefully selected areas to deny the Vietnamese enemy, namely military supply trucks, the use of roads by: Softening road surfaces. Causing landslides along roadways. Washing out river crossings.

### **Who invented cloud seeding?**

Vincent Joseph Schaefer

Vincent Joseph Schaefer (July 4, 1906 – July 25, 1993) was an American chemist and meteorologist who developed cloud seeding.

### **When did cloud seeding start?**

Cloud Seeding

1946

Cloud seeding as we know it today got its start in 1946 when Dr. Vincent J. Schaefer, working at the General Electric Laboratory in New York, was involved with research to create artificial clouds in a chilled chamber.

### **What is the negative effect of cloud seeding?**

Environmental and Health Concerns of Cloud Seeding

This can lead to health problems for humans, such as respiratory issues, skin irritation, and gastrointestinal problems. Furthermore, cloud seeding has been blamed for natural disasters like floods, tsunamis, droughts, earthquakes, tornadoes, plagues, and famines, which can cause serious harm to human health. Apr 25, 2023

### **Which countries use geoengineering?**

Geoengineering in Latin America may create more problems than ...

According to the Geoengineering Map, a civil-society initiative that tracks projects, there are currently 764 active geoengineering projects worldwide. Most are concentrated in the United States, Europe and China. Jan 31, 2023

### **How long does cloud seeding take?**

The nozzles charge the particles as they are sprayed, the charged droplets are carried up into the clouds and distributed by updrafts that feed the clouds, and the entire process takes only 15-20 minutes from seeding to precipitation. Sep 21, 2022

### **Is artificial rain harmful?**

Environmental concerns

The use of chemicals like silver iodide raises questions about the long-term effects on ecosystems. While silver iodide is considered relatively low in toxicity, its accumulation in the environment and possible effects on wildlife and water quality are areas of ongoing research. Nov 28, 2023

### **Does China support geoengineering?**

There are three main geoengineering techniques that have bolstered China's or hybrid warfare capabilities. According to a statement from China's State Council, the country is committed to bringing about 5.5 million square kilometers of its land area under its weather modification program by 2025. Jan 31, 2023

### **Is China cloud seeding?**

With more than 60 years of experience, China is now looking to expand its capabilities by 2025 through an ambitious cloud seeding program covering an area 1.5 times the size of India, or 5.5 million square kilometers. Mar 6, 2023

### **Who created geoengineering?**

The first use of the term geoengineering in approximately the sense defined above was by Marchetti in the early 1970s to describe the mitigation of the climatic impact of fossil fuel combustion by the injection of CO<sub>2</sub> into the deep ocean (14). Page 4 October 16, 2000 18:47 Annual Reviews AR118-08 248 KEITH

### **Can cloud seeding make snow?**

Making it Snow: A Brief History and Review of the Science ...

In 2020, a ground-breaking study known as the SNOWIE project used advanced radar and cloud-measuring technology to show that cloud-seeding coaxed moisture out of supercooled clouds, producing enough snow to fill 282 Olympic-sized swimming pools over approximately two hours. Mar 15, 2023

**What happens after cloud seeding?**

After cloud seeding takes place, the newly formed snowflakes quickly grow and fall from the clouds back to the surface of the Earth, increasing snowpack and streamflow.

**What is the cost of cloud seeding?**

between \$0.50 and \$1.00 per acre

Cloud seeding typically costs between \$0.50 and \$1.00 per acre. The cost of cloud seeding can vary depending on a number of factors, including the size of the area being seeded, the type of aircraft used, and the type of seeding agent used. Sep 29, 2023

**What chemicals are in cloud seeding?**

The most common chemicals used for cloud seeding include silver iodide, potassium iodide and dry ice (solid carbon dioxide). Liquid propane, which expands into a gas, has also been used. This can produce ice crystals at higher temperatures than silver iodide.

**Why cloud seeding is done?**

Desperate for water, several Western states have expanded decades-old programs to increase precipitation through cloud seeding, a method of weather modification that entails releasing silver iodide particles or other aerosols into clouds to spur rain or snowfall. Mar 3, 2022

**What are side effects of artificial rain?**

According to several reports, artificial rains might eventually change climatic patterns. "If not regulated or controlled properly, cloud seeding may cause undesirable, if not altogether, destructive weather conditions such as flooding, storms, hail risks, etc," the paper said. Nov 13, 2023

**What is the largest geoengineering project?**

\$20 million Harvard University project

The \$20 million Harvard University project is the world's largest solar geoengineering program ever, and it will launch within the next few weeks. The scientists behind the project intend to complete two small-scale dispersals by 2022.

**Does the US do geoengineering?**

Could solar geoengineering cool the planet? U.S. gets serious ...

But the large-scale field campaign is the first the U.S. government has ever conducted related to solar geoengineering. It's very basic research, says Karen Rosenlof, an atmospheric scientist at NOAA's Chemical Sciences Laboratory. "You have to know what's there first before you can start messing with that." Feb 14, 2023

Why do people oppose geoengineering?

Here are some of the key reasons to oppose geoengineering, which will be discussed in more depth below: It doesn't work: None of the technologies have a track record, all of them come with major risks and unknowns, and in some cases the effects would be obviously catastrophic.

**Can rain be stopped artificially?**

Can we stop the rain artificially? - Quora

Yes, it is possible to stop the rain artificially through a process called cloud seeding. Cloud seeding involves using various substances, such as silver iodide, to induce condensation and precipitation in clouds. Jun 13, 2019

**Is carbon dioxide used in cloud seeding?**

Glaciogenic cloud seeding is usually done by dispersing efficient ice nuclei, such as silver iodide particles or dry ice (solid carbon dioxide) into the cloud, causing heterogeneous ice nucleation.

**Is India doing cloud seeding?**

Other countries have also invested in the technology, including Indonesia and Malaysia. Scientists in western India have successfully tried cloud seeding, which resulted in a 20% boost in rainfall, Tripathi said. Nov 28, 2023

**What are the risks of geoengineering?**

There's the risk that such geoengineering technology would be used by the wealthy and powerful at the expense of others—that we'll use it to save coastal property from inundation by rising sea levels, but end up disrupting monsoons and causing famine in Southeast Asia in the process—or that disputes between nations ... Mar 17, 2023

**What is the controversy with geoengineering?**

One of the biggest criticisms of solar geoengineering is it could be grasped by polluters as a way to continue polluting, and by governments as a distraction from policies to reduce planet-heating pollution. Feb 12, 2023

**Has geoengineering been tested?**

But apart from Make Sunsets, only a small number of other research projects, opens new tabs have been conducted so far, including the launch of a high-altitude weather balloon in southeast England in 2022 to test the viability of aerosol injection equipment. Nov 1, 2023

**What is dirty snow called?**

Classifications of snow - Wikipedia

Snirt – Snirt is an informal term for snow covered with dirt, especially where strong winds pick up topsoil from uncovered farm fields and blow it into nearby snowy areas. Also, dirty snow left over from plowing operations.

**How does cloud seeding affect hail?**

What impact does cloud seeding have on hail? Though very little research on hail suppression has been done in Texas, we do know from sound research conducted in other parts of the U. S. that seeding for enhancing rainfall very likely lessens the amount, and size, of hailstones.

**Is cloud seeding artificial rain?**

What is artificial rain? Here's how cloud seeding fared in ...

Artificial rain, also known as cloud seeding, is a method used to enhance precipitation by dispersing substances into the air to encourage the formation of rain or snow. Nov 17, 2023

How does China control the weather?

The Beijing Weather Modification Office forms a part of China's nationwide weather control effort, believed to be the world's largest; it employs 37,000 people nationwide, who seed clouds by firing rockets and shells loaded with silver iodide into them.

**What are the negative effects of cloud seeding in UAE?**

Atmospheric aerosols

Cloud seeding missions require firing salts and silver iodine crystals into the atmosphere. The increased concentration of particulate matter, or micro-pollutants, increases risk for respiratory illnesses.

**What is the opposite of cloud seeding?**

Cloud seeding is the opposite of cloud busting. Jul 9, 2013

**Why doesn't it rain in Dubai?**



The climate of the peninsula, including the UAE, can be considered an extension of north Africa's sprawling Sahara Desert. The emirates' hot, dry conditions have earned them a Koppen climate classification of BWh, a tropical or subtropical desert. Nov 12, 2021

### **How much money is spent making the rain in Dubai?**

Since 2015 the UAE has spent \$18 million on rain enhancement. It is paying for Russian scientists to try to create artificial clouds on the UAE's highest peak by using a jet engine to stimulate updrafts and see whether clouds can be created on demand. Jan 27, 2023

Why doesn't it rain in Arizona?

Why It Doesn't Rain Much in the Sonoran Desert. This area's climate is, in a word, dry. Ringed by mountains that keep the rain away for much of the year, the Sonoran Desert quietly bakes. Moist air moving east from the Pacific Ocean is forced to rise over the Cascades and Sierra Nevada, cooling as it rises.

Is cloud seeding harmful to humans?

There is a lot more iodine in iodized salt (the salt that humans eat) than there is in this form of rainwater. Even in projects that have lasted 30 to 40 years, researchers haven't found any major concerns in cloud seeding processes. Mar 15, 2022

What are two potential dangers of cloud seeding?

Increased precipitation in one area could lead to droughts in nearby areas, as the rain is diverted away from those regions. Similarly, cloud seeding could cause excessive rainfall, leading to flooding and other weather-related disasters. Cloud seeding could also have an impact on agriculture and natural ecosystems. Feb 23, 2023

Which country use cloud seeding?

The United States, the United Arab Emirates, Russia, Saudi Arabia, South Africa, Thailand, and Mexico are just some of the countries developing the method. Aug 14, 2023

Who invented cloud seeding?

Vincent Joseph Schaefer

Vincent Joseph Schaefer (July 4, 1906 – July 25, 1993) was an American chemist and meteorologist who developed cloud seeding.

Which country has artificial rain?

The UAE has increasingly used cloud seeding, sometimes referred to as artificial rain or "blueskying," to create rain in the arid expanse of the country. The weather modification involves releasing common salt — or a mixture of different salts — into

clouds. The crystals encourage condensation to form as rain. Dec 16, 2023

What year did geoengineering start?

The first use of the term geoengineering in approximately the sense defined above was by Marchetti in the early 1970s to describe the mitigation of the climatic impact of fossil fuel combustion by the injection of CO2 into the deep. Page 4 October 16, 2000 18:47 Annual

**How many countries use geoengineering?**

Such operations are already under way in more than 50 countries, according to the World Meteorological Organization. Feb 15, 2022 Reviews AR118-08 248 KEITH ocean (14).

What organizations are against geoengineering?

Accion Ecologica, ETC Group, ICTA, Greenpeace, IUCN, IEN, Carbon Trade Watch, The Durban Group, Sea Shepherd and others take part. International bodies condemn the plan, and Sea Shepherd sends a ship to "intercept" the Planktos ship. The Planktos ship changes course to Spain and the Canary Islands.

What are the 4 types of geoengineering?

Geoengineering technologies can be categorized by different approaches (solar radiation management, carbon dioxide removal, weather modification), or by where they seek to intervene in the planetary ecosystem (land, air, water).

Is geoengineering ethical?

One of the few issues which ethicists have reached consensus is that it would be morally unacceptable to use geoengineering, in any form, as a replacement for cutting greenhouse gas emissions. To do so would impose unacceptably large risks and costs on vulnerable people and future generations. Dec 21, 2017

What are some examples of geoengineering?

Geoengineering | Harvard's Solar Geoengineering Research Program

Solar geoengineering

These include marine cloud brightening, cirrus cloud thinning, space-based techniques, and stratospheric aerosol scattering, amongst others. Marine cloud brightening would attempt to brighten marine clouds to reflect more sunlight back into space.

Is cloud seeding a thing?

This rain-inducing technique, called cloud-seeding, has been around for more than 60 years. The process involves "seeding" existing clouds with a harmless substance

called silver-iodide to give water droplets a particle to converge around, allowing them to form an ice crystal. Mar 15, 2023

How does cloud seeding affect climate change?

Cirrus cloud seeding is one of the most recent ideas of artificially modifying the planetary energy balance to counteract the human-caused global warming. So far, it is still highly uncertain whether such a scheme could effectively decrease the temperatures at global scales.

Why is Dubai cloud seeding?

The UAE considers water security an essential element of national security. Cloud seeding helps the country find innovative solutions that contribute to global water security by ensuring the sustainability of water resources in the UAE and other arid regions across the world. Oct 27, 2023

Is there any side effects of artificial rain?

According to several reports, artificial rains might eventually change climatic patterns. "If not regulated or controlled properly, cloud seeding may cause undesirable, if not altogether, destructive weather conditions such as flooding, storms, hail risks, etc," the paper said. Nov 13, 2023

Why shouldn't we use geoengineering?

Geoengineering could encourage polluters to keep polluting instead of doing the more critical work of cutting planet-warming gases such as carbon dioxide and methane. Even if we could use solar geoengineering to reduce the average temperature of Earth, the cooling effects wouldn't be uniform across the globe.

What is the moral hazard of geoengineering?

Many commentators have expressed concerns that researching and/or developing geoengineering technologies may undermine support for existing climate policies—the so-called moral hazard argument. This argument plays a central role in policy debates about geoengineering.

What are some of the side effects of geoengineering?

Some concerns include the risk that extreme precipitation and flooding might increase in some places, while other areas might suffer an increase in droughts—and that these effects might be even worse than the changes expected if nothing were done about climate change at all. Mar 12, 2019

Can rain be stopped artificially?

Can we stop the rain artificially? - Quora

Yes, it is possible to stop the rain artificially through a process called cloud seeding.

Cloud seeding involves using various substances, such as silver iodide, to induce condensation and precipitation in clouds. Jun 13, 2019

What are the disadvantages of artificial rain?

According to several reports, artificial rains might eventually change climatic patterns. "If not regulated or controlled properly, cloud seeding may cause undesirable, if not altogether, destructive weather conditions such as flooding, storms, hail risks, etc," the paper said. Nov 13, 2023

How does cloud seeding prevent global warming?

Marine cloud brightening also known as marine cloud seeding and marine cloud engineering is a proposed solar radiation management climate engineering technique that would make clouds brighter, reflecting a small fraction of incoming sunlight back into space in order to offset anthropogenic global warming.

Is cloud seeding real?

Cloud seeding is used all over the world as a method for enhancing winter snowfall and increasing mountain snowpack, supplementing the natural water supply available to communities of the surrounding area.

Can cloud seeding cause headaches?

There has been a rising situation of Iodism, which is a type of poisoning caused by iodine. It has severe effects on people such as skin rashes, headaches, and running noses among other symptoms.

What is the moral hazard of geoengineering?

(a) The moral hazard argument and geoengineering. The concept of a moral hazard is an idea that derives from economics [14]. Where an individual or party is insured against a particular undesired outcome, they may feel protected against the undesired outcome and therefore take greater risks.

What are two potential dangers of cloud seeding?

Increased precipitation in one area could lead to droughts in nearby areas, as the rain is diverted away from those regions. Similarly, cloud seeding could cause excessive rainfall, leading to flooding and other weather-related disasters. Cloud seeding could also have an impact on agriculture and natural ecosystems. Feb 23, 2023

**What is artificial rain? Here's how cloud seeding fared in UAE, China, Russia**

While it's been experimented with for decades, artificial rain's effectiveness can vary depending on atmospheric conditions and other factors.

Updated Nov 17, 2023, 9:58 AM IST

Delhi's Environment Minister, Gopal Rai, stated this week that Delhi's pollution status will undergo monitoring over the next two to three days before considering artificial rain. Delhi's Environment Minister, Gopal Rai, stated this week that Delhi's pollution status will undergo monitoring over the next two to three days before considering artificial rain.

## SUMMARY

One of the most famous examples of artificial rain was during the 2008 Olympics in China

The country wanted to prevent rain over Beijing's open-air 91,000-seat Olympic stadium, known as the Bird's Nest

There have been cloud seeding experiments in other countries as well including UAE and Russia

Artificial rain, also known as cloud seeding, is a method used to enhance precipitation by dispersing substances into the air to encourage the formation of rain or snow. This technique involves seeding clouds with materials such as silver iodide, potassium iodide, or dry ice, which serve as nuclei for water droplets to form around. As these particles attract moisture, they can lead to the growth of larger droplets and potentially stimulate precipitation within clouds that might not otherwise produce rain or snow. While it's been experimented with for decades, its effectiveness can vary depending on atmospheric conditions and other factors.

### **Artificial Rain in the United Arab Emirates**

Cloud seeding is a strategic approach employed a few times by the United Arab Emirates government to tackle water scarcity challenges within the country. Also known as man-made precipitation or artificial rainmaking, this technique marks the UAE as one of the pioneering nations in the Persian Gulf region to adopt cloud seeding technology. Amidst the country's water insecurity arising from its intensely hot climate, UAE scientists harness cloud seeding to bolster water resources. Utilising weather radar, they maintain constant surveillance of the nation's atmosphere. Projections from forecasters and scientists suggest that cloud seeding initiatives could amplify rainfall by around 30-35% in drier atmospheric conditions and up to 10-15% in more humid environments.

### **Artificial Rain in China**

One of the most famous examples of artificial rain was during the 2008 Olympics when China to prevent rain over Beijing's open-air 91,000-seat Olympic stadium, known as the Bird's Nest, the city's division of the National Weather Modification Office—part of the larger China Meteorological Administration.

Initially, Beijing's Weather Modification Office monitored the area's weather using satellites, aircraft, radar, and an IBM p575 supercomputer, capable of performing 9.8

trillion floating point operations per second. This supercomputer accurately models a 44,000 square kilometre (17,000 square miles) area, enabling hourly forecasts for every kilometre.

Subsequently, employing two aircraft and a network of twenty artillery and rocket-launch sites around Beijing, the city's weather engineers will deploy silver iodide and dry ice into approaching clouds that are still sufficiently distant, allowing their rain to be dispersed before reaching the stadium.

Finally, if rain-heavy clouds come close to the Bird's Nest, they will be treated with chemicals to reduce droplet size, preventing rainfall until these clouds have passed over.

Back in 1958, the Chinese initiated experimental weather manipulation to tackle the arid conditions in their northern region. The area faced recurring threats of drought and famine due to sudden windstorms from the Gobi desert.

Presently, the People's Republic allocates millions of dollars yearly to its national Weather Modification Office. According to the state-run news agency Xinhua, between 1999 and 2007, this office claimed to have safeguarded 470,000 square kilometres from hail and generated over 250 billion tons of rain—enough to fill China's second-largest river, the Yellow River, four times over.

Additionally, similar efforts have positively influenced weather conditions at national events like the World Expo in Yunnan, the Asian Games in Shanghai, and the Giant Panda Festival in Sichuan.

### **Artificial Rain in Russia**

The Russian government invested more than a million dollars to prevent rain on a public holiday.

As reported by the official news agency TASS, the Kremlin allocated approximately 86 million rubles (\$1.3 million) to ensure dry weather during the 1st of May celebrations.

Did the experiment yield results? Reports, including The Siberian Times, suggest there was light rain on the day. Did the cloud seeding successfully diminish the rain's impact, or did it fail since the rain occurred? Did it have any discernible effect at all? That's the challenge - it's nearly impossible to ascertain.

### **Artificial Rain in India**

A study published in the Bulletin of the American Meteorological Society (BAMS) revealed that the cloud seeding trial in Maharashtra's Solapur region led to an 18% increase in rainfall compared to the usual patterns. According to a report in TOI, scientists from the Indian Institute of Tropical Meteorology in Pune and other institutes conducted this study.

The experiment focused on hygroscopic cloud seeding, specifically targeting warm convective clouds with a height above zero degrees Celsius. Calcium chloride particles were released into these convective clouds to stimulate rainfall.

Spanning from 2017 to 2019, the experiment analysed 276 clouds using advanced tools like automatic rain gauges, radars, radiometers, and aircraft. Scientists also attempted glaciogenic seeding in clouds containing both ice and water. However, the study concluded that glaciogenic seeding did not significantly impact rainfall at the seeding location.

Meanwhile, Delhi's Environment Minister, Gopal Rai, stated this week that Delhi's pollution status will undergo monitoring over the next two to three days before considering artificial rain. Three days post-Diwali, Delhi's air quality registered as 'very poor' on Thursday morning. Rai mentioned that there might be an increase in wind speed after a few more days, offering hope for betterment. Currently overseeing the scenario, the authorities plan to convene with scientists and relevant departments for deliberation tomorrow. Rai highlighted that if the Air Quality Index (AQI) escalates to the 'severe plus' category, stricter measures such as odd-even restrictions will be contemplated by the government.

Results from these experiments have varied worldwide. In some cases, there have been reported increases in rainfall, while in others, the effects have been inconclusive or debatable due to the difficulty in measuring the precise impact of cloud seeding amidst natural weather variability.

<https://www.businesstoday.in/technology/news/story/what-is-artificial-rain-heres-how-cloud-seeding-fared-in-uae-china-russia-406046-2023-11-17>

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I sure did not know that Climate Change has two legs, did you??????

Read this: And they class smart people as Conspiracy Theorists????

## **YELLOWKNIFE, NWT.**

Yellowknife RCMP have announced the arrest and charging of four female youths in connection with an arson attempt along Burwash Drive in Yellowknife.

*4 charged in Yellowknife for arson as nearby wildfires remain out of control*

The incident occurred on Tuesday night and is one of two arson cases currently under investigation by the police.

According to a news release issued Wednesday morning, law enforcement received a call at approximately 11:21 p.m. about the youths attempting to ignite a fire.

Arsonists in Yellowknife! As a former criminal defense lawyer not much by way of anti-social behavior shocks me but by gosh the RCMP report 2 cases of arson here last night, 4 arrested and they're looking for 2 more bad dudes FFS.

— Garth Wallbridge – I ignore all anonymous posters. (@garthwallbridge) August 16, 2023

RCMP subsequently arrived on scene and arrested all four individuals, who were found in possession of aerosol cans and lighters.

"It should go without having to be said, incidents like these pose a very serious risk to our community," the RCMP stated in a news release.

"A significant fire behind the city's line of defence could have devastating consequences and take valuable resources away from the ongoing wildfire fighting efforts that are underway," he added.

More arsonists on the loose

In a parallel incident, RCMP are still on the hunt for two men believed to have initiated a fire near Long Lake, situated on the northwest side of the city.

Police first spotted the fire around 10:03 p.m. and promptly engaged the Yellowknife Fire Department for assistance. Despite deploying police dogs and an extensive search effort, the suspects, who were reportedly dressed in black attire, have evaded capture as of the time of publication.

These events unfold amidst a backdrop of heightened concern in Yellowknife due to a significant wildfire menacing the city's western flank. Over 200 wildfires have already burned an area that's four times the

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The Northwest Territories recently declared a territory-wide state of emergency due to the wildfires. Residents in Yellowknife have been put on evacuation notice as the fires are only about 16km northwest of the capital city.

As a precaution, areas including the Kam Lake business district, Engle industrial area, and Grace Lake have been placed under evacuation alert as the wildfire’s proximity intensifies.

Smith refuses to submit to climate cultists

Earlier this week, Alberta Premier Danielle Smith was practically begged to blame climate change on the record breaking number of forest fires in Alberta — but she refused, noting that most of them were caused by humans.

<https://thecountersignal.com/4-charged-in-yellowknife-for-arson-as-nearby-wildfires-remain-out-of-control/>

## GREECE

79 arrested in Greece for starting wildfires “Arsonist scum”

TCS Wire

August 25, 2023

Authorities in Greece have arrested 79 individuals for arson, as firefighters across the country continue to take on hundreds of deadly wildfires.

79 arrested in Greece for starting wildfires

<https://thecountersignal.com/79-arrested-in-greece-for-starting-wildfires/>

## CLIMATE CHANGE A SUMMARY--WORLD LEADERS LIVING IN THE DARK

Canada Free Press

By Jim Hollingsworth —Bio and Archives--February 23, 2024

### NOT THE CLIMATE, BUT CONTROL

<https://canadafreepress.com/article/climate-change-a-summary-world-leaders-living-in-the-dark>

If there is no climate change crisis then what is the point? The point is to get you to fear so that you will spend lots of money on projects that benefit no one. Rather than spending money on those with real needs we are asked to spend money on pointless projects that do not improve the lives of anyone.

Want to know more? You can read my short little book: Climate Change: A Convenient Truth.

If you paid any attention to what came from COP28, held in Dubai, you conclude that world leaders and intellectuals believe we are facing a major crisis and the world is doomed unless we spend billions, even trillions on climate preventive measures.

Fortunately, most of the common people believe that climate is just long-term weather which may cause it to be hot one day and cold the next. Those who have actually studied history know that the world has always warmed and cooled and that there is no cause for alarm.

### CARBON DIOXIDE IS THE GAS OF LIFE

Few of those who are sounding the alarm have any understanding of the science of climate. Al Gore noted that as temperature rose so did the carbon dioxide, but he forgot to find out if the rising of both might have been caused by something else. Few political leaders even discuss the importance of carbon dioxide in our world. It is more probable that changes in our sun are causing rising temperatures and rising levels of carbon dioxide.

Most every grammar school child knows that plants absorb carbon dioxide (which they used to grow) and give off oxygen, which all animals need to survive. The one process compliments the other.

Carbon dioxide is very important, as it is the gas of life. At the present time there is about 420 parts per million (0.042 %) of carbon dioxide in our atmosphere. From that tiny percentage is grown every plant that exists on the earth; bushes and trees and even our vegetables. The more carbon dioxide, the better. Some nurseries even burn gas in their greenhouses to increase carbon dioxide and make plants grow better.

Some world leaders consider carbon dioxide a poisonous gas, yet carbon dioxide levels are much higher on submarines and in spacecraft.

### FOSSIL FUELS DELIVERED THE WORLD FROM POVERTY

After oil was discovered one of the first things produced was kerosene. Without a doubt this saved the whales, as whale oil was used in lamps. Even before the discovery of oil kerosene was made from coal and was called "coal oil".

World government leaders and the present administration are determined to eliminate the use of all fossil fuels, because the burning of fossil fuels produces carbon dioxide.

But it is the use of fossil fuels that has created modern civilization. Elimination of fossil fuels would take us back to the stone age. Plus, it is not just diesel and gasoline, there are over 6000 things made from fossil fuels. I have documented 1,700 items, but you can get the idea. Without fossil fuels we would have no pavement, no rubber tires, and most important of all, no plastic. Thus, no vinyl fences or siding, no plastic plumbing, and no packaging of grocery store items. (Go to the grocery store and look down the aisle, then try to imagine all these things without the plastic packaging.)

### **WIND AND SOLAR ARE NO SOLUTION**

Our electricity is mainly produced using fossil fuels, with some hydroelectric (dams) and some nuclear. Wind and solar are supposed to take the place of fossil fuels.

Right now, when the wind does not blow or the sun shine the slack is taken up using coal and natural gas. To be available when needed these sources of electricity are kept idling on standby. But under such conditions they use almost as much fuel and produce almost as much carbon dioxide, so you have gained little.

When these resources are eliminated, we will have to depend on huge batteries. In some places, during the winter, there may be week after week with cloudy weather, with rain and snow. (Where we live in North Idaho, we have only had a week of clear weather in three months.) It would be impossible to build a battery large enough to power a city for a day, let alone for a week, or a month.

Wind machines only last a few years. Some burn up, or break apart. And the sound of the turbine has been a health problem for some people and for whales.

Bats and many birds are killed by wind machines. (Many of these birds are considered threatened, so this is a threat to their survival.) Plus, there is the fact that when it is really cold the wind sometimes does not blow.

Solar is not a lot better. Solar panels only last a few years. They produce no electricity at night and little in early morning or late afternoon. They produce no electricity when covered with snow, and make little sense in the northern states or in Canada. (In fact I wonder if they make any sense north of the 45th parallel.) Further, some solar installations failed (more) after a few years, or did not produce as planned. Here is another problem.

### **ELECTRIC VEHICLES ARE A RICH MAN'S DREAM**

Since carbon dioxide is a benefit to the planet none of these programs make any sense. Electric vehicles are supposed to save the planet, but this is very unrealistic. These vehicles are very expensive, must stop every couple of hours and be recharged, and have many technical problems. These vehicles with batteries are much heavier than a vehicle with internal combustion engine and are thus unsafe on the highway. Some cars parked on the coast and covered with sea water have caught fire.

### **POLAR BEARS ARE NOT THREATENED**

On May 15, 2008, the United States listed the polar bear as threatened under the Endangered Species Act. The government believed they would likely become endangered in the future. They believed the numbers of bears would decline greatly by 2050.

However, there were about 5000 bears in 1970 and today there are more than 30,000, so it appears that the bears are not in any real danger. This determination was based on computer models and not on the history of the bears. They believed the bears had to hunt seals from ice, and they believed that the ice would continue to decline in the arctic, so they assumed the numbers would decline as bears starved. But polar bears are great swimmers and can hunt seals in open water, so the danger is a myth. Not only that, sea ice in the arctic has not declined as projected.

Polar bears are actually the largest carnivores in the world. They are very dangerous. A grown polar bear can be larger than a grizzly. They can be very deadly if humans range too close. Polar bears have been here for thousands of years and will no doubt be here a lot longer.

### **NOT THE CLIMATE, BUT CONTROL**

If there is no climate change crisis then what is the point? The point is to get you to fear so that you will spend lots of money on projects that benefit no one. Rather than spending money on those with real needs we are asked to spend money on pointless projects that do not improve the lives of anyone.

Want to know more? You can read my short little book: Climate Change: A Convenient Truth.

<https://canadafreepress.com/article/climate-change-a-summary-world-leaders-living-in-the-dark>

## **DRASTIC AND IRREVERSIBLE Climate Geoengineering Worries Scientists**

By Katie Spence March 01, 2024

[https://lionessofjudah.substack.com/p/katie-spence-drastic-and-irreversible?utm\\_source=post-email-title&publication\\_id=581065&post\\_id=142308282&utm\\_campaign=email-post-title&isFreemail=true&r=x64e&triedRedirect=true&utm\\_medium=email](https://lionessofjudah.substack.com/p/katie-spence-drastic-and-irreversible?utm_source=post-email-title&publication_id=581065&post_id=142308282&utm_campaign=email-post-title&isFreemail=true&r=x64e&triedRedirect=true&utm_medium=email)

The Earth is too hot and only getting hotter, according to governments and global bodies such as the United Nations; and the efforts to reduce carbon dioxide aren't having enough of an effect.

"The world is passing through the 1.5°C ceiling and is headed much higher unless steps are taken to affect Earth's energy imbalance," James Hansen, previous director of the NASA Goddard Institute for Space Studies, said in January.

Thus, to buy more time, on Feb. 28, scientists from NASA and the National Oceanic and Atmospheric Administration (NOAA) released a report detailing a solution called "intentional stratospheric dehydration," or in layman's terms, flying planeloads of ice to 58,000 feet and spraying ice particles into the upper atmosphere.

"It's a very small effect," said lead author Joshua Schwarz, a research physicist at NOAA's chemical sciences laboratory. "Pure water vapor doesn't readily form ice crystals. It helps to have a seed, a dust particle, for example, for ice to form around."

The researchers report that by dispersing small particles, or what it calls ice nuclei, into areas of the atmosphere that are both "very cold and super-saturated with water vapor," water vapor in the atmosphere will "freeze-dry" and rain out of the atmosphere as ice crystals, cooling the planet.

The proposal is known as geoengineering—and NASA and NOAA's joint plan is far from the only idea that's jumped from the pages of science fiction, à la the 2013 Hollywood film "Snow piercer," to mainstream science.

István Szapudi, an astronomer at the University of Hawaii Institute for Astronomy, has turned to essentially geoengineering a giant parasol, or what he calls, a "tethered solar shield" to shield the Earth from a portion of the sun's energy.

"Any sunshield works by blocking a small fraction, circa 1 percent to 2

percent, of sunlight reaching Earth,” Mr. Szapudi told The Epoch Times. “This is an almost undetectable amount by looking at the sun, but it would still cool the atmosphere to pre-industrial temperatures according to climate models.

“Specifically, the tethered sun shield is a solution that is lighter, thus cheaper, by many orders than traditional designs.”

Technology entrepreneurs Luke Iseman and Andrew Song of Make Sunsets have already taken action and have been creating reflective, high-altitude clouds by releasing balloons full of sulfur dioxide (SO<sub>2</sub>) into the stratosphere, what they call stratospheric aerosol injection (SAI).

“With climate change rapidly transforming our world, it’s crucial that we prioritize action over words,” Make Sunsets stated on its website.

“We believe that SAI is the immediate, necessary solution to cool the planet and buy us time to transition to a more sustainable future.”

But scientists such as Christopher Essex, emeritus professor of applied mathematics and physics at the University of Western Ontario and former director of its theoretical physics program, said carbon dioxide (CO<sub>2</sub>) isn’t the driver of Earth’s warmer temperature and that such geoengineering measures are “extraordinarily dangerous.”

“I used to run a climate panel for the World Federation of Scientists,” he told The Epoch Times. “And we had one session where we presented on exactly why geoengineering is extraordinarily dangerous. It’s a crazy idea.”

Ian Clark, emeritus professor for the Department of Earth and Environmental Sciences at the University of Ottawa, echoed Mr. Essex.

“Geoengineering the climate is a very scary prospect,” he told The Epoch Times.

“It’s something that should be relegated to the fantasy realm and science fiction.”

The Oxford Geoengineering Programme defines geoengineering as “the deliberate large-scale intervention in the Earth’s natural systems to counteract climate change.”

According to Mr. Szapudi, climate change is a looming threat, and greenhouse gases, such as CO<sub>2</sub>, are a driving cause of that threat.

He published a report on July 31, 2023, outlining his proposal for a tethered sun shield, what he calls solar radiation management.

“Solar radiation management (SRM) is a geoengineering approach that aims to reduce the amount of solar radiation absorbed by the Earth to mitigate the effects of climate change,” Mr. Szapudi wrote in his report.

“Two strategies proposed for SRM involve adding dust or chemicals to the Earth’s atmosphere to increase the reflected fraction of sunlight or reduce the incoming radiation from space with solar shades or dust.”

He’s advocating for a sun shield because he believes it is less risky.

When asked to comment on Mr. Essex’s claim that geoengineering is “extraordinarily dangerous,” Mr. Szapudi said: “Space-based geoengineering, especially if it is modular and reversible in design, carries less risk than Earth-based SRM injecting dust or chemicals into the atmosphere, and [it is] vastly less risky than doing nothing.

“Given what we know today and the known risks of climate change, a tethered sun shield near the L1 Lagrange point at 1.5 million kilometers from us would not present an obvious risk to Earth. The benefit is preventing and even reversing negative effects of climate change.”

NASA defines Lagrange points as “positions in space where objects sent there tend to stay put” because of oppositional gravitational forces. The agency has identified five such points.

Mr. Szapudi acknowledged that there could be unknown risks and said his proposal would need to undergo a more detailed scientific study, followed by a preliminary engineering study.

“Such a study would specify the location, the design, the materials, etc., that are most suitable. At that point, a quantitative and thorough risk assessment can be done, and a decision can be made [on] whether to go ahead with the implementation,” he said.

“In general, any big project would go through many layers of risk, cost, and benefit analyses as the design shapes up, and any showstoppers identified would halt the project. Ultimately, only the most cost-effective and safest design, if any, will be implemented.”

But Mr. Essex, who built his first computer climate model in the 1970s and was chairman of The Global Warming Policy Foundation’s



Academic Advisory Council, said part of the problem with a sun shield is that it looks at the climate from an engineering perspective instead of a scientific one.

“You might be able to generate some plausible argument for defining the actual parasol and getting into space,” he said. “But the part you don’t understand is how climate will respond to it.

“Because we’ve been pushing this propoganda as being able to solve a problem, it starts to appear like an engineering problem where you can do trial and error and see if it works or doesn’t work. But the climate problem is not an engineering problem; it’s a fundamental scientific problem. ... It’s much more subtle and complex.”

Mr. Essex explained that solar radiation travels through the atmosphere, and while some believe that radiation causes warming at that point, that’s not what’s happening. Instead, the shortwave radiation hits the Earth, which heats the surface, and then the ground radiates that energy as long wave radiation into the atmosphere, increasing temperature.

“With the parasol, they’re trying to control shortwave radiation,” Mr. Essex said. “And it’s an indirect way of controlling what goes on with the long wave, the infrared.

“People like to think the Earth is like a brick, and it’s getting too hot, so we need to cool it down—global boiling, that’s the slogan—well, that’s ridiculous. It’s just about hyping up anxiety and fear so the people will go along with things and not question what’s going on.

“There’s so much going on in the atmosphere. It’s complex, conductive, and turbulent.”

#### Balloons of Sulfur

Like a sun shield, reflective aerosols fall under the definition of solar radiation management. But unlike a sun shield, reflective aerosols aren’t modular or immediately reversible

Make Sunsets fills balloons with SO<sub>2</sub>, releases them, and then pops them once they reach the stratosphere to release the gaseous contents. The effect, Make Sunsets claims, is similar to volcanic eruptions.

“Emissions from volcanic eruptions have been cooling the Earth for millions of years, like Mt. Pinatubo in 1991. We are simply mimicking Mother Nature. In 1991, Mt. Pinatubo, a strato volcano, cooled the Earth by 0.9F or 0.5C for over a year,” it stated on its website.



So far, the group has released 49 balloons since April 2022 and claims that it has “neutralized 13,791 ton-years of warming.” It says its “clouds” of sulfur stay in the sky for between six months and three years, “depending on the altitude and latitude at which we release them.”

(Top L) An airplane leaves a vapor trail as it flies in front of the moon.  
(Top R) Bulldozers work to repair a collapsed dike, on June 29, 1991, two weeks after the eruption of Mount Pinatubo volcano.

A group of Massachusetts Institute of Technology scientists reported in 2020 that releasing reflective aerosols into the stratosphere “could have other long-lasting effects on the climate.”

“Solar geoengineering would significantly change extra tropical storm tracks—the zones in the middle and high latitudes where storms form year-round and are steered by the jet stream across the oceans and land,” their report reads.

“Our results show that solar geoengineering will not simply reverse climate change. Instead, it has the potential itself to induce novel changes in climate.”

But, Make Sunsets claimed that, without mitigation such as reflective aerosols, “10s of millions of people will die, and 20 percent of species may go extinct.”

“We believe the best time to field test and scale SAI is now,” the group stated.

The group says it has been in contact with the FBI, the Federal Aviation Authority, and the NOAA.

“They are aware of our business and activities,” its website reads.

Mr. Essex said the problem with adding reflective aerosols is even more complicated than most realize.

“If you put more stuff in the sky, you don’t just absorb and scatter [radiation]. You get stuff sent back to you,” he said.

“Depending on what kind of stuff and where it is—how high up it is—will affect whether it warms or cools. It could do both.”

Mr. Essex explained that if clouds are high enough, they help cool the

atmosphere by emitting radiation into space instead of reflecting it back to Earth. Similarly, high enough CO<sub>2</sub> cools the atmosphere instead of heating it because there's less absorption between it and space.

"It depends on where it is in the atmosphere," he said.

"You have to do the whole radiative transfer problem to get this right. And a few groups are doing that, but they have a lot of trouble publishing because sometimes, they come up with answers that don't agree with the narrative."

Mr. Essex said simple adjustments can also change how water moves in and out of the atmosphere.

"All it requires is a little tweak of the right thing, and you can get completely different weather patterns. And then maybe you won't be able to grow things you used to, and there'll be problems with daily life that you never had to deal with before," he said.

"It can go both ways—cold can become warm, wet can become dry, and dry can become wet, and those changes can occur over the whole Earth."

Make Sunsets acknowledged the risks associated with injecting the atmosphere with reflective aerosols, including ozone depletion, but stated that "science and math back us up."

"Modeling shows a slight but meaningful depletion in ozone. While we'll closely monitor this, it's important to note that worst-case scenarios for ozone depletion amount to 5–10 percent on average," its website reads.

"This is less than half of what CFCs caused and may be at least partially offset by reduced global warming's positive impact on ozone."

In the late 1970s, scientists warned that manmade chemicals, such as chlorofluorocarbons (CFCs), were depleting the ozone. Then, in 1985, a hole was confirmed over Antarctica, leading to increased fear of skin cancers, damaged ecosystems, and the loss of plants and crops. In 1989, governments adopted the Vienna Convention for the Protection of the Ozone Layer, providing the framework for the Montreal Protocol, which eventually resulted in the phase-out of substances such as CFCs.

“Around 99 percent of ozone-depleting substances have been phased out and the protective layer above Earth is being replenished. The Antarctic ozone hole is expected to close by the 2060s,” the U.N. Environment Program stated regarding the effort.

“Every year, an estimated two million people are saved from skin cancer and there are broader benefits too, as many of the ozone-depleting gases also drive up global temperatures.”

Mr. Clark said injecting aerosols into the stratosphere is dangerous, and not just because of the effect on storm tracks.

“We did a lot of work to try [to] clean up the atmosphere,” he said. “The Clean Air Act addressed things like nitrous oxide and sulfur fuels and diesel and stuff like that. And then they want to undo all that work? It seems pretty reckless to me.

“And we don’t want a cooler planet! I mean, history tells us that European civilization flourished under a warmer climate. And you know what we’re seeing—with precipitation, setting records and all the rest, and consequences of a warmer planet—is far better conditions to have than what happens when things freeze earlier and for longer. Agriculture is compromised. Transportation is compromised. Everything is compromised when it’s colder.”

Neither Mr. Iseman nor Mr. Song responded to The Epoch Times’ request for comment.

Solar radiation management isn’t new, nor is it the only way some have looked to control the climate.

Indeed, Mr. Essex said he’s seen geoengineering ideas posited by scientists since the 1990s, and other possible “solutions” have included generating iron filing to cause algae blooms in the ocean, burning sulfur dioxide from ships to generate marine clouds, and using U.S. Navy artillery to fire dust into the stratosphere.

“The imagination of them all is quite extensive,” he said.

Mr. Essex believes that governments will eventually want to “control the weather with tax policy.”

“That’s basically what we have as the end game. Geoengineering is just another effort to try to control the weather,” he said.

Source: [theepochtimes.com](http://theepochtimes.com)

## WEATHER MODIFICATION ANSWERS TO THE MOST COMMONLY ASKED QUESTIONS.

<https://www.geoengineeringwatch.org/geoengineering-answers-to-the-most-commonly-asked-questions/>

Dane Wigington

GeoengineeringWatch.org

Global climate engineering operations are creating ever more extreme weather and temperature whiplash scenarios. The immense scale of climate forcing being carried out by the geoengineers is wreaking havoc on the biosphere. Over 70 years of covert climate intervention and weather warfare (along with countless other forms of anthropogenic activity) has done unimaginable damage to the planet's life support systems. The blowback is already unfolding and will get rapidly worse. The extreme and unprecedented temperature imbalances already occurring in the US, and forecasted (scheduled) to occur, are beyond alarming. The 15 minute video below exposes some of the most primary agendas of the ongoing climate engineering operations.

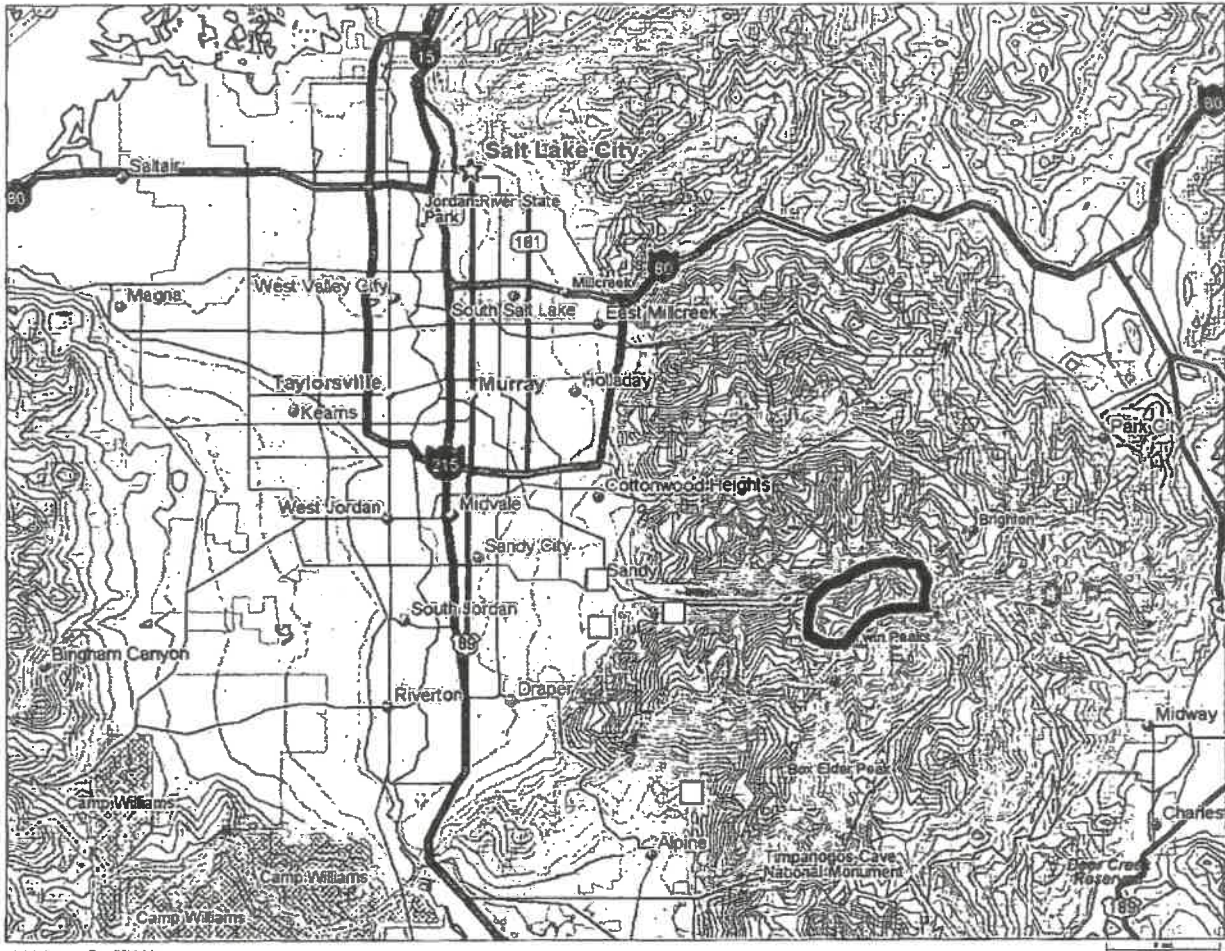
The climate engineering / weather / biological warfare operations must be brought to light, and to a halt.

DW

May be freely reprinted, so long as the text is unaltered, all hyperlinks are left intact, and credit for the article is prominently given to GeoengineeringWatch.org and the article's author with a hyperlink back to the original story.

<https://www.geoengineeringwatch.org/geoengineering-creating-freeze-fry-extremes/>





© 2011 DeLorme Topo USA 2.4  
 Scale: 1:250,000 Series: Levell 6.7 Datum: WGS84 Map Projection: UTM Spheroid: DeLorme, USGS

**Alta and Snowbird target area (black outline) and generator sites (yellow squares)**

*Proof they have ability to target designated areas!  
 Alta is a separate project activity!  
 Snowbird is a 2 different areas.*

## CLOUD SEEDING GRAPHENE OXIDE POISON

"...consequences of Graphene Oxide entering your bloodstream could be dire..."

"...consequences of Graphene Oxide entering your bloodstream could be dire...our knowledge of Graphene is limited...what do we know? Studies in mice show that Graphene can build up inside the lungs. Graphene sheets only nanometers thick would grow and collect causing fluids to build up inside your lungs. You could drown on the inside without even touching a drop of water.

How would Graphene affect your brain? If you are injected with Graphene a small amount could cross the dreaded blood-brain barrier...Graphene nanoparticles could pierce your blood cells and completely disrupt their function..."

Video source: [hiddeninplainsight1](#)

"Graphene oxide can act as a solo trigger for most COVID symptoms. This is not a VIRUS or spike protein, but a chemical warfare agent"

You Are Not Sick. You Are Being POISONED: 3D Graphene Oxide Nanoparticles for Cloud Seeding Patent US 2022/0002159 A1

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# 3D Graphene Oxide Nanoparticles for Cloud Seeding Patent US 2022/0002159 A1

January 6, 2022 | Inventors: Linda ZAO, Haoran Liang | 3D Reduced Graphene Oxide/Sio 2 Composite For Ice Nucleation |

US 2022/0002159 A1 | The present invention relates to the field of cloud seeding.



US 20220002159A1

(19) **United States**  
(12) **Patent Application Publication** (16) **Pub. No.:** US 2022/0002159 A1  
ZOU et al. (43) **Pub. Date:** Jan. 6, 2022

(54) **3D REDUCED GRAPHENE OXIDE/SIO 2 COMPOSITE FOR ICE NUCLEATION**

### Publication Classification

(71) Applicant: **Khalifa University of Science and Technology, Abu Dhabi (AE)**

(51) Int. Cl.  
*C01B 32/198* (2006.01)  
*C01B 33/12* (2006.01)

(72) Inventors: **Linda ZOU, Abu Dhabi (AE); Haoran LIANG, Abu Dhabi (AE)**

(52) U.S. CL.  
CPC ..... *C01B 32/198* (2017.08); *B52J 40/00* (2013.01); *C01B 33/12* (2013.01)

(21) Appl. No.: **17/422,994**

(57) **ABSTRACT**

(22) PCT Filed: **Jan. 14, 2020**

The present invention provides for an ice-nucleating particle for cloud seeding and other applications, which can initiate ice nucleation at a temperature of -8° C. Further, the ice nucleation particle number increased continuously and rapidly with the reducing of temperature. The ice nucleating particle in the present invention is a nanostructured porous composite of 3-dimensional reduced graphene oxide and silica dioxide nanoparticles (PrGO-SN). The present invention also provides for a process for synthesizing the PrGO-

(86) PCT No.: **PCT/IB2020/050259**

§ 371 (c)(1).  
(2) Date: **Jul. 14, 2021**

### Related U.S. Application Data

(60) Provisional application No. 62/791,927, filed on Jan. 14, 2020.

[https://lionessofjudah.substack.com/p/what-would-happen-if-graphene-was?utm\\_source=post-email-title&publication\\_id=581065&post\\_id=141970608&utm\\_campaign=email-post-title&isFreemail=true&r=x64e&open=false&utm\\_medium=email](https://lionessofjudah.substack.com/p/what-would-happen-if-graphene-was?utm_source=post-email-title&publication_id=581065&post_id=141970608&utm_campaign=email-post-title&isFreemail=true&r=x64e&open=false&utm_medium=email)

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## **Geoengineering is wreaking havoc all over the world, from fires to ice.**

<https://www.geoengineeringwatch.org/geoengineering-fire-and-ice/>

After the passing of the recent engineered winter weather onslaught on Northern California, the climate engineers are yet again cutting off the flow of precipitation to parts of the US West. Even in winter, forest fires are burning with unprecedented ferocity. What will be left after the weather-makers have wrought their decimation on formerly thriving forests? Scorched mountains, ridges and canyons, all of it devoid of life. Above it all the atmospheric aerosol dispersions continue unabated. The new installment of Into The Wild is below.

This image was taken from my backyard in Northern California, in December. Photo credit: Jovyde Wigington

For the previous episodes, click here: [Into The Wild, With Dane Wigington](#)

All are needed in the critical battle to wake populations to what is coming, we must make every day count. Share credible data from a credible source, make your voice heard. Awareness raising efforts can be carried out from your own home computer.

For those that have not yet seen our recent post on "The Dimming", it is a groundbreaking documentary that is currently in production. This documentary film will provide answers and proof of the ongoing climate engineering / weather warfare operations. Below is a 4+ minute trailer on the upcoming film.

CStarr says:

March 12, 2022 at 6:42 am

I grabbed a cup the snow falling here in Fairfax, Va today. I measured the temperature of this slippery snow. It is holding at 34.5 deg f. The ice from the fridge measured at 30 deg f. This snow is not natural. I am not sure how to upload photo of this phenomenon! How is it that snow is snow above freezing? The snow in the cup is not melting. My other thought, and Dane you are a treasure, when we see a plane choking out a stream of whitish pollution can we find through flight tracker whose plane it is and shame them for the mess they are making. Shame. Where are the people who are worried about pollution? The (what i call) horizontal clouds appear in some mornings, but not every day. Some days will be completely clear with no jet horizontal clouds. Yesterday evening the spraying was heavy. As i have been writing this the temp of the cup of snow has been going up- now at 37.5! Thank Dane for defining this problem.



**DO YOU REALLY THINK THEY CANNOT MAKE THE TEMPERATURE COLDER AND PLUMMENT 20 DEGREES WITHIN 24 HOURS?**

Just take a good look at this document attached.

[https://library.oarcloud.noaa.gov/noaa\\_documents.lib/OAR/OWAQ/Weather Modification Project/FY23/Q2/2023wmainitial.pdf](https://library.oarcloud.noaa.gov/noaa_documents.lib/OAR/OWAQ/Weather Modification Project/FY23/Q2/2023wmainitial.pdf)

*There are 102 pages of various activities - it really is going on on a continual basis!*

### HOTTEST TEMPERATURES

IF YOU WANT TO DISCREDIT WEATHER MODIFICATION AS A CAUSE OF THE HEAT WAVES, GO RIGHT AHEAD, BUT WHAT IS YOUR REASON FOR THIS PAST HEAT WAVE THAT OUR PRESENT CLIMATE ACTIVIST IGNORE?

INFORMATION PROVIDED BY PHILLIPS, A SENIOR CLIMATOLOGIST WITH THE METROROLOGICAL SERVICES OF CANADA.

**1937**

**45° C** set on **July 5, 1937**, in Yellowgrass, Saskatchewan.

But that one sweltering day was nothing compared with the heat wave the year before.

Seventy years ago this week, a two-week heat wave across much of Canada claimed the lives of almost **800 people, destroyed crops, killed livestock** and **even prompted the authorities** to allow **topless bathing suits on men.**

From **July 5-17, 1936**, the country **baked from Alberta to Ontario**, with temperatures soaring as high as **44.4° C** in St. Albans, Man.

**Winnipeg** faced **lows of 28.3° C**, and an Ontario provincial record was set with a temperature of **42.2° C** in Atikokan.

In total, the **heat wave killed 780 Canadians** and

was linked to another **400 indirect casualties, including several drownings.**

In **Toronto** alone, over **225 people succumbed** to temperatures reaching as high as **41.1° C.**

Phillips calls the 1936 hot spell the “granddaddy” of all Canadian heat waves.

“We are a **cold country, the second-coldest** in the world, and yet the **greatest loss of life (due to weather conditions)** was from a **10-day heat wave in July of '36.**”

Horses drawing carriages were known **simply to drop dead in the street** because of the heat, **fruit literally baked on the trees** and **transients were recruited** directly off trains to help **fight forest fires.**

Climate change and conditions being warmer now, aren't nearly as intense as they were back in '36,”  
**AN IMPORTANT POINT TO REMEMBER THE POPULATION AND FOSSIL FUEL DRIVEN MEANS OF TRANSPORTATION WERE ALMOST NIL.**

But Tim Ball, an environmental consultant based in Victoria and one of the first Canadians to receive a PhD in climatology, contends that what may appear to be global warming is simply a natural fluctuation.

“Climate change is all the time, always has been, always will be, and the idea that climate change is something new is part of the attempt to mislead people,”

“I could pick any period at any time and I can show you greater extremes, lower extremes,” said Ball.

“The climate is changing all the time, and what’s going on right now is well within natural variability.”

# Modification of cirrus clouds to reduce global warming

David L Mitchell and William Finnegan

Desert Research Institute, Reno, NV 89512-1095, USA

E-mail: david.mitchell@dri.edu

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Accepted for publication 12 August 2009

Published 30 October 2009

Online at [stacks.iop.org/ERL/4/045102](http://stacks.iop.org/ERL/4/045102)

## Abstract

Greenhouse gases and cirrus clouds regulate outgoing longwave radiation (OLR) and cirrus cloud coverage is predicted to be sensitive to the ice fall speed which depends on ice crystal size. The higher the cirrus, the greater their impact is on OLR. Thus by changing ice crystal size in the coldest cirrus, OLR and climate might be modified. Fortunately the coldest cirrus have the highest ice supersaturation due to the dominance of homogeneous freezing nucleation. Seeding such cirrus with very efficient heterogeneous ice nuclei should produce larger ice crystals due to vapor competition effects, thus increasing OLR and surface cooling. Preliminary estimates of this global net cloud forcing are more negative than  $-2.8 \text{ W m}^{-2}$  and could neutralize the radiative forcing due to a  $\text{CO}_2$  doubling ( $3.7 \text{ W m}^{-2}$ ). A potential delivery mechanism for the seeding material is already in place: the airline industry. Since seeding aerosol residence times in the troposphere are relatively short, the climate might return to its normal state within months after stopping the geoengineering experiment. The main known drawback to this approach is that it would not stop ocean acidification. It does not have many of the drawbacks that stratospheric injection of sulfur species has.

**Keywords:** geoengineering, cirrus clouds, climate modeling

## 1. Introduction

Geoengineering ideas have been classified into two categories (Lenton and Vaughan 2009): (1) those increasing reflectance of solar radiation and (2) those increasing outgoing longwave radiation (OLR) by removing greenhouse gases like carbon dioxide. The geoengineering idea proposed in this letter fits in neither of these categories, although it would if category 2 were broadened by removing the restriction of greenhouse gas removal. The idea proposed is to cool surface temperatures by reducing the coverage of high cirrus clouds to increase OLR.

Since greenhouse gases warm the planet by trapping OLR, and clouds have the greatest impact on the earth radiation budget, it may make sense to target clouds that most strongly regulate OLR for climate engineering purposes. Of the nine cloud types considered in Chen *et al* (2000), cirrus clouds (visible optical depth  $<3.6$ , cloud top pressure  $<440 \text{ mb}$ ) had the greatest impact on top-of-atmosphere (TOA) longwave fluxes and had a global annual mean net warming of

$+1.3 \text{ W m}^{-2}$ . A similar study (Hartmann *et al* 1992) found a TOA global annual net cloud forcing for cirrus (optical depth  $<9.4$ ) of  $+2.4 \text{ W m}^{-2}$ . Thus cirrus tend to trap more outgoing thermal radiation than they reflect incoming solar radiation and have an overall warming effect on the climate system. Conversely, liquid water clouds have a net cooling effect, reflecting more solar radiation than retention of longwave radiation. This difference is primarily due to the relatively cold temperatures of cirrus clouds, causing the earth to radiate at an effectively colder temperature (i.e. nearer the cirrus cloud temperature), thus trapping thermal radiation below cirrus altitudes that would otherwise escape to space. This is why the higher (i.e. colder) the cirrus clouds are, the greater is their OLR impact. Both liquid water and cirrus clouds effectively absorb and emit longwave radiation, but the low water clouds are emitting this thermal radiation at temperatures only slightly cooler than the surface. Thus it makes sense to target the colder cirrus clouds for geoengineering due to their greater impact on OLR.

**CLIMATE LOCKDOWN BANS GERMANY 2024  
WEEKEND DRIVING BANS**

You need to think outside the box regarding how climate Lockdowns or 15 minute cities might arrive, how they might look.

Just like covid started as 2 weeks to flatten the curve, climate Lockdowns will be as insidious.

This is the same play- To incrementally accustom us to totalitarian governance.

The beast requires the climate play to be successful to succeed.

So hit hard, very hard here. Do not let up.

Article from the Telegraph.

<https://www.telegraph.co.uk/world-news/2024/04/12/german-transport-minister-warns-of-weekend-driving-ban/>

“Germany’s transport minister has warned that driving will have to be banned at the weekends unless the country’s net zero laws are changed.

Volker Wissing’s FDP party wants the law amended so the polluting transport sector can miss carbon emissions reduction targets, as long as Germany as a whole reaches them.

But the change is opposed by the Greens, who are part of the three-way coalition with the pro-business FDP and the Social Democrats (SPD), led by Olaf Scholz, the chancellor.

Negotiations over the law have dragged on since September last year. In a bid to heap pressure on his coalition partners to amend the law, Mr Wissing said that he would have to enforce a ban on weekend driving to abide by the law unless it was changed before mid-July.

The Greens accused Mr Wissing of stirring up unfounded fears at a time when German enthusiasm for climate-friendly legislation is at a low ebb during the cost of living crisis.

Julia Verlinden, the Green's parliamentary group leader, said there were other ways to tackle pollution, including introducing a speed limit on the nation's autobahns.

However, a speed limit on the motorways is controversial. Mr Wissing has ruled it out, as have opposition parties the CDU and hard-Right Alternative for Germany.

German Transport Minister Volker Wissing

Mr Wissing defended his comments, saying: 'I told the citizens the truth. You can only save such large amounts [of pollution] by giving up cars and trucks' CREDIT: Liesa Johannssen/Reuters

Greenhouse emissions in Europe's biggest economy fell to the lowest level in 70 years in 2023, but the transport sector has been consistently failing to meet its climate targets.

According to the current climate protection law, the ministry responsible for underperforming sectors must launch an immediate programme to put them back on track.

Advertisement

Mr Wissing has not yet done so. His ministry claims reforming the sector is more challenging than other areas of the economy because it affects people's everyday lives and cannot be changed quickly.

"A corresponding reduction in traffic performance would only be possible through restrictive measures that are difficult to communicate to the population, such as nationwide and indefinite driving bans on Saturdays and Sundays," he wrote in a letter dated Thursday to coalition parliamentary group leaders.

The letter was heavily criticised by coalition partners and environmental groups. 'Scaremongering through absurd proposals'

"It is not responsible for a minister to stir up unfounded fears," Katharina Droege, the

Green Party parliamentary group leader, said on Friday.

Detlef Mueller, the SPD deputy parliamentary group leader, said the gambit would not move the negotiations forward.

Advertisement

“Scaremongering through absurd proposals does not help climate protection in the transport sector at all, on the contrary,” he said.

Clara Thompson, mobility expert at Greenpeace, told the German Press Agency: “Wissing has wasted two years blocking every climate protection measure in road traffic - now he is coming up with horror scenarios so that he won’t have to do anything in the future either.”

However, Christian Lindner, the FDP party leader and finance minister, supported the threat.

“The climate protection law of the previous government could soon lead to driving bans,” he wrote on social media.

The transport ministry said the minister’s letter was not a threat but rather expressed the opinion that parliament should live up to its responsibilities and agree upon the amendment.”

Understand how they will operate. No more Cooperation with owning the science.

Take down the BEAST

LawyerLisa





<https://climateviewer.com/2019/10/04/shocking-electric-weather-modification-companies-in-2019/>

Cloud ionizers are rapidly popping up around the globe as the replacement for the most widely used weather modification technique: dumping chemicals into clouds with cloud seeding.

Cloud ionization and electric methods promise greater control of the weather without any toxic chemicals and according the CEO of Earthwise Technologies (now closed) they can actually make the air cleaner.

Cloud ionizers use pollution already in the sky as a "cloud seed" or scientifically referred to as a cloud condensation nuclei (CCN). The idea is simple: create static electricity that attracts water to aerosols (dust, metals, pollution) in the sky to create clouds or make it rain.

Finally, cloud ionizers are being used to protect critical infrastructure like nuclear waste from lightning strikes!

Another <sup>2019</sup> new technique being discussed by three prominent companies and the Chinese government is the ability to use electromagnetic signals sent from ground based antennas to steer atmospheric rivers, or rivers in the sky.

This article and video is to update my original post on the topic of cloud ionization from 2014: Cloud Ionization, Electric Rainmaking, and Laser-guided Weather Modification

### **STEERING ATMOSPHERIC RIVERS WITH ANTENNAS**

Miles Research and aquies global rain project

<http://milesresearch.co/>

David Miles on Steering Sky Rivers, Weather Moderation, and Military

## Implications

<https://climateviewer.com/2019/01/20/david-miles-on-steering-sky-rivers-weather-moderation-and-military-implications/>

<https://climateviewer.com/2018/06/07/aquiess-sciblue-steering-rivers-in-the-sky/>

<https://climateviewer.com/2015/05/28/how-texas-stole-californias-rain/>

<https://climateviewer.com/2019/10/04/shocking-electric-weather-modification-companies-in-2019/>

**The Star**

WASHINGTON, D.C., MONDAY, FEBRUARY 8, 1937

**Recent Experiments In Scientific Rain Making**



**Mon Evening Transcript**

WASHINGTON, FEBRUARY 8, 1937

**SHOWERED GLASS AND PLASTER.**

**RAIN-MAKING TEST UNPOPULAR IN WASHINGTON**

Embarrassment of the Day Kept Up All Night.

**SECRET WEEKLY**

**PRODUCING RAIN 1891**

**Popular Science Monthly**

Looking for Cloud to Charge for Weather

Coming for the Weather




**Popular Science MONTHLY**

FOUNDED 1872

**Rainmaking Airplanes for Montana**

ON THE basis of the recent releasing of the machine, as it speaks through the experiments at McCook Flying Field, it is felt the need of such an air-

**SCIENCE MONTHLY**

**ing Riddle Solved?**

Big Flying Machine Brings New Light on Riddle of Spraying with Electrically Charged Ions



**Popular Science**

**"Rain-Making" Tower**

William Haight, of Wilmington Park, Calif., claims he can make rain by the manipulation of what he calls negative electric ground waves and positive waves of the atmosphere's upper strata. His apparatus is mounted on a tower



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to release it

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**POPULAR SCIENCE**

By Robert S. Maerz

**Weird Schemes To Make It RAIN**

Let them never





**Argus**

Australia's Checkmates to try again

**AF TO MAKE THE GREATEST RAIN-MAKING BID YET**

Several planes will try new method



**The Daily Chronicle**

Riders

**Trails Dim Sun, Springs Gripes**

Several planes will try new method

**coal riment**

**The Canberra**

RESEARCH IN US

**Jets 'may affect v**

URBANA, Ill., Wednesday (AP-Reuters). — Vapor trails from jet aircraft may be responsible for some weather changes, according to studies being carried out at the University of Illinois.

Dr. Stanley Chapman, head of the Department of Meteorology at the University of Illinois, said Monday that the jet 23 years showed an annual increase of 1.5 degrees Celsius each year, a narrowing of daily temperature ranges and a decrease in the number of rain-producing cloud systems.

For the past five years, Walter Sorey has been photographing the clouds every 15 minutes, and Mr. Chapman said they showed a surprising regular pattern that began with a clear sky at the airport.

These trails form a blanket around a moving jet.

The Illinois-Chapman said the air world experienced a decrease in the number of supercooled clouds.

He said the clouds were with the Linn ground station.

The trail by capturing the ground by the north wind energy.



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INITIAL REPORT ON WEATHER MODIFICATION ACTIVITIES

This report is required by Public Law 92-205; 85 Stat. 735; 145 U.S.C. 330b. Knowing and willful violation of any rule adopted under the authority of Section 2 of Public Law 92-205 shall subject the person violating such rule to a fine of not more than \$10,000, upon conviction thereof.

Complete in accordance with instructions on reverse and forward one copy to:  
National Oceanic and Atmospheric Administration  
Office of Oceanic and Atmospheric Research  
1315 East-West Highway, WWMC-3, Rm 11216  
Silver Spring, MD 20910

1. PROJECT OR ACTIVITY DESIGNATION, IF ANY

Cooling Earth

2. DATES OF PROJECT

a. DATE FIRST ACTUAL WEATHER MODIFICATION ACTIVITY IS TO BE UNDERTAKEN

2/12/2023

b. EXPECTED TERMINATION DATE OF WEATHER MODIFICATION ACTIVITIES

3/23/2023

3. PURPOSE OF PROJECT OR ACTIVITY

reduce average global temperature

4. (a) SPONSOR

NAME Make Sunsets Incorporated / Luke Iseman

4. (b) OPERATOR

same as 4A

AFFILIATION

founder

PHONE NUMBER 4156236817

AFFILIATION

PHONE NUMBER

STREET ADDRESS

514 Americas Way #18412

STREET ADDRESS

CITY

Box Elder

STATE

SD

ZIP CODE

57719

CITY

STATE

ZIP CODE

5. TARGET AND CONTROL AREAS (See Instructions)

TARGET AREA

all of Earth

CONTROL AREA

n/a

LOCATION

all of Earth

SIZE OF AREA

196,900,000 SQ. MI

LOCATION

SIZE OF AREA

SQ. MI

6. DESCRIPTION OF WEATHER MODIFICATION APPARATUS, MODIFICATION AGENTS AND THEIR DISPERSAL RATES, THE TECHNIQUES EMPLOYED, ETC. (See Instructions)

We are deploying sulfur dioxide, calcium carbonate, and/or other proprietary compounds into the stratosphere to offset global warming. Our deployments will occur via balloons and/or other aircraft. Deployment rates will vary, peaking at no more than 100 megatons in total per year. Initial flights will occur with as little as 1mg per flight.

7. LOG BOOKS Enter name, affiliation, address, and telephone number of responsible individual from whom log books or other records may be obtained.

NAME Luke Iseman

AFFILIATION

founder

PHONE NUMBER

STREET ADDRESS

8. SAFETY AND ENVIRONMENT

YES

NO

Has an Environmental Impact Statement, Federal or State, been filed? If yes, please furnish a copy as applicable.

YES

NO

Have provisions been made to acquire the latest forecasts, advisories, warnings, etc., of the National Weather Service, Forest Service, or others when issued prior to and during operations? If yes, please specify on a separate sheet.

YES

NO

Have any safety procedures (operational constraints, provisions for suspension of operations, monitoring methods, etc.) and any environmental guidelines (related to the possible effects of the operations) been included in the operational plans? If yes, please furnish copies or a description of the specific procedures and guidelines.

9. OPTIONAL REMARKS (See Instructions. Use Separate Sheet)

CERTIFICATION: I certify that all statements in this report on this weather modification project are complete and correct to the best of my knowledge and are made in good faith.

NAME OF REPORTING PERSON

Luke Iseman

AFFILIATION

founder, Make Sunsets

OFFICIAL TITLE

CEO

STREET ADDRESS

DATE

3/31/2023

PHONE NUMBER

199

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**CIA DIRECTOR CONFIRMS WEATHER MODIFICATION - Post**  
"Just another conspiracy theory Flerf!"

WATCH VIDEO

<https://twitter.com/Incogni17422663/status/1763202681311486376>

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The Weather Channel Founder, John Coleman, Schools CNN on Climate Change

[https://energycentral.com/c/cp/weather-channel-founder-john-coleman-schools-cnn-climate-change?fbclid=IwAR1\\_96bLXTip8USFfv1GdpmILW8Ljki62t-u20ImH1\\_17zJ30JQxES-yRKU](https://energycentral.com/c/cp/weather-channel-founder-john-coleman-schools-cnn-climate-change?fbclid=IwAR1_96bLXTip8USFfv1GdpmILW8Ljki62t-u20ImH1_17zJ30JQxES-yRKU)

the Weather Channel **Founder, not “co-founder”**, John Coleman (meteorologist), Schools CNN on Climate Change “Baloney”, “there is no global warming”.

John Stewart Coleman (October 15, 1934 – January 20, 2018) was an American television weatherman.

**Excerpt (out of the 3:08 to 5:08 min):**

The **97% of the climatologists is a manipulated figure – the government puts up about \$2.5 b USD / year directly for climate research, it gives this money only to scientists that produce scientific results that support the global warming hypostasis.** They do not have any choice, if are you going to get the money you have got to support their position.

**Hypostasis (philosophy) – noun**, an underlying reality or substance, as opposed to attributes or to that which lacks substance.

**This is a 10:24 min long educational video, but the 3:08 to 5:08 min segment has it all.**

<https://www.youtube.com/watch?v=OhX2KQs3v5w&feature=youtu.be>

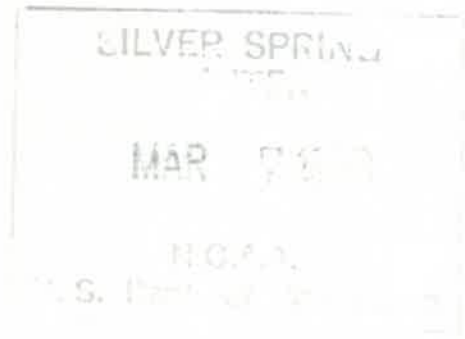
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# National Weather Modification Policies and Programs.

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Submitted by the Secretary of Commerce  
in compliance with Public Law 94-490

November 1979



<https://wm-so.glb.shawcable.net/service/home/~/?auth=co&loc=en&id=933450&part=2>

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1979  
QC  
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**A Report to**  
**• The President and The Congress**

600

**National Weather Modification  
Policies and Programs  
November 1979**

**Submitted by the Secretary of Commerce  
in compliance with Public Law 94-490  
November 1979**

For sale by the Superintendent of Documents. U.S. Government Printing Office  
Washington, D.C. 20402  
Stock Number 003-017-00470-8

CIC'IJ

THE SECRETARY OF COMMERCE

Washington, D.C. 20230

DEC 17 1979

Sirs:

It is my honor to submit to you a report on National Weather Modification Policies and Programs. This document contains the findings, conclusions, and recommendations of the study required by the National Weather Modification Act of 1976, Public Law 95-490.

Enclosure

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The President

President of the Senate

Speaker of the House of Representatives

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Hurricane Moderation . . . . . 20

Other Applications . . . . . 21

Summary . . . . .

Quote:

Weather can be modified by man, but much more knowledge is needed to

intervene in complex atmospheric processes with scientifically predictable results. There are good reasons to believe that a coordinated long-term research and development program can supply many of the missing answers. In recent years, striking advances have taken place in developing the research tools needed to investigate atmospheric phenomena. Increased computer power and more effective numerical models offer much greater opportunity to address crucial questions concerning intra-cloud and cloud-environment interactions. Greatly improved remote sensing techniques provide tools for studying a variety of cloud phenomena. Aircraft and sophisticated instruments are available for airborne measurement of many essential cloud and environment variables.

<https://wm-so.glb.shawcable.net/service/home/~/?auth=co&loc=en&id=933450&part=2>

# Weather Modification Project Reports

<https://libguides.library.noaa.gov/weather-climate/weather-modification-project-reports>

## Submission Information

### Persons Required to Report.

The Weather Modification Reporting Act of 1972, 15 U.S.C. § 330 et seq. requires that all persons that conduct non-Federal weather modification activities within the United States or its territories report such activities to the U.S. Secretary of Commerce at least 10 days prior to and after undertaking the activities. Failure to report can result in fines of up to \$10,000.

All reports submitted to NOAA are compiled and then posted on the NOAA Weather Modification Website.

### Activities subject to reporting.

(a) Weather modification activities are defined as “Any activity performed with the intention of producing artificial changes in the composition, behavior, or dynamics of the atmosphere” (see 15 CFR § 908.1). The following, when conducted as weather modification activities, shall be reported (see 15 CFR § 908.3):

Seeding or dispersing of any substance into clouds or fog, to alter drop size distribution, produce ice crystals or coagulation of droplets, alter the development of hail or lightning, or influence in any way the natural development cycle of clouds or their environment;

Using fires or heat sources to influence convective circulation or to evaporate fog;

Modifying the solar radiation exchange of the earth or clouds, through the release of gases, dusts, liquids, or aerosols into the atmosphere;

Modifying the characteristics of land or water surfaces by dusting or treating with powders, liquid sprays, dyes, or other materials;

Releasing electrically charged or radioactive particles, or ions, into the atmosphere;

Applying shock waves, sonic energy sources, or other explosive or acoustic sources to the atmosphere;

Using aircraft propeller downwash, jet wash, or other sources of artificial wind

generation;

Using lasers or other sources of electromagnetic radiation; or

Other activities undertaken with the intent to modify the weather or climate, including solar radiation management activities and experiments

(b) The requirement to report does not apply to activities of a purely local nature that can reasonably be expected not to modify the weather outside of the area of operation. This exception is presently limited to the use of lightning deflection or static discharge devices in aircraft, boats, or buildings, and to the use of small heat sources, fans, fogging devices, aircraft downwash, or sprays to prevent the occurrence of frost in tracts or fields planted with crops susceptible to frost or freeze damage. Also, the requirement to report does not apply to religious activities or other ceremonies, rites and rituals intended to modify the weather.

(c) All activities noted in paragraph (a) must be reported at least 10 days before the commencement of such project or activity. However, after the Administrator has received initial notification of a planned activity, he may waive some of the subsequent reporting requirements. This decision to waive certain reporting requirements will be based on the general acceptability, from a technical or scientific viewpoint, of the apparatus and techniques to be used.

(d) Other reporting exceptions may be made in the future by rule of the Administrator.

Is there a specific form to submit?

The following forms should be used:

17-4 - Initial Report on Weather Modification Activities (Approved Information collection 0684-0025)

17-4A - Interim Activity Reports and Final Report (Approved Information collection 0648-0025)

When creating your reports, please use the following coding system as your NOAA file name: year, state, first four digits of the project name, and the respective report number. For instance, for a project that takes place in 2021 in Maryland and is titled Rock Canyon, the code would be 2021MDROCK-1 (initial report) and 2021MDROCK-2 (final report). You may also use this naming convention to save your files prior to submitting.

To see full file.

(b1)

<https://libguides.library.noaa.gov/weather-climate/weather-modification-project-reports>

For attached reporting material

[https://library.oarcloud.noaa.gov/noaa\\_documents.lib/OAR/OWAQ/Weather\\_Modification\\_Project/FY24/Q1/2023IDCM-1.pdf](https://library.oarcloud.noaa.gov/noaa_documents.lib/OAR/OWAQ/Weather_Modification_Project/FY24/Q1/2023IDCM-1.pdf)

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# North American Weather Consultants, Inc.

8160 South Highland Drive, Suite A-2  
Sandy, Utah 84093  
Telephone 801-942-9005  
Facsimile 801-942-9007  
E-Mail nawc@nawcinc.com

Air Quality, Applied Meteorology, Meteorological Research, Weather Modification

October 13, 2004

Karen King  
NOAA/Office of Oceanic and Atmospheric Research  
Routing Code R/WA  
1315 East-West Highway, Room 11216  
Silver Spring, MD 20910

Dear Ms. King:

Enclosed are initial cloud seeding reports for the 2004-2005 winter season, as listed below:

Alta/Snowbird, Utah - 05-1260  
Central and Southern Utah - 05-1261  
Boise River, Idaho 05-1262

If you have any questions, please call me at 801-942-9005.

Sincerely,



Don A. Griffith  
President

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NOAA FORM 17-4A  
4-81)

U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Form Approved OMB Control No. 0648-0025  
Expires 05/31/2024

### INTERIM ACTIVITY REPORTS AND FINAL REPORT

This report is required by Public Law 92-205; 85 Stat. 735; 145 U.S.C. 330b. Knowing and willful violation of any rule adopted under the authority of Section 2 of Public Law 92-205 shall subject the person violating such rule to a fine of not more than \$10,000, upon conviction thereof.

NOAA FILE NUMBER  
**2023CAMOKE**

INTERIM REPORT       FINAL REPORT

Complete in accordance with instructions on reverse and forward one copy to:  
National Oceanic and Atmospheric Administration  
Office of Oceanic and Atmospheric Research  
1315 East-West Highway, SSMC-3, Rm. 11216  
Silver Spring, MD 20910

REPORTING PERIOD  
FROM **11/01/2023** TO **12/31/2023**

MONTH	(a) NUMBER OF MODIFICATION DAYS	(b) NUMBER OF MODIFICATION DAYS PER MAJOR PURPOSE			(c) HOURS OF APPARATUS OPERATION BY TYPE		(d) TYPE AND AMOUNT OF AGENT USED					
		INCREASE PRECIPITATION	ALLEVIATE		OTHER	AIRBORNE	GROUND	SILVER IODIDE	CARBON DIOXIDE	UREA	SODIUM CHLORIDE	OTHER
			HAIL	FOG								
JANUARY												
FEBRUARY												
MARCH												
APRIL												
MAY												
JUNE												
JULY												
AUGUST												
SEPTEMBER												
OCTOBER												
NOVEMBER												
DECEMBER	1	1				66	1422					
TOTAL	1	1				66	1422					
TOTALS FOR FINAL REPORT	1											

DATE ON WHICH FINAL WEATHER MODIFICATION ACTIVITY OCCURRED (For Final Report only.)

**CERTIFICATION:** I certify that all statements in this report on this weather modification project are complete and correct to the best of my knowledge and are made in good faith.

NAME OF REPORTING PERSON  
**Neil Flaiz**

AFFILIATION  
**Pacific Gas & Electric**

SIGNATURE  
**Neil Flaiz** Digitally signed by Neil Flaiz  
Date: 2024.02.05 23:51:38 -08'00'

STREET ADDRESS  
**300 Lakeside Drive**

OFFICIAL TITLE  
**Senior Meteorologist**

**Oakland**

STATE  
**CA**

ZIP CODE  
**94612**

DATE  
**02/05/2024**

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(61)

**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
OFFICE OF OCEANIC AND ATMOSPHERIC RESEARCH  
Office of Weather and Air Quality  
1315 East-West Highway  
Silver Spring, MD 20910

October 20, 2004

Don A. Griffith  
President  
North American Weather  
Consultants, Inc.  
8160 South Highland Drive  
Suite A-2  
Sandy, Utah 84093

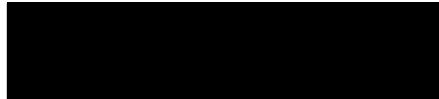
Dear Mr. Griffith:

Thank you for your Initial Reports on Weather Modification Activities for the 2004-2005 winter season. The projects were assigned the following NOAA File Numbers:

<u>Project Name:</u>	<u>NOAA File Number:</u>
Alta/Snowbird	05-1260
Central and Southern Utah	05-1261
Boise River, Idaho	05-1262

As a reminder, please submit a Final Report within 45 days after the project has terminated. This is mandated under Public Law 92-205.

Sincerely,



Ms. Karen King, Manager  
Weather Modification Activities  
Reporting Program





(61)

05-1260

Complete in accordance with instructions on reverse and forward copy:				Form Approved: OMB No. 0648-0025 Expires 10/31/2001			
TO: National Oceanic and Atmospheric Administration Office of Oceanic and Atmospheric Research 1315 East-West Highway SSMC-3 Room 11554 Silver Spring, MD 20910				NOAA FORM 17-4 U.S. DEPARTMENT OF COMMERCE (4-81) NAT'L OCEANIC AND ATMOSPHERIC ADM. <b>INITIAL REPORT ON WEATHER MODIFICATION ACTIVITIES</b> (P.L. 205, 92 <sup>ND</sup> . CONGRESS)			
<b>1. PROJECT OR ACTIVITY DESIGNATION, IF ANY</b> Alta/Snowbird				<b>2. DATES OF PROJECT</b>			
<b>3. PURPOSE OF PROJECT OR ACTIVITY</b> Increase snowpack for ski areas				a. DATE FIRST ACTUAL WEATHER MODIFICATION ACTIVITY IS TO BE UNDERTAKEN 10/15/2004			
				b. EXPECTED TERMINATION DATE OF WEATHER MODIFICATION ACTIVITIES 12/24/2004			
<b>4. (a) SPONSOR</b>				<b>4. (b) OPERATOR</b>			
NAME Onno Wieringa				NAME Don Griffith			
AFFILIATION Alta Ski Lifts Co.		PHONE NUMBER (801) 359-1078		AFFILIATION North American Weather Consultants		PHONE NUMBER (801) 942-9005	
STREET ADDRESS P.O. Box 8007				STREET ADDRESS 8160 South Highland Dr. Ste A-2			
CITY Alta		STATE UT	ZIP CODE 84092	CITY Sandy		STATE UT	ZIP CODE 84093
<b>5. TARGET AND CONTROL AREAS (See Instructions)</b>							
TARGET AREA				CONTROL AREA			
LOCATION Alta and Snowbird ski resorts		SIZE OF AREA 10 SQ.MI		LOCATION N/A		SIZE OF AREA N/A SQ.MI.	
<b>6. DESCRIPTION OF WEATHER MODIFICATION APPARATUS, MODIFICATION AGENTS AND THEIR DISPERSAL RATES, THE TECHNIQUES EMPLOYED, ETC. (See Instructions)</b> Four ground-based silver iodide generators will be used. Each generator emits 12 grams per hour of silver iodide. Operational decisions will be made from NAWC offices in Sandy, Utah.							
<b>7. LOG BOOKS:</b> Enter name, affiliation, address, and telephone number of responsible individual from whom log books or other records may be obtained.							
NAME Don Griffith				THIS REPORT IS REQUIRED BY PUBLIC LAW 92-205; 85 STAT 735; 15 U.S.C. 330b. KNOWING AND WILLFUL VIOLATION OF ANY RULE ADOPTED UNDER THE AUTHORITY OF SECTION 2 OF PUBLIC LAW 92- 205 SHALL SUBJECT THE PERSON VIOLATING SUCH RULE TO A FINE OF NOT MORE THAN \$10,000, UPON CONVICTION THEREOF.			
AFFILIATION North American Weather Consultants		PHONE NUMBER (801) 942-9005					
STREET ADDRESS 8160 South Highland Dr. Ste. A-2							
CITY Sandy		STATE UT	ZIP CODE 84093				
<b>B. SAFETY AND ENVIRONMENT</b>							
<input type="checkbox"/> YES		<input checked="" type="checkbox"/> NO		Has an Environmental Impact Statement, Federal or State been filed? If yes, please furnish a copy as applicable.			
<input checked="" type="checkbox"/> YES		<input type="checkbox"/> NO		Have provisions been made to acquire the latest forecasts, advisories, warnings, etc. of the National Weather Service, Forest Service, or others when issued prior to and during operations? If yes, please specify on a separate sheet.			
<input checked="" type="checkbox"/> YES		<input type="checkbox"/> NO		Have any safety procedures (operational constraints, provisions for suspension of operations, monitoring methods, etc.) and any environmental guidelines (related to the possible effects of the operations) been included in the operational plans? If yes, please furnish copies or a description of the specific procedures and guidelines.			
<b>9. OPTIONAL REMARKS (See Instructions. Use Separate Sheet.)</b>							
NAME Don Griffith				<b>CERTIFICATION:</b> I certify that the above statements are true, complete and correct to the best of my knowledge and belief.			
AFFILIATION North American Weather Consultants				SIGNATURE [Redacted]			
STREET ADDRESS 8160 South Highland Dr., Ste. A-2				OFFICIAL TITLE President			
CITY Sandy		STATE UT	ZIP CODE 84093	DATE 10/13/2004		PHONE NUMBER (801) 942-9005	

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NOAA FORM 17-4A  
(4-81)

U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Form Approved OMB No. 0648-0025  
Expires 10/31/2001

**INTERIM ACTIVITY REPORTS AND FINAL REPORT**

This report is required by Public Law 92-205; 85 Stat. 735; 145 U.S.C. 330b. Knowing and willful violation of any rule adopted under the authority of Section 2 of Public Law 92-205 shall subject the person violating such rule to a fine of not more than \$10,000, upon conviction thereof.

NOAA FILE NUMBER

05-1260 Alta/Snowbird

INTERIM REPORT

FINAL REPORT

Complete in accordance with instructions on reverse and forward one copy to:

National Oceanic and Atmospheric Administration  
Office of Oceanic and Atmospheric Research  
1315 East-West Highway SSMC-3 Room 11554  
Silver Spring, MD 20910

REPORTING PERIOD

FROM 10/15/2004

TO 12/24/2004

MONTH	(a) NUMBER OF MODIFICATION DAYS	(b) NUMBER OF MODIFICATION DAYS PER MAJOR PURPOSE				(c) HOURS OF APPARATUS OPERATION BY TYPE		(d) TYPE AND AMOUNT OF AGENT USED					
		INCREASE PRECIPITATION	ALLEVIATE		OTHER	AIRBORNE	GROUND	SILVER IODIDE	CARBON DIOXIDE	UREA	SODIUM CHLORIDE	OTHER	
			HAIL	FOG									
JANUARY													
FEBRUARY													
MARCH													
APRIL													
MAY													
JUNE													
JULY													
AUGUST													
SEPTEMBER													
OCTOBER	6	6					193	2,316					
NOVEMBER	5	5					98	1,176					
DECEMBER	4	4					67	804					
TOTAL	15	15	0	0	0	0	358	4,296	0	0	0	0	0
TOTALS FOR FINAL REPORT													

DATE ON WHICH FINAL WEATHER MODIFICATION ACTIVITY OCCURRED (For Final Report only.)

**CERTIFICATION:** I certify that all statements in this report on this weather modification project are complete and correct to the best of my knowledge and are made in good faith.

NAME OF REPORTING PERSON

Don Griffith

AFFILIATION North American Weather Consultants

SIGNATURE

STREET ADDRESS 8160 South Highland Dr., Suite A-2

OFFICIAL TITLE

President

CITY Sandy

STATE UT

ZIP CODE 84093

DATE 01/05/2005

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### INSTRUCTIONS FOR INTERIM AND FINAL REPORTS

Any person engaged in any weather modification project or activity in the United States on January 1 in any year shall submit one copy of this form setting forth as of such date the information required with respect to each such continuing project or activity not previously furnished in a prior interim report. The box indicating "Interim Report" should be checked. The January 1 date shall not apply if other arrangements have previously been made with the written approval of the Administrator of NOAA. The report shall be received by NOAA not later than 45 days following the end of the reported period.

Upon completion of a project or activity, one copy of this report shall be submitted and the box checked indicating "Final Report." The final report shall be received by NOAA not later than 45 days after the completion of the project or activity.

The NOAA File Number should be filled in for any project for which the Administrator has assigned a file number.

A supplemental report in letter form referring to the appropriate NOAA file number must be made to the Administrator if the "Interim" or "Final" reports are found to contain any material inaccuracies, misstatements, and omissions.

#### INTERIM REPORT

The information in Items (a) through (d) on the report form should be provided as prescribed below for the months to which the report pertains. If no data are applicable for any given item in any month, enter zero.

- Item (a) Enter the number of days on which actual weather modification activities took place.
- Item (b) Enter in the appropriate column the number of days on which modification activities were conducted, segregated by each of the major purposes of the activities. Normally, the total of entries in (b) would equal the total in (a).
- Item (c) Enter in the appropriate column the total number of hours of operation of each type of weather modification apparatus (i.e., net hours of agent release). If the form does not contain sufficient space, report additional types on a separate sheet.
- Item (d) Enter in the appropriate column the total amount of agent used, by type. If the form does not contain sufficient space, report additional types on a separate sheet. **Silver Iodide (grams), Carbon Dioxide (pounds), Urea (gallons), Sodium Chloride (grams), Other (indicated on a separate sheet the type and unit of measure.)**

The totals for these items shall be provided for the period covered by the interim report.

#### FINAL REPORT

The final report shall contain the information required for interim reports, to the extent not previously report. In addition, the items designated as "Totals for Final Report" should be report. This information should pertain to the entire project or activity period, rather than only the period since the last interim report. At the space at the end of the form, enter the date on which final weather modification activity occurred.

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Complete in accordance with instructions on reverse and forward copy: TO: National Oceanic and Atmospheric Administration Office of Oceanic and Atmospheric Research 1315 East-West Highway SSMC-3 Room 11554 Silver Spring, MD 20910	Form Approved: OMB No. 0648-0025 Expires 01/31/2018 NOAA FORM 17-4 U.S. DEPARTMENT OF COMMERCE (4-81) NAT'L OCEANIC AND ATMOSPHERIC ADM. <b>INITIAL REPORT ON WEATHER MODIFICATION ACTIVITIES</b> (P.L. 205, 92 <sup>ND</sup> . CONGRESS)
---	--

<b>1. PROJECT OR ACTIVITY DESIGNATION, IF ANY</b> Southern and Central Utah	<b>2. DATES OF PROJECT</b> a. DATE FIRST ACTUAL WEATHER MODIFICATION ACTIVITY IS TO BE UNDERTAKEN 11/01/2023 b. EXPECTED TERMINATION DATE OF WEATHER MODIFICATION ACTIVITIES 04/15/2024
--	---

<b>3. PURPOSE OF PROJECT OR ACTIVITY</b> Augment snowpack			<b>4. (b) OPERATOR</b> NAME Todd Flanagan		
<b>4. (a) SPONSOR</b> NAME Bryce Jackson		AFFILIATION Utah Water Resources Development Corporation		PHONE NUMBER (435) 427-3749	
STREET ADDRESS 32650 N 12000 E			STREET ADDRESS 8180 South Highland Dr Ste B-2		
CITY Fairview	STATE UT	ZIP CODE 84629	CITY Sandy	STATE UT	ZIP CODE 84093

5. TARGET AND CONTROL AREAS (See Instructions)					
TARGET AREA			CONTROL AREA		
LOCATION see map	SIZE OF AREA 10,000 SQ. MI		LOCATION Various sites in UT, NV, AZ	SIZE OF AREA na SQ. MI.	

**6. DESCRIPTION OF WEATHER MODIFICATION APPARATUS, MODIFICATION AGENTS AND THEIR DISPERSAL RATES, THE TECHNIQUES EMPLOYED, ETC.** (See Instructions)

Approximately 70 ground-based cloud nuclei generators will be used. Each generator emit 8 grams per hour of silver iodide when active. Some remotely operated sites will be added to the program, each having a somewhat higher emission rate. In addition, a seeding aircraft is planned for the southern portion of this program and will be based in St. George, Utah. Operational decisions will be made by NAWC meteorologists.

**7. LOG BOOKS:** Enter name, affiliation, address, and telephone number of responsible individual from whom log books or other records may be obtained.

NAME Todd Flanagan	THIS REPORT IS REQUIRED BY PUBLIC LAW 92-205; 85 STAT 735; 15 U.S.C. 330b. KNOWING AND WILLFUL VIOLATION OF ANY RULE ADOPTED UNDER THE AUTHORITY OF SECTION 2 OF PUBLIC LAW 92-205 SHALL SUBJECT THE PERSON VIOLATING SUCH RULE TO A FINE OF NOT MORE THAN \$10,000, UPON CONVICTION THEREOF.
AFFILIATION North American Weather Consultants	
STREET ADDRESS 8180 South Highland Dr Ste B-2	
CITY Sandy	
STATE UT	ZIP CODE 84093

**8. SAFETY AND ENVIRONMENT**

YES  NO Has an Environmental Impact Statement, Federal or State been filed? If yes, please furnish a copy as applicable.

YES  NO Have provisions been made to acquire the latest forecasts, advisories, warnings, etc. of the National Weather Service, Forest Service, or others when issued prior to and during operations? If yes, please specify on a separate sheet.

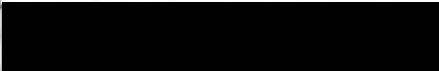
YES  NO Have any safety procedures (operational constraints, provisions for suspension of operations, monitoring methods, etc.) and any environmental guidelines (related to the possible effects of the operations) been included in the operational plans? If yes, please furnish copies or a description of the specific procedures and guidelines.

**9. OPTIONAL REMARKS** (See Instructions. Use Separate Sheet.)

NAME Todd Flanagan	<b>CERTIFICATION:</b> I certify that the above statements are true, complete and correct to the best of my knowledge and belief.		
AFFILIATION North American Weather Consultants	SIGNATURE		
STREET ADDRESS 8180 South Highland Dr Ste B-2	OFFICIAL TITLE Meteorologist		
CITY Sandy	STATE UT	ZIP CODE 84093	DATE 10/26/2023
		PHONE NUMBER (801) 942-9005	

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NOAA FORM 17-4 (4-81)		U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION		Form Approved OMB Control No. 0648-0025 Expires 05/31/2021	
<b>INITIAL REPORT ON WEATHER MODIFICATION ACTIVITIES</b>  This report is required by Public Law 92-205; 85 Stat. 735; 145 U.S.C. 330b. Knowing and willful violation of any rule adopted under the authority of Section 2 of Public Law 92-205 shall subject the person violating such rule to a fine of not more than \$10,000, upon conviction thereof.				Complete in accordance with instructions on reverse and forward one copy to: National Oceanic and Atmospheric Administration Office of Oceanic and Atmospheric Research 1315 East-West Highway, WWMC-3, Rm 11216 Silver Spring, MD 20910	
<b>1. PROJECT OR ACTIVITY DESIGNATION, IF ANY</b>  Idaho Power's Central Mountain Project		<b>2. DATES OF PROJECT</b> a. DATE FIRST ACTUAL WEATHER MODIFICATION ACTIVITY IS TO BE UNDERTAKEN <b>11/15/2023</b> b. EXPECTED TERMINATION DATE OF WEATHER MODIFICATION ACTIVITIES <b>04/30/2024</b>			
<b>3. PURPOSE OF PROJECT OR ACTIVITY</b> ecipitation Enhancement/Snow Augmentation					
<b>4. (a) SPONSOR</b> NAME <b>Idaho Power Company</b>		<b>4. (b) OPERATOR</b> NAME <b>Same</b>			
AFFILIATION <b>Self</b>		PHONE NUMBER <b>(208)388-2200</b>		AFFILIATION PHONE NUMBER	
STREET ADDRESS <b>1221 W Idaho St</b>				STREET ADDRESS	
CITY <b>Boise</b>		STATE <b>ID</b>		ZIP CODE <b>83702</b>	
CITY		STATE		ZIP CODE	
<b>5. TARGET AND CONTROL AREAS (See instructions)</b>					
<b>TARGET AREA</b>			<b>CONTROL AREA</b>		
LOCATION <b>Payette, Boise, and Wood Bc</b>		SIZE OF AREA <b>4560</b> SQ. MI		LOCATION <b>SNOTEL sites NW and N</b>	
				SIZE OF AREA <b>Point</b> SQ. MI	
<b>6. DESCRIPTION OF WEATHER MODIFICATION APPARATUS, MODIFICATION AGENTS AND THEIR DISPERSAL RATES, THE TECHNIQUES EMPLOYED, ETC. (See instructions)</b>					
1. Ground-based generators: 33 units operating from locations indicated on project maps. a. Agent for 32 generators: Silver iodide (AgI) at 20 g/hr via acetone carrier and propane flame. b. Agent for 1 generator: Liquid Propane (test generator that will vary dispersal rates for testing purposes)					
2. Airborne: 2 Aircraft operating from BOI equipped with 150 g end-burning and 20 g ejectable flares. a. Agent: Silver iodide					
3. Rawinsonde located near Crouch, ID. Two radiometers, located on Squaw Butte, ID and Hill City, ID.					
<b>7. LOG BOOKS</b> Enter name, affiliation, address, and telephone number of responsible individual from whom log books or other records may be obtained.					
NAME <b>Derek Blestrud</b>					
AFFILIATION <b>Idaho Power Company</b>		PHONE NUMBER <b>(208)388-5899</b>			
STREET ADDRESS <b>1221 W Idaho St. (Mail to: CHQ-6 PO Bc</b>					
CITY <b>Boise</b>		STATE <b>ID</b>		ZIP CODE <b>83702</b>	
<b>8. SAFETY AND ENVIRONMENT</b>					
<input type="checkbox"/> YES		<input checked="" type="checkbox"/> NO		Has an Environmental Impact Statement, Federal or State, been filed? If yes, please furnish a copy as applicable.	
<input checked="" type="checkbox"/> YES		<input type="checkbox"/> NO		Have provisions been made to acquire the latest forecasts, advisories, warnings, etc., of the National Weather Service, Forest Service, or others when issued prior to and during operations? If yes, please specify on a separate sheet.	
<input checked="" type="checkbox"/> YES		<input type="checkbox"/> NO		Have any safety procedures (operational constraints, provisions for suspension of operations, monitoring methods, etc.) and any environmental guidelines (related to the possible effects of the operations) been included in the operational plans? If yes, please furnish copies or a description of the specific procedures and guidelines.	
<b>9. OPTIONAL REMARKS (See instructions. Use Separate Sheet).</b>					
<b>CERTIFICATION:</b> I certify that all statements in this report on this weather modification project are complete and correct to the best of my knowledge and are made in good faith.				<b>NAME OF REPORTING PERSON</b> <b>Derek Blestrud</b>	
AFFILIATION <b>Idaho Power Company</b>					
STREET ADDRESS <b>1221 W Idaho St. (Mail to: CHQ-6 PO Bc</b>				<b>OFFICIAL TITLE</b> <b>Senior Atmospheric Scientist</b>	
CITY <b>Boise</b>		STATE <b>ID</b>		ZIP CODE <b>83702</b>	
				DATE <b>11/15/2023</b>	
				PHONE NUMBER <b>(208)388-5899</b>	

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**Attachment to accompany NOAA Form 17-4, Nov. 2023  
Idaho Power Company Weather Resources Management Project  
Payette, Boise, Wood, and Upper Snake River Basins**

**Item 4: Addresses**

<b>Street Address:</b> 1221 West Idaho Street Boise, ID 83702	<b>Mailing Address:</b> Water Resources & Policy Dept. - CHQ-6 P.O. Box 70 Boise, ID 83707
---	---

**Item 5: Target/Control:**

Not a target – control program; project evaluation to be done by computer assessment of annual runoff.

- Item 8.**
1. No Environmental Impact Statement required.
  2. In addition to the wealth of information available via the internet, Idaho Power Company operates a high resolution Weather Research and Forecasting model that is used for case guidance.
  3. Suspension criteria satisfying the constraints listed below (extracted from the overall Project plan and abbreviated for inclusion here):

Any well-designed and responsibly conducted weather modification program includes guidelines for temporarily suspending or completely stopping cloud seeding when certain conditions exist.

This safeguard is intended to avoid contributing to or to give the perception of contributing to, runoff or reservoir levels beyond manageable limits, whether it is a real or perceived hazardous situation. Other hazardous situations include, but may not be limited to, flooding, excessive erosion and sedimentation buildup, and avalanches resulting from natural meteorological or hydrological phenomena. IPC created a list of triggers that it would monitor to determine whether cloud seeding operations should be suspended. These triggers include (and are discussed in detail below):

- Total snowpack
- Potential flood situations (including rain-on-snow)
- Severe weather threats, including tornadoes, locally heavy precipitation, strong or damaging winds, hail, or lightning
- Surface Water Supply Index
- Avalanche conditions
- Special circumstances

Assessing these triggers is a routine facet of ongoing forecasting and cloud seeding activities. The time needed for making decisions and acting on these parameters is shorter than commonly used in routine assessments.

These triggers are monitored on a storm-by-storm and moment-to-moment basis during rapidly changing weather conditions. National Weather Service (NWS) Flash Flood or Severe Weather Warnings pertinent to a target area, its drainage area, or even adjacent watersheds can trigger suspension of cloud-seeding operations. While suspending cloud seeding ahead of a severe weather threat is typically infrequent and short-lived, suspensions during potential flood situations might span several days or terminate cloud seeding for the remainder of the season. Special circumstances such as search and rescue missions, avalanche threats, or other emergencies within or near a target area may result in temporarily curtailing seeding operations, as IPC deems prudent.

Suspensions can be called for all or part of a basin, based upon deduced threat. An example of this might be that there is a flood warning for Weiser River near Weiser, Idaho; the northern generators in the Payette Basin may be suspended until the threat passes, but the southern generators located in the Payette Basin may remain active to focus augmentation the eastern Payette Basin and the Boise Basin.

**Total snowpack**

If any of the next 3 variables are met.

**1- SNOTEL**

Snowpack can begin as early as October and continue through April and sometimes into May. A hazard potential from snowmelt exists after excessive snow accumulations because it creates unmanageable runoff or it creates flood-stage runoff. Therefore, certain percentages of April first's basin-wide average water content are used as cutoff criteria for seeding operations.

Total snowpack status is evaluated from data gathered by other agencies such as the Natural Resources Conservation System (NRCS), snow survey, and snow pillow data. Table 1 lists these percentages. Once suspended, the program may resume seeding operations if subsequent snow survey or snow pillow data indicate the accumulation has fallen below these percentages.

Date	Cut-off value (percentage of April 1 average)
January 1	95%
February 1	110%
March 1	125%
April 1	140%

Table 1 - Snowpack levels that would suspend seeding

### 2- Surface Water Supply Index (SWSI)

A Surface Water Supply Index (SWSI) is a predictive indicator of the surface water available in a basin compared to historic supply. The SWSI is calculated by summing the two major sources of irrigation water supply; reservoir carryover and spring and summer streamflow runoff. These two sources are analyzed together when determining the total surface water supply available for the season.

	Boise
Jan	2.3
Feb	2.1
Mar	1.9
Apr	1.8

**Error! Reference source not found.** 2 lists the SWSI values of concern for the different basins.

### 3- Flood Index

Idaho Power has created a new daily-updated long-term suspension criteria named the Flooding Index. As a reminder, Idaho Power uses both short-range and long-range criteria for cloud seeding suspension. Short-range suspension criteria include: flood stage, flood warnings, extreme avalanche danger, and search and rescue operations and are on the range of 1-2 weeks in the future. Short-range criteria remain unchanged. Long-range criteria look at conditions occurring on the order of weeks to months in advance. The monthly NRCS Surface Water Supply Index (SWSI) and Total SWE from SNOTEL sites are currently used for long-range criteria. Drawbacks to SWSI include:

- Monthly distribution so a suspension lasts at least one month
  - Cannot come out of suspension early if conditions change
- Depends on ranking the last 30 years
  - It updates every 10 years which changes interpretation of SWSI
  - Does not include historic years with massive flooding which is a stakeholder concern
- Each streamgage has a different SWSI threshold which makes it harder to interpret at a glance
- Can be difficult to maintain due to database dependencies



The Flooding Index suspension criteria is based on publicly available water supply forecasts from the Northwest River Forecast Center (NWRFC). The methodology requires establishing a water supply threshold for each streamgage where flooding becomes hazardous for the public. Idaho Power estimated initial thresholds based on prior years, but the thresholds are open to change based on feedback from stakeholders. The daily NWRFC 50th percentile water supply forecasts is smoothed to a 7 day average and the index is calculated as water supply forecast divided by flood threshold. Cloud seeding suspension is recommended once the flooding index is  $> 1$  for 3 consecutive days. The 7-day averaging and 3 consecutive day criteria are used to avoid moving in and out of suspension quickly which may cause confusion with stakeholders and partnered operators. An "Action Stage" at 0.95 is also present to give stakeholders a heads up that we are close to suspension and that operations may change. This stage also alerts the operators to take a closer look at the long-range forecasts.

Benefits of the new suspension criteria are:

- Daily updates
  - Operations can resume faster, 3 days after an index falls below 1 instead of 1 month with SWSI
- Is relatively easy to understand
  - If the index is  $< 1$ , no suspension
- Standardizes the index across all gages
  - 1 is the output suspension threshold of concern for all gages
- Uses publicly available data that is easy to access
- Can be used for any streamgage in any state
- Stakeholders have a voice in creating the flooding threshold value

Drawbacks of the new suspension criteria are:

- It's new and people are not familiar with it
- There's a short suspension history available for thresholds

Idaho Power will eventually transition to only using the Flooding Index for long-range suspension. This is based on hindcasts for Water Years 2017-2020 indicate the Flooding Index works well to identify when suspensions should occur. The Flooding Index identified times when both the SWSI and Total SWE indicated suspension was prudent. Streamgage water supply thresholds were set based on these water years, but can be moved up or down based on stakeholder feedback.

### Rain-induced winter floods

IPC will take every precaution to ensure timely suspension of operations during these situations, because of the potential for flooding. Suspending operations under these conditions is intended to limit the effect of seeding when any increase in precipitation might contribute to the potential flood hazard or be perceived to do so. Seeding will be suspended when any of the criteria listed in Table 2 or Table 3 are met or forecast to occur within 24 hours.

River flow and encroachment forecasts are based upon information and predictions supplied by the NWS, Northwest River Forecast Center (NWRFC), USGS, and IPC. Both NWRFC and IPC use a stream flow model that predicts the inflow to Brownlee Reservoir and other upper Snake River locations, as well as tributaries of the system. Primary input to the model includes existing basin wetness and a Quantitative Precipitation Forecast (QPF). These forecasts are extremely sensitive to predicted condensate supply rates and temperatures. Suspension of seeding will occur whenever the NWS, NWRFC, or IPC forecasts exceed these criteria.

To provide an added level of caution during possible flood situations, seeding can be suspended at the discretion of IPC meteorologists and when indicated by the QPF. Suspension can occur even if criteria are not explicitly met.

Central Mountains - Winter flooding from excessive rainfall is possible in the Central Mountains. A large portion of the basin lies below 4,500' elevation and frequently receives rain rather than snow. Sometimes, heavy rain falls well above the 4,500' contour.

**Error! Reference source not found.**3 shows several river locations that are monitored to determine whether cloud seeding operations should be suspended. Seeding will be suspended when any of the criteria listed in **Error! Reference source not found.**3 are met or forecast to occur within 24 hours.

Location	USGS Gauge Identification	Flood Stage (GH – feet)	Flood Discharge (cfs)
Weiser River near Weiser	13266000	9.5	8,890
SNAKE River at Weiser	13269000	12	67,560
South Fork Payette at Lowman	PRL11	7.5	7,205
Payette River near Emmett	13249500	10.51	16,000
Boise River at Glenwood Springs	13206000	10.31	7,000
Big Wood River at Hailey	13139510	6	4,150
Little Wood near Carey	13148500	6	1,660

Table 3 – Central Mountains: Critical river stages

### Severe Weather Warnings

Seeding operations will be suspended whenever the NWS issues a severe weather warning for a cloud seeding region. This includes warnings for adjacent areas if the weather activity prompting the warning is likely to move into a cloud seeding region.

Usually warnings are issued when strong convective activity is expected. The official criteria are heavy local rainfall, winds at 50 knots (60 mph or higher) or if the winds cause observed damage, large hail (hailstones ¾ inches in diameter or larger), tornadoes, or funnel clouds.

### Other Special Circumstances

IPC has the authority to suspend or terminate seeding activities under any special or unusual circumstances that may be deemed hazardous or might be perceived to be so by the public. Examples of special circumstances are extreme avalanche hazard as reported in United States Forest Service USFS avalanche status bulletins, very strong winds, unusually warm temperatures, heavy snow at low elevations, or other unforeseen circumstances.

**Note:** If suspension criteria are met during a seeding period, IPC will stop seeding operations immediately.

**File name: Weather Modification USA report for fiscal year 1965  
President Lyndon B Johnson**

February 18, 1966

To the Congress of the United States:

I am transmitting, for the consideration of the Congress, the Seventh Annual Report on Weather Modification (for Fiscal Year 1965) submitted to me by the Director of the National Science Foundation.

Highly encouraging steps are being taken toward establishing safe and effective programs for modifying the weather. We can now begin to see the day when such programs may become operationally feasible. This is an exciting and encouraging development not only for Americans, but for men everywhere.

Last year, in transmitting to the Congress the Sixth Annual Report, I indicated the need for a larger effort in basic research and in the development of means to put the knowledge we have to work.

That increased effort is noted in this report. It describes not only the vigorous pursuit of weather modification programs by agencies of the Executive Branch but also the valuable stimulus afforded by Committees of the Congress, and the significant activities of **nongovernmental groups**.

**RECENT STUDIES**

The list of recent activities in this field is heartening. For example, on **January 1, 1966**, the first **Federal regulation on weather modification became effective**. The **National Science Foundation** issued rules providing that advance notice of intention to modify the weather must be given to the Foundation.

More recently, two significant reports by advisory groups have been issued. A two volume study by a National Academy of Sciences Panel, released January 14, reviewed in detail the **physical science aspects of weather and climate modification**. Five days later the National Science Foundation's Special Commission on Weather Modification issued a broad report covering the **biological and social aspects, statistical problems, problems of law and organization, and international implications**, as well as **physical science aspects**. Additional reports by the Special Commission will soon be forthcoming.

Congress, too, has indicated its interest in scheduling **additional hearings on weather and climate modification** during this session. It is striking that separate

groups dealing seriously with this problem have, after long study, arrived at similar and significant conclusions.

The National Academy of Sciences report, for example, says: "**In a sense, weather modification today is a reality. Man can and does interfere with the atmosphere** in a number of ways. His ability to produce deliberate beneficial changes is still very limited and uncertain, but it is no longer economically or politically trivial."

The report of the Special Commission, in a markedly similar passage, says, "**Weather and climate modification is becoming a reality.** The daily activities of man influence the atmosphere in a number of ways and **his ability to induce deliberate changes in measurable magnitude by artificial means is progressing.**"

The report I submit today says it another way: "In **1965, key words are no longer 'whether' and 'when.'** They are **'what' and 'how' and 'who.'**"

### **PROBLEMS--AND PROGRESS**

Two sets of problems face us and both are difficult. One consists of finding out **how to modify the weather and climate.** The second consists of determining how best to utilize this knowledge for the benefit of mankind once it is achieved.

The scientists and engineers inside and outside the Government must address themselves particularly to the first set of problems. All of us, as concerned citizens, must seriously consider the second.

At present **it appears feasible, under appropriate conditions, to seed some kinds of clouds and achieve increased precipitation.** It is also possible, under certain conditions, **to dissipate some types of fog.** Partial success has been reported from abroad in **reducing hail** damage.

As our understanding of atmospheric processes increases, our ability to do more will also increase. Even now, men are dreaming and planning of projects that will some day enable us to **mitigate the awesome and terrible forces of hurricanes and tornadoes.** Such a time is still far off, but perhaps not so far off as we thought only a few years ago.

That so much is being done now is a credit not only to the men of science working in the field, but also to the understanding and support of the Congress which has expressed its interest in and support of this field of great national interest. I commend to your continuing interest this report and the important efforts that it describes.

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LYNDON B. JOHNSON

The White House

February 18, 1966

<https://www.presidency.ucsb.edu/documents/message-the-congress-transmitting-the-national-science-foundations-annual-report-weather>

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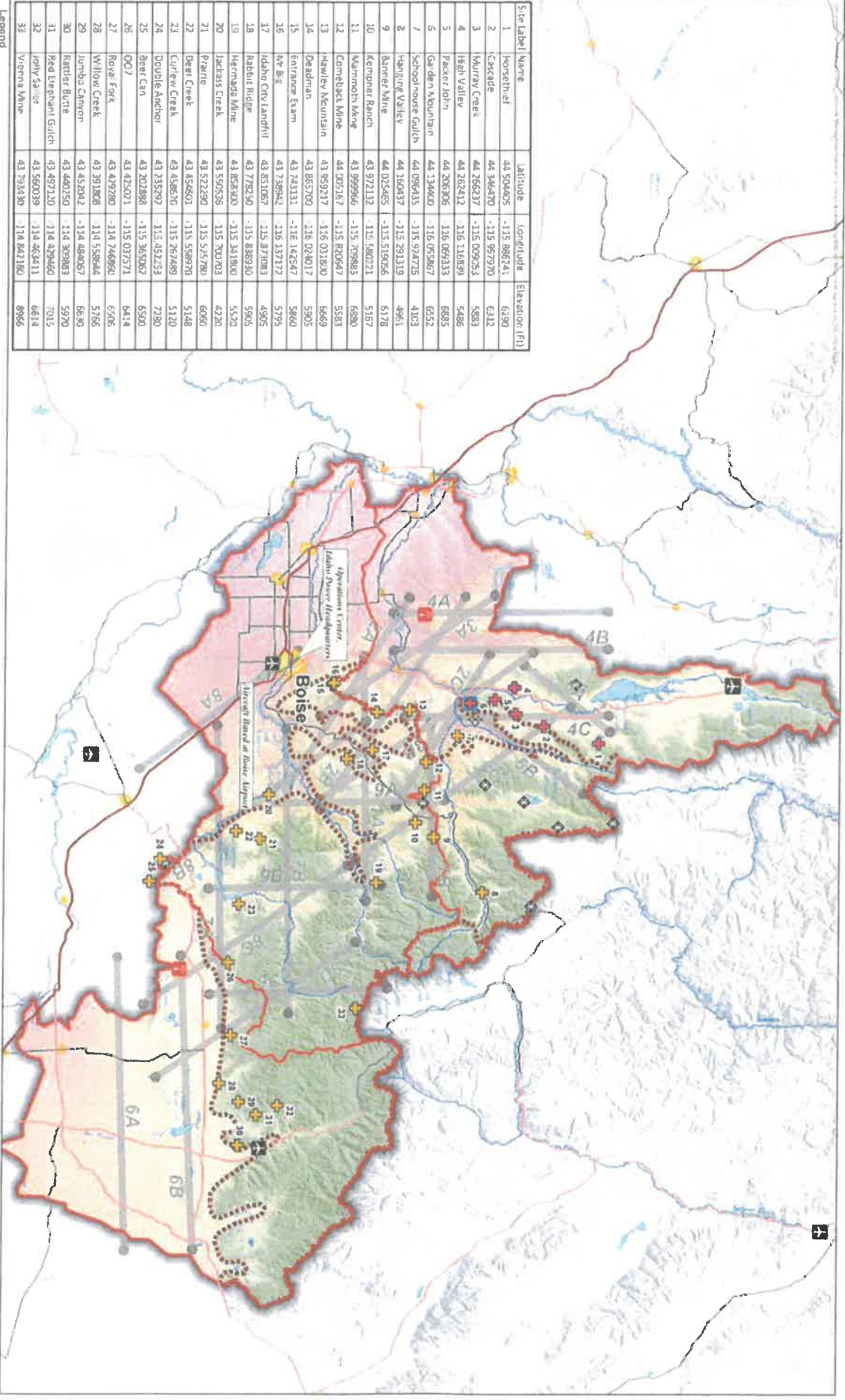
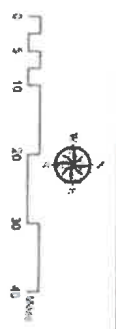
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Site Label	Name	Latitude	Longitude	Elevation (ft)
1	Horseshoe	44.504405	-115.086241	6390
2	Cerule	44.346470	-115.957970	6312
3	Murray Creek	44.266237	-115.009253	5833
4	Hell Valley	44.262412	-116.118389	5486
5	Packer John	44.306306	-116.093333	6895
6	Garden Mountain	44.346400	-116.053667	6952
7	Schoolhouse Gulch	44.096435	-115.924735	4103
8	Hanging Valley	44.160437	-115.293319	4961
9	Burner Mine	44.025465	-115.190056	6178
10	Kempner Ranch	43.972132	-115.580271	5187
11	Marmoth Mine	43.999866	-115.209883	6800
12	Cornelback Mine	44.002167	-115.820467	5583
13	Deedman	43.865700	-116.031800	6669
14	Entrance Farm	43.743131	-116.024017	5905
15	Ke-Bee	43.736842	-116.142567	5860
16	Idaho City Landfill	43.831087	-115.974083	4905
17	Rabbit Ridge	43.728230	-115.838340	5955
18	Werners Mine	43.658400	-115.541800	5520
19	Jacksass Creek	43.520290	-115.525780	6060
20	Prairie	43.454601	-115.580970	5148
21	Deer Creek	43.458607	-115.267489	5120
22	Curlew Creek	43.435292	-115.452453	7280
23	Double Anchor	43.202884	-115.365062	6500
24	Deer Cyn	43.425021	-115.037571	6414
25	Royal Fork	43.429280	-114.748660	6506
26	Willow Creek	43.452042	-114.484067	6630
27	Jurrobs Canyon	43.440250	-114.309883	5970
28	Red Elephant Gulch	43.497230	-114.429460	7015
29	Jenny Sa'ee	43.560039	-114.463411	6614
30	Victoria Mine	43.794330	-114.842180	6966

- Legend
- + IPC Liquid Propane + Agri GGEN
  - + IPC GGEN
  - + Wet Season
  - + Wet Tower
  - + Seasoner
  - + Rainwater
  - + Basins Targeted
  - + Flight Lines
  - + Swimsound
  - + Target Area
  - + Precip Gauge

# CM Project Map

Date 11/11/2023



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## **OPERATIONAL DEFENSES THROUGH WEATHER CONTROL**

**NY 2030**

<https://www.alachuacounty.us/Depts/epd/EPAC/Operational%20Defenses%20through%20Weather%20Control%20in%202030.pdf#page=22&zoom=auto,-267,679>

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## Weather as a Force Multiplier: Owning the Weather in 2025

<https://climateviewer.com/weather-as-force-multiplier-owning-the-weather-in-2025/>

1995-1996

Last Updated: Thursday, Jul 8, 2021

Geoengineering • Weather Modification • Space Weather Modification

US Air Force dreams of future weather warfare techniques.



**2025 is a study designed** to comply with a directive from the chief of staff of the Air Force to examine the concepts, capabilities, and technologies the United States will require to remain the dominant air and space force in the future. **Presented on 17 June 1996**, this report was produced in the Department of Defense school environment of academic freedom and in the interest of advancing concepts related to national defense. The views expressed in this report are those of the authors and do not reflect the official policy or position of the United States Air Force, Department of Defense, or the United States government.

This report contains fictional representations of future situations/scenarios. Any similarities to real people or events, other than those specifically cited, are unintentional and are for purposes of illustration only. [1]

In 2025, US aerospace forces can “own the weather” by capitalizing on emerging technologies and focusing development of those technologies to war-fighting applications. Such a capability offers the warfighter tools to shape the battlespace in ways never before possible. It provides opportunities to impact operations across the full spectrum of conflict and is pertinent to all possible futures. The purpose of this paper is to outline a strategy for the use of a future weather-modification system to achieve military objectives rather than to provide a detailed technical road map.

A high-risk, high-reward endeavor, weather-modification offers a dilemma not unlike the splitting of the atom. While some segments of society will always be reluctant to examine controversial issues such as weather-modification, the tremendous military capabilities that could result from this field are ignored at our own peril. From enhancing friendly operations or disrupting those of the enemy via small-scale tailoring of natural weather patterns to complete dominance of global communications and counterspace control, weather-modification offers the war fighter a wide-range of possible options to defeat or coerce an adversary. Some of the potential capabilities a weather-modification system could provide to a war-fighting commander in chief (CINC) are listed in table 1. [2]

Table 1

Operational Capabilities Matrix

**DEGRADE ENEMY FORCES**

**ENHANCE FRIENDLY FORCES**

**Precipitation Enhancement**

- Flood Lines of Communication
- Reduce PGM/Reece Effectiveness
- Decrease Comfort Level/Morale

**Storm Enhancement**

- Deny Operations

**Precipitation Denial**

- Deny Fresh Water
- Induce Drought

**Space Weather**

- Disrupt Communications/Radar
- Disable/Destroy Space Assets

**Fog and Cloud Removal**

- Deny Concealment
- Increase Vulnerability to PGM/Reece

**Detect Hostile Weather Activities**

**Precipitation Avoidance**

- Maintain/Improve LOC
- Maintain Visibility
- Maintain Comfort Level/Morale

**Storm Modification**

- Choose Battlespace Environment

**Space Weather**

- Improve Communication Reliability
- Intercept Enemy Transmissions
- Revitalize Space Assets

**Fog and Cloud Generation**

- Increase Concealment

**Fog and Cloud Removal**

- Maintain Airfield Operations
- Enhance PGM Effectiveness

**Defend against Enemy Capabilities**

Technology advancements in five major areas are necessary for an integrated weather-modification capability:

- advanced nonlinear modeling techniques,
- computational capability,
- information gathering and transmission,
- a global sensor array, and
- weather intervention techniques.

<https://climateviewer.com/weather-as-force-multiplier-owning-the-weather-in-2025/>

Scroll down to the bottom of this page on the link and there is more information that you really don't want to know!!!!!!

## Operation Popeye, Motorpool, Intermediary, Compatriot: Weather Warfare Over Vietnam

<https://climateviewer.com/operation-popeye-motorpool-intermediary-compatriot-weather-warfare-vietnam/>

March 20, 1967 - July 5, 1972

Last Updated: Thursday, Aug 13, 2020      Weather Modification

Scroll to the bottom of the page of this link and see all the video and newspaper evidence of that time.

<https://climateviewer.com/operation-popeye-motorpool-intermediary-compatriot-weather-warfare-vietnam/>

Operation Popeye's weather warfare project was conducted from Thailand over Cambodia, Laos, and Vietnam and was allegedly sponsored by Secretary of State Henry Kissinger and CIA without the authorization of then Secretary of Defense Melvin Laird who said "we have never engaged in that type of activity [weather modification] over Northern Vietnam" in Congressional testimony. [1] The top secret weather modification operations were conducted by military WC-130 planes [2][3] and RF-4 jets [4] spraying silver iodide and lead iodide into monsoon storm clouds. Operation Popeye first came to public light in March 1971, when reporter Jack Anderson [5] published The Pentagon Papers [6] and a story in the New York Times [7] based on a secret 1967 memo (below) from the Joint Chiefs of Staff to President Johnson. The memo read:

ACTIONS: "LAOS OPERATIONS – Continue as at present plus Operation POP EYE to reduce the trafficability along infiltration routes" & AUTHORITIES/POLICY CHANGE: "Authorization required to implement operational phase of weather modification process previously successfully tested and evaluated in same area". (US Senate, Subcommittee on Oceans and International Environment; 26 July 1972; p. 5). [8]

After disclosure of Operation Popeye it was renamed to Operation Motorpool, Operation Intermediary and finally Operation Compatriot. These operations led to several congressional hearings led by Senator Claiborne Pell, [9] The Weather Modification Reporting Act of 1972, the National Weather Modification Policy Act of 1976, The Environmental Modification Convention (ENMOD) Weather Warfare Ban of 1978, and a full disclosure report titled "Weather Modification: Programs, Problems, Policy, and Potential."

Goals:

- Softening road surfaces
- Causing landslides along roadways
- Washing out river crossings
- Maintain saturated soil conditions beyond the normal time span.

Mr DOOLIN: I speak in a personal capacity and not in my official capacity, Mr. Chairman. I have been in this job for 5 years, and I didn't have this clearance even though Southeast Asia is in my area of responsibility in the Office of the Secretary of Defense. The first I learned of it was, as the result of a Jack Anderson column, and I made inquiries at the time - simply for my own edification... [US Senate, Subcommittee on Oceans and International Environment; 20 March 1972; p. 111] [10]



Few aviation writers and historians seem to be aware that there were three WC-130As. These three were originally trash-haulers, borrowed from TAC in late 1966 for use in Operation Popeye, the rain-making mission in Southeast Asia, set to begin the following year. The intent of the mission was to create enough year-round rain to keep the Ho Chi Minh trails impassable with mud. Tests were conducted over Laos in 1966, and the operational missions began in March of 1967 from Udorn RTAFB, Thailand. They were flown by crews of the 54th WRS, rotated on a regular basis from Guam. In addition, 54th crews were sometimes called upon to conduct synoptic weather reconnaissance from Udorn over various areas of Southeast Asia, out to and including the Bay of Bengal.

The A-models were modified for weather reconnaissance, probably at WRAMA, with the AN/AMR-1 system. They were not configured for atmospheric sampling. Two were kept at Udorn, with the third rotating to and from Guam for maintenance, repair, and crew changes, from June 1967 through late 1970. When the third one was not enroute to/from Thailand, it was used for normal weather reconnaissance activities from Guam. In late 1970 the A's were replaced with three 1958 B-models, and the rain-making mission continued through mid-1972 with whichever B- or E-models were available from the 54th. After re-conversion to transport, the A's were transferred to Air Force Reserve units. During their brief stint as rain-makers, they flew a total of 1435 combat sorties, and it is reported that at least one of them received battle damage. All three A-models wore the standard Southeast Asia camouflage colors and markings, but with no unit designations of any kind. In 1973, 56-0519 was given or



loaned to the South Vietnamese Air Force, and it became one of the spoils of war on April 30, 1975. The last reliable sighting was in April of 1999, which reported her corroded and derelict at Tan Son Nhut Airport, Ho Chi Minh City. [2][3]



Howard Kidwell here, and I flew RF-4's with the 14th TRS at Udorn, Thailand 1970-71.

While there, I kept hearing the call sign "Motorpool" used by two of crews in the 14th. When I inquired what they did, I got the usual reply that it was Top Secret and no one knew. I knew the crews and they wouldn't say zip. This grows on a guy, and I had to find out what was going on. So, dummy me, I volunteered. Well, in a little while I was interviewed and told they would get a higher security clearance for me. In a few short weeks and I was told to come to Motorpool Ops for a briefing. (I found out later that friends and relatives in the states were contacted about me). The Lt Col in charge said the room had been swept for monitoring devices, etc., and I had one last chance to withdraw my volunteer statement. I had fleeting thoughts of flying over China, working for the CIA, you name it... but what the heck. I signed the statement and found out that I was going to make rain! Geez! I thought they were kidding! Not so, and soon I was flying with a Motorpool guy or Squadron GIB (Guy-in-Back) cleared for Motorpool ops.

The RF-4 could carry 52 photoflash carts or chaff carts on each side. We carried chaff to defeat Fire-Can or SAM Radars (more on chaff later). The "rain making stuff" was carried in these racks.

During the rainy season each crew flew once a day, on the average, in addition to regular missions. A "scout" plane (WC-130) would call back and "scramble" us -- giving us a flight level, which was usually 19,000. We would go into the roll cloud (or whatever you WX guys call it) by the side of each thunderstorm. When it got to raining like crazy we would pickle off a cart, count to 5, pickle off another one and then you were out in the blue, made a 360 degree turn and, like magic, another thunderstorm had usually formed and you did the same thing again. It was all over Laos and we would go over the passes to do our thing.

We were constantly getting struck by lighting of course. You could hear the rapid build up of a high pitch whine on the SAM warning gear and then "Bang!" I never got used to it. We tore up radar warning and ECM pods, you name it. Once I had a nose cone shattered, which knocked out the airspeed, so I landed using the angle of attack indicator. The Wing Commander was a friend and he would say; "Howard, I don't know what the heck you're doing, but whatever it is, can you please not tear up my planes?"

Motorpool carried such a high priority that if we had just one RF-4 in commission, it would fly the Motorpool mission. We would usually go to a tanker after takeoff, get some gas and go do our thing. Sometimes, if we still had carts and the "bumpers" were going, we would go back to the tanker, get 15,000 lbs. of gas and do it again. Several times we would get so fired up about our success that we found ourselves over North Vietnam with active SAM sites -- and of course no chaff on board. Sometimes we would have to fly over North Vietnam to the coast, down the coast and come around south of the DMZ.

They told us that some "little green suited men" on the ground would give us "mud BDA" and it sounded like it was working.

The DFC I got for the Motorpool mission is sort of generic. Ahhh, the games people play... [4]

**Related Hearings**

- US Congress, Senate, Committee on Foreign Relations, Subcommittee on Oceans and International Environment, Hearing: Prohibiting Military Weather Modification, Washington, DC: US Govt. Printing Office, 26-27 July 1972, 162 pages.
- US Congress, Senate, Committee on Foreign Relations, Report: Prohibiting Environmental Modification as a Weapon of War, Report no. 93-270. Washington, DC: OS Govt. Printing Office, 27 June 1973, 7 pages.
- US Congress, Senate, Committee on Foreign Relations, Subcommittee on Oceans and International Environment, Hearing: Weather Modification, Washington, DC: US Govt Printing Office, 1974, 123 pages.
- US Congress, House, Committee on Foreign Affairs, Hearing: Weather Modification as a Weapon of War, Washington, DC: US Govt. Printing Office, 24 September 1974, 39 pages.
- US Congress, House, Committee on International Relations, Subcommittee on International Organization, Hearing: Prohibition of Weather Modification as a Weapon of War, Washington, DC: OS Govt. Printing Office, 29 July 1975, 51 pages

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## CIA Project Nile Blue - Rain Embargo on Cuban Sugar Crops

<https://climateviewer.com/cia-project-nile-blue-rain-embargo-cuban-sugar-crops/>

1969-1970

Last Updated: Friday, Sep 11, 2020

### Weather Modification

"But the seeding near Cuba was to cause less rain, not more. It was supposed to squeeze rain out of clouds before they reached the island. You might say we tried to embargo rainclouds." [1]

Did the CIA order weather modification to ruin the Cuban sugar crop in 1969 and 1970, or didn't it?

"Another CIA plot: Cuba crops." The Harold Weisberg Archive, Beneficial-Hodson Library, Hood College. San Francisco Examiner. (June 27, 1976)

<http://jfk.hood.edu/Collection/Weisberg%20Subject%20Index%20Files/C%20Disk/CIA%20Cuba%20Policy/Item%2014.pdf>

Lowell Ponte, former researcher for International Research and Technology Corporation, a Pentagon "think tank," says the CIA and Pentagon ordered seeding off the shores of Cuba, to "milk" rain clouds, at a time when Castro's fortunes seemingly depended on a successful harvest of sugar cane.

The CIA has categorically denied it practiced cloud seeding anywhere except in Vietnam during that time period.

Ponte says the Cuban experiment was part of "Project Nile Blue," carried on officially starting in 1970 by the Pentagon's Advanced Research Projects Agency (ARPA). ...

Ponte adds that "Nile Blue" was really aimed at "destabilizing" weather in the Soviet Union, China, and Cuba, to ruin harvests and create political unrest. [2]

Lowell Ponte claimed "...that the Central Intelligence Agency and the Pentagon

(236)



cooperated in a program to seed clouds near Cuba so that they would drop their rain before reaching the island, thus causing a drought.' The efforts allegedly took place "...in 1969 and 1970 in order to damage Cuba's sugar crop." (107) The US Department of Defense replied that "We have never conducted weather modification around Cuba." (108) [3]

The Nile Blue program made use of what was at the time the world's largest computer, ILLIAC IV, the construction of which had also been funded by ARPA. It would have to be considered of inestimable value if someone had decided for once to anticipate the environmental effects of a proposed very large scale man-made technological intervention. One can only hope that this is actually why the program was initiated. As already indicated, as early as 1961 a RAND report on weather modification emphasized the complexity of atmospheric processes and the interrelation of modification and prediction. Perhaps it is also of interest that the only two reports that deal with weather and climate prepared by the US Central Intelligence Agency that have been publicly released deal with similar broad considerations of weather, climate, food production, etc. (49) It is unlikely, however, that the program was quite so benign. In 1962, years before the Nile Blue Program was initiated, ARPA had contracted for a classified research project with the title Some Upper Atmosphere Aspects of Chemical Geophysical Warfare. [3]

## **Governments should be more transparent in their plans, projections, and support**

<https://productiongap.org/2023report/#R6>

Governments should be more transparent in their plans, projections, and support for fossil fuel production and how they align with national and international climate goals.

Governments play a central role in setting the direction of future fossil fuel production. State-owned entities control half of global production for oil and gas and over half for coal. Governments' existing targets, policies, and support for fossil fuel production help to influence, legitimize, and enable continued investments in domestic and international fossil fuel projects, which are undermining the transition to renewable energy and global climate mitigation efforts.

At the same time, many fossil fuel projects planned and under development are now at risk of becoming stranded assets as the world decarbonizes and global demand for coal, oil, and gas are expected to peak and decline within this decade, even without additional policies.

There is a need for governments to adopt both near- and long-term reduction targets for fossil fuel production and use to complement other climate mitigation benchmarks and reduce the risks of stranded assets. Countries with **greater transition capacity** should aim for **faster reductions** than the global average.

<https://productiongap.org/2023report/#R6>

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NSF 66-3

**WEATHER  
AND  
CLIMATE MODIFICATION  
Report on the  
SPECIAL COMMISSION ON  
WEATHER MODIFICATION  
NATIONAL SCIENCE FOUNDATION**

<https://www.nsf.gov/nsb/publications/1965/nsb1265.pdf>

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## LETTER OF TRANSMITTAL

The Honorable Leland J. Haworth  
Director  
National Science Foundation  
Washington, D. C.

Dear Dr. Haworth:

It is an honor to transmit herewith to the National Science Foundation the report of the Special Commission on Weather Modification, authorized by the National Science Board at its meeting on October 17-18, 1963, in accordance with Sections 3(a)(7) and 9 of the National Science Foundation Act of 1950, as amended, and appointed by you on June 16, 1964. The Commission was requested to examine the physical, biological, legal, social, and political aspects of the field and make recommendations concerning future policies and programs.

The physical science aspects have been studied primarily through cooperative liaison with the National Academy of Sciences' Panel on Weather and Climate Modification.

Much of the background work for the treatment of the other aspects of the problem was carried out under National Science Foundation grants or contracts, reports of which research and study are to be published as stated in the Appendix.

The Commission held eleven meetings supplemented by many days of study, research, writing and conferences. The Commission report has been prepared by and its content is concurred in by all the members of the Commission.

The Commission was assisted throughout its deliberations by an Executive Secretary. Dr. Edward P. Todd served in this capacity during the early months. Mr. Jack C. Oppenheimer succeeded Dr. Todd and has done an outstanding job of assisting the Commission.

Respectfully submitted,  
A. R. Chamberlain, Chairman  
Vice President  
Colorado State University

December 20, 1965

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## **New Analysis of National Climate Plans**

### **Insufficient Progress Made,**

### **COP28 Must Set Stage for Immediate Action**

<https://unfccc.int/news/new-analysis-of-national-climate-plans-insufficient-progress-made-cop28-must-set-stage-for-immediate>

**14 November 2023**

UN Climate Change News, 14 November 2023 – A new report from UN Climate Change finds national climate action plans remain insufficient to limit global temperature rise to 1.5 degrees Celsius and meet the goals of the Paris Agreement.

Even with increased efforts by some countries, the report shows much more action is needed now to bend the world's emissions trajectory further downward and avoid the worst impacts of climate change.

“Today's report shows that governments combined are taking baby steps to avert the climate crisis. And it shows why governments must make bold strides forward at COP28 in Dubai, to get on track,” said the Executive-Secretary of UN Climate Change, Simon Stiell. “This means COP28 must be a clear turning point. Governments must not only agree what stronger climate actions will be taken but also start showing exactly how to deliver them.”

Stiell stressed that the conclusion of the first global stocktake at COP28 is where nations can regain momentum to scale up their efforts across all areas and get on track with meeting the goals of the Paris Agreement. The stocktake is intended to inform the next round of climate action plans under the Paris Agreement (known as nationally determined contributions, or 'NDCs') to be put forward by 2025, paving the way for accelerated action.

“The Global Stocktake report released by UN Climate Change this year clearly shows where progress is too slow. But it also lays out the vast array of tools and solutions put forward by countries. Billions of people expect to see their governments pick up this toolbox and put it to work,” Stiell said.

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severe droughts, heatwaves and rainfall.

“Every fraction of a degree matters, but we are severely off track. COP28 is our time to change that,” Stiell said. “It’s time to show the massive benefits now of bolder climate action: more jobs, higher wages, economic growth, opportunity and stability, less pollution and better health.”

UN Climate Change analyzed the NDCs of 195 Parties to the Paris Agreement, including 20 new or updated NDCs submitted up until 25 September 2023. In line with the findings from last year’s analysis, today’s report shows that while emissions are no longer increasing after 2030, compared to 2019 levels, they are still not demonstrating the rapid downward trend science says is necessary this decade.

If the latest available NDCs are implemented, current commitments will increase emissions by about 8.8%, compared to 2010 levels. This is a marginal improvement over last year’s assessment, which found countries were on a path to increase emissions 10.6% by 2030, compared to 2010 levels.

By 2030 emissions are projected to be 2% below 2019 levels, highlighting that peaking of global emissions will occur within this decade.

In order to achieve peaking of emissions before 2030, the report says, “the conditional elements of the NDCs need to be implemented, which depends mostly on access to enhanced financial resources, technology transfer and technical cooperation, and capacity-building support; as well as the availability of market-based mechanisms.”

“Using the Global Stocktake to plan ahead, we can make COP28 a game-changer. And provide a springboard for a two-year climate action surge,” Stiell said. “We need to rebuild trust in the Paris process. Which means delivering on all commitments, particularly on finance, the great enabler of climate action. And ensuring that we are increasing resilience to climate impacts everywhere.”

“Today’s synthesis report of national climate plans underscores the need for us to act with greater ambition and urgency to meet the goals of the Paris Agreement – there is simply no time left for delays,” said Dr. Sultan Al Jaber, COP28 President Designate. “COP28 must be a historic turning point in this critical decade for Parties to seize the moment of the Global Stocktake to commit to raise their ambition and to unite, act and deliver outcomes that keep 1.5C within reach, while leaving no one behind.”

“NDCs remain the cornerstone of our shared vision of achieving the Paris targets, including keeping the target of below 2 degrees and aspiring to limiting increase to below 1.5 degrees,” COP27 President and Egypt’s Foreign Minister Sameh Shoukry

said. "In Sharm El-Sheikh leaders discussed several initiatives to assist us to reach that goal, as well as assist the Global South in adapting their economies accordingly. We need to keep the momentum going as there is no time to waste or lose focus on the target."

"It is essential while we pursue our undertaking to continue seeking climate Justice and assist the Global South, who contribute the least in emissions yet bear the brunt of the most vicious effects of climate change, to not only survive but also transition into more sustainable economy through just transition pathways," Shoukry said.

### **Long-term low-emission development strategies**

A second UN Climate Change report on long-term low-emission development strategies, also released today, looked at countries' plans to transition to net-zero emissions by or around mid-century. The report indicated that these countries' greenhouse gas emissions could be roughly 63% per cent lower in 2050 than in 2019, if all the long-term strategies are fully implemented on time.

Current long-term strategies (representing 75 Parties to the Paris Agreement) account for 87% of the world's GDP, 68% of global population in 2019, and around 77% of global greenhouse gas emissions in 2019. This is a strong signal that the world is starting to aim for net-zero emissions.

The report notes, however, that many net-zero targets remain uncertain and postpone into the future critical action that needs to take place now.

The UN Climate Change Conference (COP28) will take place in Dubai, United Arab Emirates, from 30 November to 12 December this year.

<https://unfccc.int/news/new-analysis-of-national-climate-plans-insufficient-progress-made-cop28-must-set-stage-for-immediate>



## Phasing down or phasing up?

Top fossil fuel producers plan even more extraction despite climate promises



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Production Gap Report 2023

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[https://productiongap.org/wp-content/uploads/2023/11/PGR2023\\_web\\_rev.pdf](https://productiongap.org/wp-content/uploads/2023/11/PGR2023_web_rev.pdf)



## The Production Gap

### Phasing down or phasing up?

#### **Top fossil fuel producers plan even more extraction despite climate promises**

“Governments are literally doubling down on fossil fuel production; that spells double trouble for people and planet. We cannot address climate catastrophe without tackling its root cause: fossil fuel dependence. COP28 must send a clear signal that the fossil fuel age is out of gas — that its end is inevitable. We need credible commitments to ramp up renewables, phase out fossil fuels, and boost energy efficiency, while ensuring a just, equitable transition.”

– António Guterres, United Nations Secretary-General

Governments, in aggregate, still plan to produce  more than  double the amount of fossil fuels in 2030 than what would be consistent with limiting global warming to  1.5°C.

This comes despite  151 national governments having pledged to achieve net-zero emissions and the latest forecasts suggesting that global coal, oil, and gas demand will peak this decade, even without new policies. Meanwhile, the impacts of climate change, long predicted by scientists, are now manifesting and wreaking havoc in every corner of the planet, and fossil-fuel-derived CO<sub>2</sub> emissions reached a record high in 2022.

This year’s report features two major updates to the production gap analysis, drawing on the new mitigation scenarios database compiled for the Intergovernmental Panel on Climate Change’s Sixth Assessment Report and changes in government plans and projections since August 2021. The report also provides individual country profiles for 20 major fossil-fuel-producing countries, evaluating governments’ latest climate ambitions and their plans, policies, and strategies that support fossil fuel production or the transition away from it.

## Key Findings from the 2023 Report

<https://productiongap.org/2023report/#R1>

Governments, in aggregate, still plan to produce more than double

Governments, in aggregate, still plan to produce more than double the amount of fossil fuels in 2030 than would be consistent with limiting warming to 1.5°C. The persistence of the global production gap puts a well-managed and equitable energy transition at risk.

Major producer countries have pledged to achieve net-zero emissions and launched initiatives to reduce emissions from fossil fuel production, but none have committed to reduce coal, oil, and gas production in line with limiting warming to 1.5°C.

**Note: Canada is NOT a major producer. Only 1.6% of world total and is designated a "sink" nations because it ABSORBS more than 20 times what it produced.**

Country	Status of national net-zero commitment; net-zero target year	Signatory of Global Methane Pledge	Signatory of Glasgow Statement	Planned change in national fossil fuel production for 2030 relative to 2021 (EJ)		
				Coal	Oil	Gas
Australia	In law 2050	✓		▲ 0.2	■ 0 <sup>b</sup>	▲ 0.7
Brazil	NDC objective 2050	✓		No data	▲ 5.2	▲ 1.0 <sup>d</sup>
Canada	In law 2050	✓	✓	No data	▲ 3.0	▲ 0.6
China	NDC objective 2060			▼ 5.3	■ 0	▲ 2.6
Colombia	In law 2050	✓		▲ 1.7	▼ 0.1	■ 0
Germany	In law 2045	✓	✓	▼ 0.5	■ 0	▼ 0.1
India	NDC objective 2070			▲ 10.7	No data	No data
Indonesia	In strategy document 2060	✓		▲ 2.5	▼ 0.2	▲ 1.1
Kazakhstan	In strategy document 2060			▼ 0.2	▲ 0.4	▲ 0.1 <sup>d</sup>
Kuwait	Political pledge 2050 (oil & gas sector) 2060 (rest of economy)	✓		No production	▲ 2.1	▲ 0.1
Mexico	No commitment	✓		No data	▲ 1.4	▲ 0.6
Nigeria	In law 2060	✓		No data	▲ 1.3	▲ 2.6 <sup>d</sup>
Norway	No commitment <sup>a</sup>	✓		No data	▼ 0.5	▼ 0.3
Qatar	No commitment			No production	No data	▲ 3.9 <sup>e</sup>
Russian Federation	In strategy document 2060			▲ 3.2	▲ 2.9	▲ 3.3
Saudi Arabia	Political pledge 2060	✓		No production	▲ 5.5	▲ 1.3
South Africa	In strategy document 2050			No data	No data	No data
UAE	NDC objective 2050	✓		No production	▲ 1.8 <sup>e</sup>	▲ 0.4 <sup>b</sup>
UK	In law 2050	✓	✓	No data	▼ 0.7	▼ 0.6
US	In policy document 2050	✓	✓	▼ 5.1	▲ 5.2	▲ 2.5

<sup>a</sup> Norway has committed to a "low-emission society" by 2050 in its 2018 Climate Change Act, with 90–95% emission reduction targets.

<sup>b</sup> Planned change for 2028, furthest year for which data is available.

<sup>c</sup> Planned change for 2027, furthest year for which data is available.

<sup>d</sup> Excluding gas that is re-injected, consumed by producers, and/or flared.

Sources: Net Zero Tracker (2023) and own analyses (see Chapter 3).

**Please take note of the fact the countries that produce the most CO2 have not signed onto this net zero contract. No check marks beside any of them, China, India, Qatar, Russian Federation, South Africa, Kazakhstan.**

Continued production and use of coal, oil, and gas are not compatible with a safe and livable future. Achieving net-zero CO<sub>2</sub> emissions by 2050 requires governments to commit to, plan for, and implement global reductions in the production of all fossil fuels alongside other climate mitigation actions, beginning now.

**TO READ ALL REPORTS CLICK ON LINK BELOW OR COPY  
AND PASTE IN YOUR BROUSER**

<https://productiongap.org/2023report/#R3>

**HOW MANY TREES ARE IN THE WORLD**

<https://8billiontrees.com/trees/how-many-trees-are-in-the-world/>

CANADA PRODUCES ONLY **1.6** PERCENT OF COMBINED WORLD TOTAL CO2.

CANADA'S TREED FORESTS **ABSORB 10 TIMES MORE** CO2 THAN CANADA PRODUCE.

CANADA HAD BEEN DESIGNATED A '**SINK**' NATIONS BECAUSE WE **ABSORB** MORE CO2 THAN WE PRODUCE.

**WHY IS CANADA JEOPARDIZING OUR ECONOMY AND CITIZEN DUE TO THIS CLIMATE CHANGE FARCE??**

IF THE FACTS ABOVE DO NOT PROVE IT NOTHING WILL.

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## **Bill Gates is funding a scheme to cut down 70 million acres of forests in North America**

<https://expose-news.com/2023/09/02/bill-gates-cutting-down-70m-acres-forests/>

By Rhoda Wilson on September 2, 2023 • ( 69 Comments )

Bill Gates and other investors are betting Kodama Systems can reduce carbon dioxide in the air by chopping down and burying trees. The move will see 70 million acres of forests, mostly in the Western United States, cut down over the next decade.

After cutting down the trees, Kodama plans to bury them – to reduce global warming. However, “global warming” is a scam to enable the rich to become richer and the real reason for the destruction of forests is to reap saleable carbon offsets.

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### **The Carbon Cycle**

The following text in this section is extracted from National Geographic’s encyclopaedia intended for children aged 10 to 13.

Carbon is in a constant state of movement from place to place. It is stored in what are known as reservoirs, and it moves between these reservoirs through a variety of processes, including photosynthesis, burning fossil fuels, and simply releasing breath from the lungs. The movement of carbon from reservoir to reservoir is known as the carbon cycle.

Carbon can be stored in a variety of reservoirs, including plants and animals, which is why they are considered carbon life forms. Carbon is used by plants to build leaves and stems, which are then digested by animals and used for cellular growth.

In the atmosphere, carbon is stored in the form of gases, such as carbon dioxide. It is also stored in oceans, captured by many types of marine organisms. Some organisms, such as clams or coral, use the carbon to form shells and skeletons.

Most of the carbon on the planet is contained within rocks, minerals, and other sediment buried beneath the surface of the planet.

Because Earth is a closed system, the amount of carbon on the planet never changes.

The carbon cycle is vital to life on Earth. Nature tends to keep carbon levels balanced, meaning that the amount of carbon naturally released from reservoirs is equal to the amount that is naturally absorbed by reservoirs. Maintaining this carbon balance allows the planet to remain hospitable for life.

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Read more: The Carbon Cycle for Grades 5-8, Encyclopaedic Entry, National Geographic

**Anthropogenic Climate Change is a Fraud**

The National Geographic Encyclopaedic Entry above ends with the sentence: "Scientists believe that humans have upset this [carbon] balance by burning fossil fuels, which has added more carbon to the atmosphere than usual and led to climate change and global warming."

National Geographic must be referring to either corporately funded scientists or scientists employed by corporations. As we will see in the next section, scientists who are truly concerned about the planet and the life it supports reveal the facts.

Anthropogenic or human-caused climate change is a fraud and has been known to be a fraud from the outset. This was demonstrably revealed to the world in 2009 with the release of leaked emails dubbed Climategate.

As it leads into the next section, it's also worth noting an eye-opening 2013 article published by Forbes that used quotes from climate alarmists to reveal the truth about the climate change agenda. The article was aptly titled: 'In Their Own Words: Climate Alarmists Debunk Their 'Science'.'

**Bill Gates Plans to Cut Down Trees**

At the end of July, Forbes was given the task of promoting Gates' latest plan to destroy and capitalise on the natural world in the name of "climate change" in an article titled: 'Chop Down Forests to Save the Planet? Maybe Not as Crazy as it Sounds'. Yes, it is as crazy as it sounds.

At least Forbes was honest enough to highlight why the article was being published in its drop head: "Bill Gates and other investors are betting Kodama Systems can reduce carbon dioxide in the air by chopping down and burying trees. Now if only Uncle Sam would get on board with tax credits, too."

The final sentence gives a clue to what this latest scam is all about – money. Let's see what the article has to say and how Forbes manipulates and outright lies to try to sell the idea that Gates and other investors are doing this for the good of the planet.

It's not long into the article that Forbes links carbon to trading of carbon credits and carbon offsets:

Yes, the conventional idea is to plant trees to soak up carbon dioxide from the air and to then sell credits to corporations, private jet owners and others who need or want to offset their emissions. But scientists say burying trees can reduce global warming as well – particularly if those trees would otherwise end up burning or decaying, spewing their stored carbon into the air.

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Chop Down Forests to Save the Planet? Maybe Not as Crazy as it Sounds, Forbes, 28 July 2023

Trees are “spewing” carbon into the air. Really? It’s shameless propaganda.

Related: They’re using indoctrination tools on you right now, today. And it’s only going to get worse

Forbes may benefit from reading National Geographic’s encyclopaedia for children. And then, if the author feels he can cope with more grown-up content, perhaps he can listen to Patrick Moore explain that the idea of CO<sub>2</sub> being a pollutant is dangerous propaganda. Or perhaps he can examine satellite imagery that demonstrates how CO<sub>2</sub> as nature’s fertilizer has steadily been enriching Earth’s atmosphere.

And, should Forbes feel it necessary to fall back on the default “human-caused climate crisis” narrative, a study conducted on data from 1750 to 2018 will clarify things for him. The study estimated that the value of the atmospheric concentration of anthropogenic fossil-derived CO<sub>2</sub> in 2018 was 46.84 ppm out of a total of 405.40 ppm.

Forbes then turned to wildfires to argue the case for Bill Gates and other investors:

California’s enormous 2020 wildfires drove home the risks to air, property and life posed by overgrown forests ... To help address the problem, the U.S. Forest Service aims to thin out 70 million acres of western forests, mostly in California, over the next decade, extracting more than 1 billion tonnes of bone-dry biomass.

Chop Down Forests to Save the Planet? Maybe Not as Crazy as it Sounds, Forbes, 28 July 2023

According to Roger Pielke, a professor in the College of Arts and Sciences at the University of Colorado, Canada’s wildfire trends show no increase in recent decades, wildfires used to be much more extensive in past centuries and wildfires are a part of the natural ecosystem.

Wildfires across the world that corporately funded media have enthusiastically publicised have been the result of man’s intervention – but not the human-caused climate change that corporate media supports.

The fires in Greece, Spain, Italy and the Amazon rainforest are most likely due to arson. And regarding the recent fires in Hawaii – there are so many questions without honest answers concerning the destruction of Lahaina in Maui, that even people who normally trust the government are starting to wonder what has really happened there.

Forbes then attempts to justify burying wood in man-made vaults, which should be a nice little earner. In fact, Yale Carbon Containment Lab (“CC Lab”), Kodama’s partner, is hoping to make a business out of “earthen vaults” or “biomass vaults.”

It is customary, after such forest thinning, for logs of marketable size to go to sawmills, with most of the rest piled up and later burned under controlled conditions. Kodama wants to bury the leftovers instead – in earthen vaults designed to maintain dry and anoxic (oxygen-free) conditions and protect the wood from rotting or burning.

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Chop Down Forests to Save the Planet? Maybe Not as Crazy as it Sounds, Forbes, 28 July 2023

CC Lab admits biomass vaults are not viable: "The greatest risk for this project is the high cost to transport wood from dispersed sources to a single storage site. Transporting wet wood is significantly more time and energy-intensive than leaving it in the forest. Logistics greatly impact project viability, even if the price of carbon is high." And, "the carbon containment value of burying large volumes of wood may be offset partially or totally by the carbon released from the soils when excavating a storage pit."

Despite this, as MIT Technology Review noted, Merritt Jenkins, Kodama's co-founder and chief executive, says they plan to earn revenue from their forest thinning work, as well as by selling usable timber and carbon credits from its burial projects.

**Forbes summed up the potential benefits for Kodama and its investors:**

Along with the [venture capital] seed money, Kodama has already received \$1.1 million in grants from California's forest fire agency and others, as well as purchase commitments for the carbon credits tied to the first 400 tonnes of trees it buries. On the open market, those credits should fetch \$200 a tonne. Eventually, Kodama wants to cut down and bury more than 5,000 tonnes of trees a year.

If you want to cut down trees and pelletise them to burn in place of coal, there are tax credits for that too. But not, as of now, for burying them.

Chop Down Forests to Save the Planet? Maybe Not as Crazy as it Sounds, Forbes, 28 July 2023

So, we can conclude the idea is don't use the wood, don't recycle it and don't allow it to enrich the environment, simply cut trees down and bury them. Does it sound crazy to you?

We have a crisis but it's not a climate crisis. Green policies are killing people, economies and, increasingly, the planet. The goal to reduce carbon emissions is a scam to enable the rich to become richer off the backs of the poor.

**The Investors**

Kodama Systems, based in the Sierra Nevada foothills town of Sonora, has been operating in stealth mode since it was founded in the summer of 2021, MIT Technology Review wrote. "Stealth mode"? Is that another way of saying Kodama has been illegally logging and then burying the evidence? If so, the illegal loggers have since raised millions.

In December 2022, Kodama announced that it had raised \$6.6 million in a Series Seed funding round co-led by leading climate-technology investors Breakthrough Energy Ventures and Congruent Ventures. Kodama has additionally received a business development grant from California's forestry and fire protection services CAL FIRE to develop site connectivity and automation for forest thinning, and a carbon removal research and development grant from Frontier Climate for a biomass storage pilot project in partnership with the Yale Carbon Containment Lab.

Breakthrough Energy Ventures (“BEV”) was founded by Bill Gates and is backed by many of the world’s top business leaders, BEV has raised more than \$2 billion in committed capital to support cutting-edge companies that are leading the world to net-zero emissions. BEV is a purpose-built investment firm that is seeking to invest, launch and scale global companies that will eliminate greenhouse gas emissions throughout the economy as soon as possible.

Congruent Ventures is a leading early-stage venture firm focused on partnering with entrepreneurs to build companies addressing climate and sustainability challenges. Congruent is one of the most active US investors in climate. Its portfolio represents companies that will “help to decarbonise” every sector of the economy – energy, fleet electrification, farming, new food products, sustainable aviation fuels, manufacturing, and more. In April 2023, it had more than \$700 million in assets under management.

Frontier Climate was founded by Stripe, Alphabet, Shopify, Meta, McKinsey and tens of thousands of businesses using Stripe Climate. Frontier aims to act as the middleman between buyers and sellers of carbon removal. What this means in simple terms is buyers decide how much they want to spend on carbon removal each year, Frontier aggregates the buyers’ budgets and then pays suppliers to remove the carbon.

MIT Technology Review reported that on 15 December Stripe revealed it would provide a \$250,000 research grant to Kodama and Yale Carbon Containment Lab as part of a broader carbon removal announcement. That grant will support a pilot effort to bury waste biomass harvested from California forests in the Nevada desert and study “how well it prevents the release of greenhouse gases that drive climate change.” Stripe also agreed to purchase about 415 tonnes of carbon dioxide eventually sequestered by Kodama for another \$250,000, if that proof-of-concept project achieves certain benchmarks.

For the last several years, Stripe has pre-purchased tonnes of carbon dioxide that start-ups aim to eventually draw out of the air and permanently sequester, in an effort to help build up a carbon removal industry.

### **Let’s Keep the Trees and Get Rid of the Billionaires**

Even scientists who have been bought off or indoctrinated with the “climate crisis” ideology have had enough of the billionaires’ antics. Some have called for a shareholder-based carbon tax. The wealthiest 10 per cent in the USA are the source of 40 per cent of US national greenhouse gas emissions, they say. And, the wealthiest 1 per cent of households are responsible for between 15 per cent and 17 per cent of emissions.

And increasingly, climate activists are setting their sights on the 1 per cent. Billionaires’ lifestyles are unsustainable, billionaires are bad for the planet they say. We may agree for different reasons but we do agree that billionaires are bad for the planet.

<https://expose-news.com/2023/09/02/bill-gates-cutting-down-70m-acres-forests/>

## CO2- Not So Villainous After All

<https://canadafreepress.com/article/co2-not-so-villainous-after-all>

February 29, 2024

Carbon dioxide is a gas that is of fundamental importance to life as we know it. If its concentration in the atmosphere becomes too low, the bulk of the living things on the surface of the earth will die, and the surface will become as barren as the other planets in the solar system. (1)

The carbon dioxide component of the earth's atmosphere is 0.04%, 4/100th of one percent. As an atmospheric gas, CO<sub>2</sub> is an insignificant component except for plant life. The really absurd part is that this only 3.2% of that 4/100th of one percent of the atmosphere is man-caused CO<sub>2</sub>, 96.8% of the CO<sub>2</sub> is naturally occurring. This means that human caused CO<sub>2</sub> represents 1/28/1000th of one percent of the earth's atmosphere. That's a pretty small number, isn't it? For that reason alone, it is utterly stupid to continue worrying about human caused CO<sub>2</sub>. (2)

Since atmospheric carbon dioxide is present in extremely low quantities and has a narrow band of wave lengths that it absorbs, it cannot possibly compete in effect with the much larger total solar radiation reaching the Earth's surface. (1)

Past and modern climate change is driven by solar cycle variations and their effect on ocean circulation and heat transport. Climate changes are natural and not driven by atmospheric CO<sub>2</sub>. (3)

The globe's cities are warming primarily due to declining albedo (a measure of the reflectivity of a surface), not CO<sub>2</sub> radiative forcing. (4)

Carbon dioxide fertilization has led to an enhanced greening trend in 72.6 percent of cities across the world since 1985, accelerating to 89.2 percent since 2001. This greening trend is the key factor towering the albedo-reflecting incoming solar radiation in urban areas, amounting to a +2.75 W/m<sup>2</sup> increase in solar radiation reaching the surface from 1986 to 2020.

In contrast, the clear sky only trend from CO<sub>2</sub> surface forcing only amounts to 0.2W/m<sup>2</sup> per decade, or 0.02 W/m<sup>2</sup> per year in the 21st century. (This trend only represents the forcing from CO<sub>2</sub> in an imaginary world where no clouds exist). Thus, the positive radiative imbalance from the declining trend in albedo explains urban warming far better than an enhanced greenhouse effect from a clear sky only CO<sub>2</sub> radiative forcing. (5)

Throughout the last hundred of thousands of years, temperature changes have preceded the lagging changes in CO<sub>2</sub>. It is now known that solar radiation supplies

more than 99.95 percent of the total energy driving the world's climate

The effects of the greenhouse gases are only one-fifth of the IPCC assumption. The rate of temperature rise by the greenhouse gases between 1975 and 2000 is a little more than 0.2 C/100 ppm, instead of 1.0 C/ppm. (6)

The temperature rise caused by the greenhouse gases is much smaller compared with the combined rise caused by the two natural changes between 1975 and 2000, about 0.1 C, instead of 0.5 C. (7) This is from one of the 160 papers that find extremely low CO2 climate sensitivity. (6)

Water vapor dominates. Researchers conclude that the observed increase of the atmospheric CO2 concentration has not altered, in a discernible manner, the greenhouse effect, which remains dominated by the quantity of water vapor. They report there is no need for adaptation due to increased CO2 concentration. (8)

There are several aspects in which elevated CO2 levels have beneficial effects on society, which the IPCC commonly ignores as they do not fit the narrative of a climate emergency.

Matthew Wielicki explores these benefits, focusing on agricultural productivity, plant growth, and potentially mitigating certain environmental challenges to show that elevated CO2 has had a net benefit on society to the present day. (9)

CO2 is in fact a prerequisite of life, and global food production will expand by trillions of dollars in the coming decades as CO2 levels continue to rise. (10)

The effect of increased atmospheric CO2 on plant growth and agricultural productivity had been identified by NASA long ago. NASA's original findings have recently been confirmed: 'Greening acceleration occurred in 55.15 percent of the globe, while browning acceleration occurred in only 7.28 percent.' Importantly, the study highlighted the fact that drought trend did not necessarily trigger vegetation browning, but slowed down the rate of greening. (11)

Studies have also shown that crops such as wheat, rice and soybeans can exhibit increased growth rates and yields in environments with higher CO2 concentrations.

Remote sensing data from satellites has shown that the expansion of the plant kingdom from 1982 to 2015 was equivalent to adding over 20 million square kilometers of leaf surface area or twice the size of the United States. Thus, it should not be surprising that global agricultural productivity has likewise been steadily rising as a function of increasing atmospheric CO2 concentrations. (10)

The acceleration in global agricultural productivity between 2012 and 2050 due to projected growth in atmospheric CO2 concentrations is estimated to be worth an additional \$10 trillion (in 2006 dollars) in increasing yields for 45 different cereals, fruits, and vegetables. Craig Idso's results indicate that the annual total monetary value of this benefit grew from \$18.5 billion in 1961 to over \$140 billion by 2011, amounting to a total sum of \$3.2 trillion over the 50 year period 1961-2011. Projecting the monetary value of this positive externality forward in time reveals it will likely bestow an additional \$9.8 trillion on crop production between now and 2050. (12)

The CO2 fertilization effect has been the dominant driver of the global scale increase in 'leaf area index' (LAI) or greening since the 1990s. Scientists have estimated that photosynthesis enhancing capacity is 70% responsible for the greening trend. (13)

Satellite data indicate 55.15% of global areas are greening at an accelerated rate whereas just 7.28% have undergone a browning trend since 2001. (14)

Carbon dioxide has been used successfully for over a century in refrigeration and air conditioning because it emits received energy within 3 nanoseconds--a characteristic that defies all heat trapping pseudoscience claims.

Drought resistance of the plant kingdom naturally improves as CO2 concentrations increase and most plants will produce more foliage per mm of precipitation. This is why commercial greenhouses artificially raise ambient CO2 by 3x to 4X above atmospheric concentrations.

In the last decade more scientists have come forward to admit that climate computer models are fatally flawed because university academics have overlooked to check their wild alarmist predictions with independent industry experts who have the hands on knowledge of the real world properties of CO2. The real scientists are saying that the academics have been bamboozled by 'garbage in garbage out.' (15)

Richard Lindzen, professor at MIT, has this to say, "What historians will definitely wonder about in future centuries is the deeply flawed logic, obscured by shrewd and unrelenting propaganda which actually enabled a coalition of powerful special interests to convey to nearly everyone in the world that CO2 from human industry was a dangerous, planet destroying toxin. It will be remembered as the greatest mass delusion in the history of the world, that CO2 in plants was considered for a time to be a deadly poison.

Future generations will wonder in bemused amazement that the 21st century's developed world went into hysterical panic over an averaged temperature increase

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of a few tenths of a degree, and this was the basis of gross exaggerations of highly uncertain computer projects combined into implausible chains of inference, proceeded to contemplate a roll-back of the industrial age." (16).

<https://canadafreepress.com/article/co2-not-so-villainous-after-all>

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## HAARP TO HOLD PUBLIC OPEN HOUSE

SATURDAY, AUGUST 27, 2022

The High-frequency Active Auroral Research Program facility in early June near Gakona, Alaska, in June 2022. The 33-acre ionospheric research instrument helps researchers study the ionosphere.

The public will have opportunity to learn about how scientists study the Earth's ionosphere, the region between Earth's lower atmosphere and the vacuum of space, at an Aug. 27, 2022, open house at the High-frequency Active Auroral Research Program. The facility, widely known simply as HAARP, is in Gakona, Alaska.

This event will provide an opportunity for members of the public to see this world-class research facility firsthand and to learn about the science questions the facility seeks to answer. HAARP attracts scientists from universities, government and the private sector.

A 90-minute self-guided, timed-entry tour will highlight the following:

- HAARP's control room
- Science and history displays
- Power plant, with the five generators used during research
- Transmitters and the 33-acre antenna array
- Aircraft surveillance radar
- Ionosonde, a radar that checks the status of the ionosphere
- Riometer, which measures cosmic radio noise
- Optical equipment domes

The University of Alaska Fairbanks acquired HAARP's research equipment from the Air Force in August 2015 under an education partnership agreement. The UAF Geophysical Institute operates HAARP under a cooperative research and development agreement.

In 2021, the National Science Foundation awarded the Geophysical Institute a five-year \$9.3 million grant for a new research observatory at HAARP. The Subauroral Geophysical Observatory for Space Physics and Radio Science will explore Earth's upper atmosphere and geospace environment.

Space for the open house is limited. To obtain a free ticket, find the ticketing page on HAARP's website.

The open house runs from 9 a.m. to 3 p.m. Saturday, Aug. 27. Download the event flyer.

A promotional video for the open house is available online.

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The health and safety of visitors, staff and volunteers is the HAARP staff's highest priority. To reduce the risk of COVID-19 transmission, HAARP visitors are required to mask indoors at all times and outdoors when a distance of 6 feet cannot be maintained.

Parking is limited. Vehicles are restricted to a maximum length of 36 feet, maximum width of 9 feet and maximum height of 10 feet.

**HAARP is located in Gakona at mile 11.3 Tok Cutoff, 26 miles northeast of Glennallen. It is 200 miles from Anchorage and 230 miles from Fairbanks.**

<https://www.uaf.edu/news/haarp-to-hold-public-open-house-in-august.php>

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## **Air Force Agreement Allows Ionospheric Research to Continue**

Published Dec. 7, 2016 By Jaelyn Knapp Air Force Technology Transfer Program  
Kirtland Air Force Base, New Mexico (AFNS) --

Because of a recent Cooperative Research and Development Agreement between the Air Force Research Laboratory's Space Vehicles Directorate and the University of Alaska Fairbanks (UAF), more than twenty-five years of science and atmospheric research will continue at the High Frequency Active Auroral Research Program (HAARP).

Although the Air Force will not be funding maintenance of the HAARP facility or other research efforts, this agreement allows ionospheric research to continue. UAF will maintain the facility and will be offered access to government-funded resources to continue existing ionospheric research.

"The objective of the joint Air Force and Navy HAARP was to conduct basic, exploratory, and advanced development research programs leading to the use of emerging ionosphere/radio science technology for next-generation systems by characterizing the physical processes produced in the ionosphere and space via interactions with high-power radio waves," said Dr. Craig Selcher, the senior research physicist and former Air Force HAARP program manager. "With the completion of these efforts for the Department of Defense on the horizon, handing the torch to the UAF Geophysical Institute allows for the continuation of the ground-breaking research that only the HAARP facility can perform."

The HAARP facility is located in Gakona, Alaska, and includes a high-frequency radio transmitter that directs its energy upward into the ionosphere and space, as well as a suite of optical and radio diagnostics instruments. The research involves the space environment beginning at about 100 km altitude (~60 miles) out to tens of thousands of kilometers, far above the jet stream or the atmosphere that affects terrestrial weather.

According to Dr. Robert McCoy, the UAF Geophysical Institute director, "HAARP is one of four active ionospheric facilities in the world and by far the most powerful and flexible. The first science campaign is planned for February 2017. Scientists around the world have been making proposals to government funding agencies to support research at HAARP.

"The unique attributes of HAARP are its demonstrated ability to create ionospheric perturbations in a small region over the facility and stable, long-lived ionospheric layers even in the absence of auroral activity. Its superior location in the subarctic enables over-the-horizon radar experiments, and utilization of the ionosphere as a large antenna to generate extremely low-frequency waves for a number of applications."

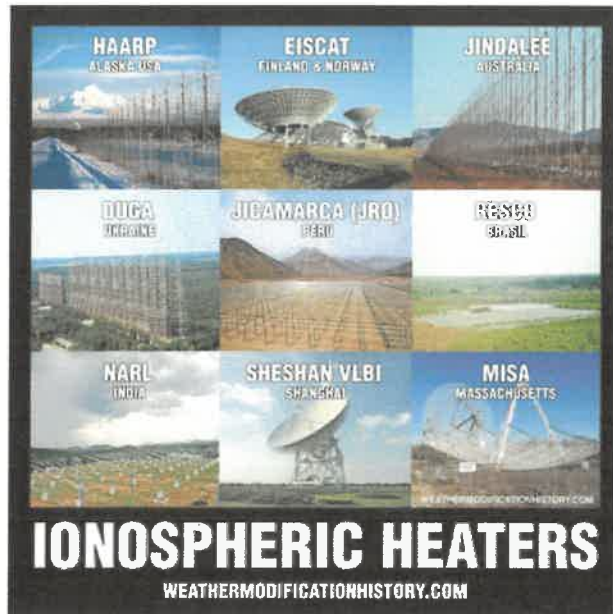
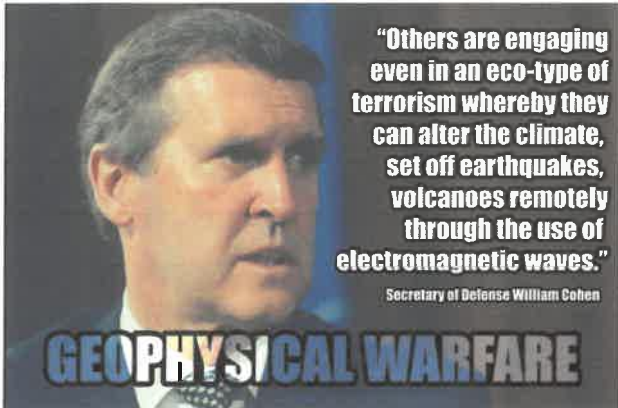
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The Air Force Technology Transfer Program Office facilitated the CRADA agreement. Air Force T2 was created to link technology, the Air Force mission, and the commercial marketplace by ensuring that Air Force science and engineering activities are transferred or intentionally shared with state and local governments, academia and industry

<https://www.af.mil/News/Article-Display/Article/1022760/air-force-agreement-allows-ionospheric-research-to-continue/>

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## HAARP and Ionospheric Heaters Worldwide



### Map Type

Keyhole Markup Language (Google Earth KML)  
Map Source

<https://climateviewer.org/layers/kml/atmospheric-sensors-and-emf-sites/Ionospheric-Heaters-Worldwide-ClimateViewer-3D.kmz>

### More Info

<https://climateviewer.com/haarp/>

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<https://climateviewer.org/history-and-science/atmospheric-sensors-and-emf-sites/maps/haarp-ionospheric-heaters-worldwide/>

## HAARP and Ionospheric Heaters Worldwide

Combine this map with any of our other maps via ClimateViewer 3D! Check out hundreds of maps and share custom maps!

Ionospheric Heater: “Powerful HF transmitter (2.8 to 10 MHz) that induces controlled temporary modification to the electron temperature at desired altitude”.

### What does that mean?

Heater antenna arrays pump electricity from the ground into space. This artificial electrical alteration of our ionosphere creates many different effects. Scientists doing these experiments do so without any oversight. These experiments are highly controversial and likely are affecting more than just our atmosphere, they may be affecting your mood.

### Ionospheric Heaters

Secretary of Defense William Cohen - Eco-Terrorism and Weather Warfare - Geophysical Warfare

Electromagnetic HAARP EISCAT Ionospheric Heater Incoherent Scatter Radar ISR Sounding Rocket Space Weather Modification Popular

<https://climateviewer.org/layers/kml/atmospheric-sensors-and-emf-sites/Ionospheric-Heaters-Worldwide-ClimateViewer-3D.kmz>

<https://climateviewer.org/history-and-science/atmospheric-sensors-and-emf-sites/maps/haarp-ionospheric-heaters-worldwide/>

<https://climateviewer.com/haarp/>

### Attribution

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Five Eyes STONEGHOST Surveillance Network

Wed, Sep 11, 2019

HAARP and Ionospheric Heaters Worldwide

Mon, Jul 22, 2019

Radio Telescopes and Space Communications Worldwide

Sun, Jul 21, 2019

Missile Defense Radars (Star Wars SDI, Space Fence)

Sun, Jul 21, 2019

Lasers and Directed-Energy Weapons

Sat, Jul 20, 2019

50 years of U.N. tracking Weather Modification Projects (1952-1999)

Wed, May 8, 2019

Colorado Cloud Seeding Generators (2019)

Fri, Jan 4, 2019

ClimateViewer Reports (2011-2017)

Sat, Nov 3, 2018

ClimateViewer Reports (January - November 2018)

Sat, Nov 3, 2018

Baseline Surface Radiation Network (BSRN)

Wed, Oct 31, 2018

**WEATHER MODIFICATION HISTORY**

Weather Modification History

Get in Touch

ClimateViewer Eye Logo

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## Climate Global Control Trading LLC Creates & Steers Hurricanes with Ionospheric Modification and Cloud Ionization

First, watch the video in this link. <https://climateviewer.com/2018/09/22/climate-global-control-trading-llc-creates-steers-hurricanes-with-ionospheric-modification-cloud-ionization/>

A new company based in UAE is validating everything I have said about replacing natural weather with technocrats controlling the global water cycle. They claim to use "Ionospheric Technology" to steer cyclones, end dust storms, and bring rain to drought filled regions of the Middle East. I have talked many times over the past few years about a company called Aquiss which claimed to steer atmospheric rivers using electromagnetic waves, cloud ionization and "weather resonance technology." Their website has disappeared from the internet and eerily seems to be related to this new company.

Nora's personal note: Did not Dubai just have a terrible storm with atmospheric rivers causing millions of dollars of damage. Does this not seem suspicious????

Climate Global Control Trading LLC claims they created and steered Tropical Cyclone Ashobaa (June 7-12, 2015) using their ionospheric technology. The implications of this claim are ASTOUNDING and confirm what many of us have already known: our weather is for sale and hurricanes can be controlled!

Before getting into the details, please check out my presentation on the big picture about the replacement of the natural water cycle and weather:

The Climate Changers and Water Wars - Technocracy, Geoengineering, and Replacing the Water Cycle



# WEATHER MODIFICATION

## REDUCING RAINFALL

Iran Accuses Israel of Cloud Theft  
JULY 2, 2018

"Joint teams from Israel and one of the neighboring countries make the clouds entering into Iran barren. Moreover, we are faced with the cases of cloud theft and snow theft."  
Brigadier General Gholam Reza Jalali, head of Iran's Civil Defense Organization



<https://climateviewer.com/2018/07/02/iran-accuses-israel-of-cloud-theft-weather-modification-clouds-stealing-iran/>

## GEOENGINEERING PUBLIC ACCEPTANCE

The scientists and the citizens change their view on climate with that is already a massive experiment in our world. They are not ready to accept the numbers of 100,000 that we should start weather set of experiments and go into geoengineering. We should go out and together with the public, we should do it.

U.K. Research Secretary David Jones

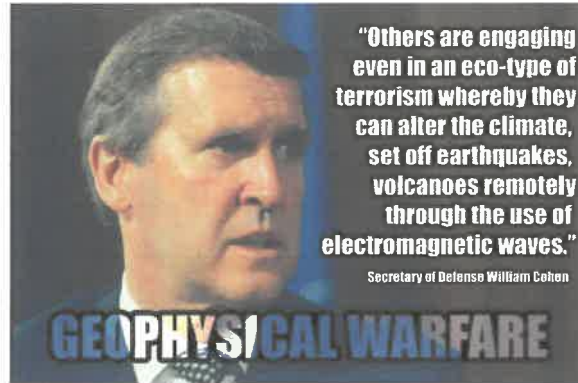


## TECHNOCRACY AND CONTROL OF WEATHER

An infographic featuring a large eye icon labeled "TECHNOCRATS" at the top. Below it are six diamond-shaped icons representing different sectors: SCIENCE (flask), POLITICS (capitol), LEGAL GOVERNANCE (gavel), COMMERCE (dollar bill), WATER WARE (water drop), and HEALTH (person). At the bottom is the logo for CLIMATEVIEWER.COM and a reference to a report by the Brookings Institution.

## THE ENVIRONMENTAL MODIFICATION ACCOUNTABILITY ACT

CLIMATEVIEWER.COM/EMAA



## Space Weather Modification: HAARP and the Sky Heaters

Posted: Tuesday, Aug 21, 2012 Last Updated: Friday, Jan 31, 2020

### What is HAARP?

<https://climateviewer.com/space-weather-modification/>

The High Frequency Active Auroral Research Program (HAARP) is a 3.6 million watt antenna array operated by the US military in Gakona, Alaska. Since the Limited Test Ban Treaty over 50 years ago, extremely high-powered radars have been heating rocket exhaust plumes and barium clouds to measure and alter our space environment.

Space Weather Modification technology has advanced to the point where our own environment is now being used as a weapon, and the stakes could not be any higher. If you thought the cold-war was bad, you ain't seen nothing yet. This hidden history is now exposed in the following series of articles, a Space-Weather Modification Timeline, and a map of currently operational Ionospheric Heaters.

What is an Ionospheric Heater?

Why Heat the Ionosphere?

Do Ionospheric Heaters Affect Your Brain?

Essential Reading

Space Weather Modification Videos

"HAARP and the Sky Heaters Explained" • Watch this Playlist on YouTube

"Chemtrails From SPACE! Sounding Rockets, Satellite Chemical Releases, and Ionospheric Heaters" • Watch this Playlist on YouTube

HAARP and the Sky Heaters Map

haarp ionospheric heater map climateviewer 3D

View Map on ClimateViewer 3D. RED = Ionospheric Heater, DARK BLUE = Incoherent Scatter Radar (ISR), GREEN = EISCAT (ISR), LIGHT BLUE = Historic facilities (now closed). There are



five major Ionospheric Heaters and multiple smaller facilities in operation today, not counting the Sky Heaters on trailers, submarines, and boats

If any of the links above do not work, copy the URL and paste it into the form below to check the Wayback Machine for an archived version of that webpage

Previous Post

ClimateViewer Pollution Tracker - Mapping Climate Change Today!  
Geoengineering, Climate Engineering, and Climate Intervention  
Thursday, Jan 3, 2013

CIA Concerned Rogue Geoengineering is Undetectable!

January - March 2015

Department of Homeland Security Hurricane Modification Workshop Report

February 6-7, 2008

Test Technology Symposium 1997: Weather Modification

March 19, 1997

Weather as a Force Multiplier: Owning the Weather in 2025

1995-1996

The Environmental Modification Convention (ENMOD) Weather Warfare Ban

The Environmental Modification Convention (ENMOD) Weather Warfare Ban

December 10, 1976 - January 17, 1980

CIA Project Nile Blue - Rain Embargo on Cuban Sugar Crops

1969-1970

**Operation Popeye**, Motorpool, Intermediary, Compatriot: Weather Warfare Over Vietnam

March 20, 1967 - July 5, 1972

President Lyndon Johnson Approves Weather Warfare

May 27, 1962 - 1969

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Sunday, Jan 6, 2019  
Geoengineering • Weather Modification • Space Weather Modification  
Directed Energy Weapons 101: Sonic, Microwave, Laser, and Non-Lethal Warfare

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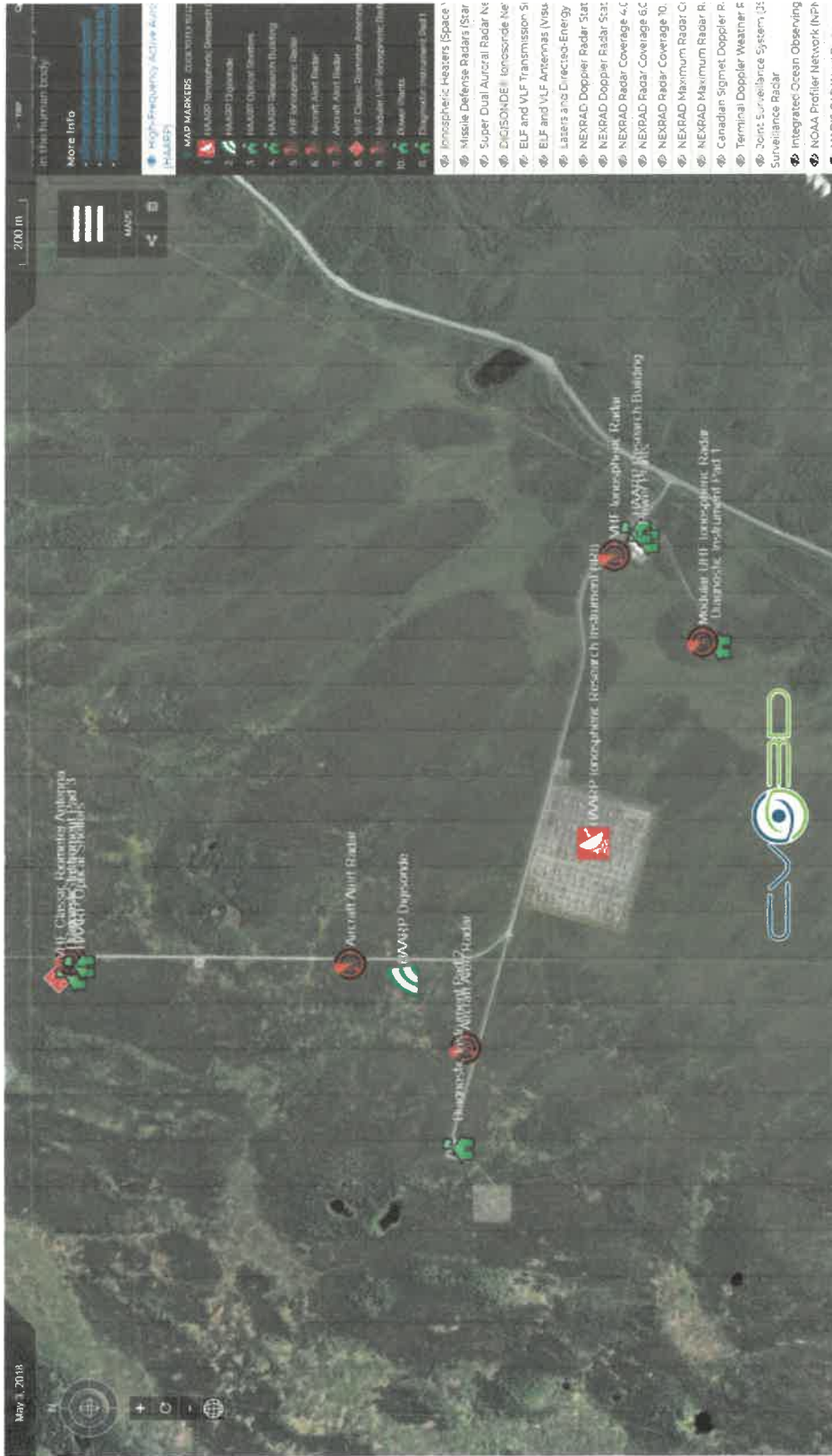
**WEATHER MODIFICATION HARP  
ESSENTIAL READING AND MAPS, ETC. LINK**

<https://climateviewer.org/history-and-science/atmospheric-sensors-and-emf-sites/maps/haarp-ionospheric-heaters-worldwide/>

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WEATHER MODIFICATION - HARP MAP map of currently operational Ionospheric Heaters.



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-protecting against EMP from solar flares and high altitude nuclear devices (graphic below)

### The “Christofilos Effect”

During the upper-atmospheric (space-based) nuclear test explosions of the 1950's, Nicholas Christofilos discovered how whistler waves, a type of electromagnetic/radio-frequency radiation, raced from pole to pole along the Van Allen Belts, destroying satellites in low Earth orbit.

Christofilos's Effect is still in use today under many new name. The Christofilos Effect is now in use as a geophysical weapon, a Star Wars defense system, and a last hope short-circuit for an EMP or solar flare related doomsday.

Before the discovery of the natural Van Allen belts in 1958, N. C. Christofilos had suggested in October 1957 that many observable geophysical effects could be produced by a nuclear explosion at high altitude in the upper atmosphere. This suggestion was reduced to practice with the sponsorship of the Advanced Research Project Agency (ARPA) of the Department of Defense and under the overall direction of Herbert York, who was then Chief Scientist of ARPA. It required only four months from the time it was decided to proceed with the tests until the first bomb was exploded. The code name of the project was Argus. Three events took place in the South Atlantic. ... Following these events, artificial belts of trapped radiation were observed.

A general description of trapped radiation is as follows. Charged particles move in spirals around magnetic-field lines. The pitch angle (the angle between the direction of the motion of the particle and direction of the field line) has a low value at the equator and increases while the particle moves down a field line in the direction where the magnetic field strength increases. When the pitch angle becomes 90 degrees, the particle must move in the other direction, up the field lines, until the process repeats itself at the other end. The particle is continuously reflected at the two mirror points — it is trapped in the field. Because of asymmetries in the field, the particles also drift around the earth, electrons towards the east. Thus, they form a shell around the earth similar in shape to the surface formed by a field line rotated around the magnetic dipole axis. - List of Artificial Radiation Belts - Wikipedia

The electromagnetic pulse generated by the explosion and the “Christofilos Effect” — the creation of an artificial radiation belt around the Earth — could cripple “low Earth orbit” satellites and with them many of the world’s communications systems, Jane’s reported.

A high-altitude explosion “produces an artificial radiation belt that, within weeks to at most months, delivers a lethal dose of radiation to satellites,” said Dennis Papadopoulos, a scientist at the University of Maryland who worked with Nicholas Christofilos, who predicted the effect.

“If someone were to explode a 10-kiloton nuclear weapon at a high enough altitude over their own territory, 90 percent of the world’s low Earth orbit satellites would be lost within a month,” Papadopoulos said. - Christofilos effect - Wikipedia, censored version =)

**HAARP is currently the most powerful Ionospheric Heater in the world, soon to one-upped by EISCAT 3D (Tromso, Norway) at 1 Gigawatt ERP.**

Thursday, Jul 5, 2018  
Geoengineering Solar Radiation Management SRM vs ERM: Cirrus Cloud Thinning  
Monday, Jun 25, 2018  
Henry Kissinger, the CIA, and Weather Warfare  
Thursday, May 24, 2018  
"Accidental Geoengineering" with Ship Tracks and Contrails  
Sunday, Apr 1, 2018  
Weather Modification Laws in the United States of America  
Saturday, May 14, 2016  
Aluminum, Barium, and Chemtrails Explained – JUST THE FACTS  
Sunday, Mar 15, 2015  
Ionospheric Heaters: How HAARP really works  
Saturday, Oct 18, 2014  
HAARP, ELF Generation, and Mass Mind Control  
Saturday, Oct 11, 2014  
The Anatomy of Slavespeak  
Sunday, Apr 6, 2014  
Cloud Ionization, Electric Rainmaking, and Laser-guided Weather Modification  
Wednesday, Mar 26, 2014  
Geoengineering and Weather Modification Patents  
Monday, Mar 24, 2014  
Weather Modification Corporations, Universities, and Derivative Traders  
Tuesday, Dec 10, 2013  
Featured Presentations  
The ENMOD Accountability Act: Weather Warfare Protection  
Geoengineering, Weather Modification, and Weaponizing Nature  
Ionospheric Heaters: Space Weather Control and Geophysical Warfare  
The Climate Changers and Water Wars: Technocracy, Geoengineering, and Replacing the  
Water Cycle  
Carbon Black Dust: The Chemtrail Secret for Weather Warfare, Geoengineering, and Ozone  
Destruction  
EPA Hearing on Jet Pollution and Geoengineering - August 11, 2015



**HAARP** was originally designed by the military and eventually sold to the University of Alaska because the military had "moved on to better ways to control the ionosphere," referring to satellite and sea-based heaters.

**1987** – Stanford Star Lab gave a proposal for the future of ionospheric modification.

**1990** – ARCO and APTI proposed an Artificial Ionospheric Mirror. 1990

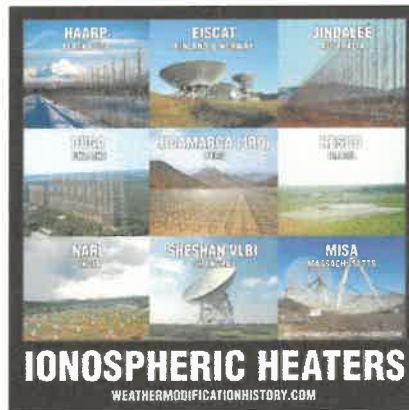
**1993** – Electromagnetic Interference Impact of the Proposed Emitters for the High Frequency Active Auroral Research Program 1993

**1997** – HAARP is described as a "Weapon System"

**1999** – The US Air Force Geophysics Lab (now AFRL) and the US Navy Office of Naval Research discuss HAARP at their Joint Services Program. 1999

**1999** – HAARP will also be used to search for nukes underground. See: Imaging of Underground Structure Using HAARP 1999

HAARP is part of DARPA's Project NIMBUS campaign BRIOCHE.



**Terrorism, Weapons of Mass Destruction, and U.S. Strategy** Sam Nunn Policy Forum - April 28, 1997 University of Georgia, Athens, Georgia.

### "From annihilation to defence

With the breakup of the Soviet Union, submarine communications no longer seemed as crucial, and HAARP needed a new raison d'être. Supporters proposed new tactics, such as studying ELF waves' ability to map out underground bunkers like those found in North Korea, a goal that quickly drew scepticism.



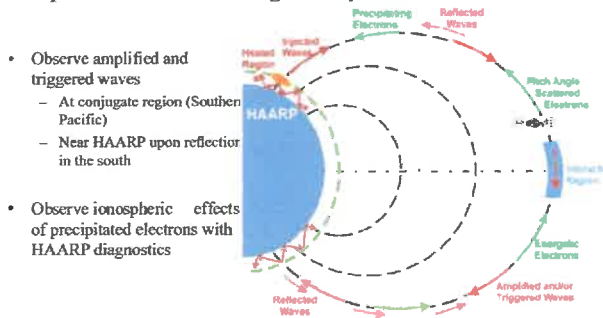
After the terrorist attacks of 9/11, however, the military found a new use for HAARP. In 2002, a panel headed by Anthony Tether, the director of DARPA, recommended that the facility be used to study ways to counter the effects of a high-altitude nuclear detonation, which would release energetic electrons that could cripple low-Earth satellites.

Electrons are produced naturally in this region when the solar wind, a stream of energetic particles flowing from the Sun, slams into the magnetic envelope that protects Earth. The planet has its own self-cleaning mechanism to rid itself of the particles: it eventually dumps them lower into the atmosphere through natural auroras and lightning. Scientists are now looking at whether they can accelerate this process by creating 'whistler' waves, which would kick the electrons into low enough altitudes — around 100 kilometres — where they would rain out naturally.

No one knows for sure whether it will work. 'It is what we call a data-starved area — theory is ahead of actual observations,' says Paul Kossey, HAARP's programme manager at the Air Force Research Laboratory at Hanscom Air Force Base, Massachusetts [now closed and relocated to Ohio]. Several experiments are being done to look at this possibility. Stanford University in Palo Alto, California, for example, is involved in the One Hop Experiment, which uses HAARP to inject very-low-frequency waves into the magnetosphere to create whistlers. The investigators use a buoy and ships in the South Pacific, where the waves fall back to Earth, to measure the presence of whistler waves."

- Purposeful Anthropogenic Climate Alteration: RF Ionospheric Heater Arrogance (e.g. HAARP), Dr. Rick Shankman, MIT ClimateX

**TETHER Panel Recommendation:  
Use HAARP facility in Alaska as a "wind tunnel"  
to determine the feasibility and engineering  
specifications of a mitigation system.**



Satellite Threat Due to High Altitude Nuclear Detonation - Eisenhower Institute

**Do Ionospheric Heaters Affect Your Brain?**

**Ionospheric Heaters create ELF waves which may be affecting your brain:**

Extremely Low Frequency (ELF) waves :ELF waves up to 100 Hz are once more naturally occurring, but they can also be produced artificially (such as for the Navy's Project Sanguine for submarine communication). ELF-waves are not normally noticed by the unaided senses, yet

their resonant effect upon the human body has been connected to both physiological disorders and emotional distortion. Infrasound vibration (up to 20 Hz) can subliminally influence brain activity to align itself to delta, theta, alpha, or beta wave patterns, inclining an audience toward everything from alertness to passivity. Infrasound could be used tactically, as ELF-waves endure for great distances; and it could be used in conjunction with media broadcasts as well. Source: "MindWar"

Think we are crazy? The Russian government does not:

**Title: Russian parliament concerned about US plans to develop new weapon**

Document Number: FBIS-SOV-2002-0808

Document Date: 08 Aug 2002

Division: Russia, North America

Subdivision: Russia, United States

Sourceline: CEP20020808000087 Moscow Interfax in English 1009 GMT 8 Aug 02

Citysource: Moscow Interfax

Language: English

[FBIS Transcribed Text] MOSCOW. Aug 8 (Interfax) – The Russian State Duma has expressed concern about the United States' program to develop a qualitatively new type of weapon.

"Under the High Frequency Active Auroral Research Program (HAARP), the U.S. is creating new integral geophysical weapons that may influence the near-Earth medium with high-frequency radio waves," the State Duma said in an appeal circulated on Thursday.

"The significance of this qualitative leap could be compared to the transition from cold steel to fire arms, or from conventional weapons to nuclear weapons. This new type of weapons differs from previous types in that the near-Earth medium becomes at once an object of direct influence and its component.

These conclusions were made by the commission of the State Duma's international affairs and defense committees, the statement reads.

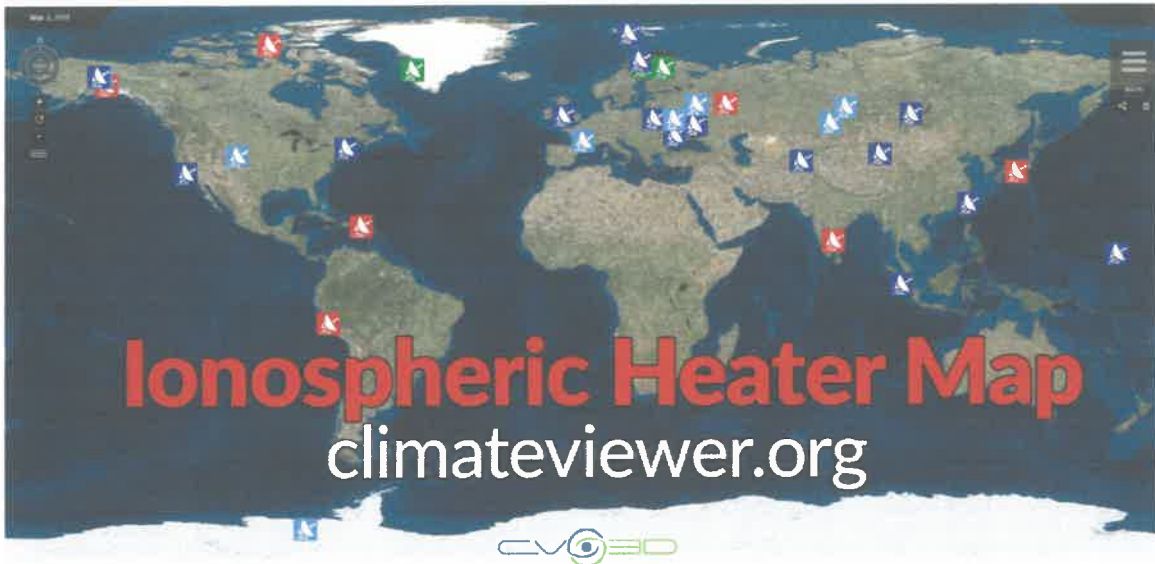
The committees reported that the U.S. is planning to test three facilities of this kind. One of them is located on the military testing ground in Alaska and its full-scale tests are to begin in early 2003. The second one is in Greenland and the third one in Norway.

"When these facilities are launched into space from Norway, Alaska and Greenland, a closed contour will be created with a truly fantastic integral potential for influencing the near-Earth medium," the State Duma said.

The U.S. plans to carry out large-scale scientific experiments, under the HAARP program, and not controlled by the global community, will create weapons capable of breaking radio communication lines and equipment installed on spaceships and rockets, provoke serious accidents in electricity networks and in oil and gas pipelines and have a negative impact on the mental health of people populating entire regions, the deputies said. They demanded that an international ban be put on such large-scale geophysical experiments. The appeal, signed by 90

deputies, has been sent to President Vladimir Putin, to the United Nations and other international organizations, to the parliaments and leaders of the UN member countries, to the scientific public and to mass media outlets. Among those who signed the appeal are Tatyana Astrakhankina, Nikolai Kharitonov, Yegor Ligachev, Sergei Reshulsky, Vitaly Sevastyanov, Viktor Cherepkov, Valentin Zorkaltsev and Alexei Mitrofanov.

[Description of Source: Moscow Interfax in English — non-government information agency known for its aggressive reporting, extensive economic coverage, and good coverage of Russia's regions. ]



View Map on ClimateViewer 3D. RED = Ionospheric Heater, DARK BLUE = Incoherent Scatter Radar (ISR), GREEN = EISCAT (ISR), LIGHT BLUE = Historic facilities (now closed). There are five major Ionospheric Heaters and multiple smaller facilities in operation today, not counting the Sky Heaters on trailers, submarines, and boats

<https://climateviewer.com/space-weather-modification/>

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<http://climateglobal.net/>

Climate Global Control Trading LLC Creates & Steers Hurricanes with Ionospheric Modification and Cloud Ionization

<https://climateviewer.com/2018/09/22/climate-global-control-trading-llc-creates-steers-hurricanes-with-ionospheric-modification-cloud-ionization/>

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FILE NAME WEATHER MODIFICATION THE CATASTROPHIC CONSEQUENCES OF CLIMATE ENGINEERING

## THE CATASTROPHIC CONSEQUENCES OF CLIMATE ENGINEERING WEATHER MODIFICATION

<https://youtu.be/kyxmrwbTKoM>

<https://www.youtube.com/watch?v=kyxmrwbTKoM>

Must view, THE DIMMING, the most comprehensive climate engineering documentary: <https://youtu.be/rf78rEAJvhY>

Geoengineering Watch Vs. The "Fact Checker", Lawsuit Filed:  
<https://youtu.be/sMedYDBFGOI>

The Catastrophic Consequences Of Climate Engineering:  
<https://youtu.be/kyxmrwbTKoM>

To see firsthand film footage of the climate engineering impact on our forests and its vanishing inhabitants, view the new series: "Into The Wild, With Dane Wigington":  
<https://www.youtube.com/playlist?list=PLwfFtDFZDpwvtAJ2yrKO3idEKDP3miLq9>

Geoengineering Watch has conducted our first ever high altitude particulate testing. Film footage of the flight and lab testing processes are featured in "The Dimming", a groundbreaking documentary that is currently in production. This is a new 12+ minute insight segment on the upcoming film. <https://youtu.be/4x3z35HA6JQ>

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# WEATHER MODIFICATION ACT

## PROVINCE OF BRITISH COLUMBIA

### DEFINITION "WEATHER MODIFICATION ACTIVITY"

"Weather modification activity" means any activity designed or intended to produce, by physical or chemical means, changes in the composition or dynamics of the atmosphere for the purpose of increasing, decreasing or redistributing precipitation, decreasing or suppressing hail or lightning or dissipating fog or cloud.

#### What is the weather modification Act in BC?

2 (1) A person must not commence or carry on a weather modification activity in British Columbia without first obtaining a permit from the minister. (2) An application for a permit under subsection (1) must be made to the minister in the form and containing the information prescribed by the regulations.

#### What is the weather modification Act 1985?

This Act creates an obligation on any person engaged in activities aimed at weather modification to inform the Administrator (the Assistant Deputy Minister of the Meteorological Service) of any activity or action in Canada that is designed or intended to produce changes in the weather. Mar 19, 2020

#### What was the weather modification in 1948?

In Canada weather modification began in 1948 with a federal government experiment that used dry ice dispersed into clouds to stimulate rainfall. Under appropriate conditions, rainfall did result. Feb 7, 2006

#### How long has weather modification been around?

The first scientifically controlled and monitored effort generally recognized by the meteorological community as constituting weather modification occurred in 1948.

#### What are the two factors that control weather in all years?

The Sun's heat causes the gases in the atmosphere to warm to different temperatures in different places, causing the air to move. The wind is the movement of air, and

wind causes changes in the weather. Weather is also affected by water vapor or moisture in the air. May 19, 2023

### **What are the negative effects of cloud seeding?**

Cloud Seeding: Advantages and Disadvantages | Earth.Org

Finally, let us shed light on the often-overlooked aspect of human exposure in the cloud seeding process. The environment becomes tainted, and we are abruptly confronted with the threat of iodism – a rather unpleasant combination of skin rashes and digestive issues.

### **Who is the father of meteorology in the world?**

Luke Howard - Wikipedia

Luke Howard

Background. Luke Howard has been called "the father of meteorology" for his comprehensive recordings of weather in the London area from 1801 to 1841 and his writings, which transformed the science of meteorology.

### **What does silver iodide do to humans?**

Exposure to high levels of silver over a long period of time can **result a gray or blue-gray discoloration of the skin and other tissues known as argyria. While this condition is permanent**, it is thought to only be a cosmetic problem that is not otherwise harmful to health (ATSDR, 1990; ATSDR, 1999).



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File Name **Why did the BC government repeal the Weather Modification Act ?**

## **Why did the BC government repeal the Weather Modification Act ?**

<https://lailayuile.com/2011/07/28/why-did-the-bc-government-repeal-the-weather-modification-act/>

Posted on July 28, 2011 10:06 am by Laila

Everyone knows at least one person who is a chemtrail enthusiast, and usually that person is the butt of jokes. But after coming across a few items of interest, I'm not so sure it's very funny anymore.

In a recent conversation about how bad the weather has been this summer- wet, dreary and downright tragic at times- the direction turned towards whether or not this could be prompted by some sort of weather modification. HAARP, chemtrails, cloud seeding... the different options were bantered around and then time took precedence and the conversation ended.

But my thoughts on weather modification did not, and so off to do some research to satisfy my curiosity.

What I found, left me with more questions than answers.

For example, it might surprise most British Columbians to know that in **2001, BC Hydro hired an international company, Weather Modification Inc.,** to conduct a feasibility study on weather modification to enhance the snowpack, thereby increasing run-off and filling reservoirs to capacity, which of course would generate more electricity when it goes through the turbines downstream.

Interesting, no? Imagine the possibilities of Hydro generation if they could increase the snowpack every year! While I could not locate that study online, I did locate reference to it in another study done by the same company for the state of Wyoming ( search British Columbia on that PDF link). **The reference is in regards to the amount of silver found in run-off and if the levels of concentration are harmful or not - Silver Iodide is what the clouds are seeded with to enhance precipitation.**

This **company appears to be no stranger to the BC government,** showing up on the public accounts going back as far as **1998/99.**

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But what was even more interesting to discover, is that **no more than 2 years after that BC Hydro feasibility study, the Weather Modification Act was repealed by none other than Kevin Falcon**, who was then the very ambitious minister of Deregulation. **How convenient.** It was thought the act added just added an unnessecary layer of regulation on top of the federal requirements.

Under that old act, anyone wishing to initiate weather modification activities had to **apply for a permit** to the Minister of Water Land and Air Protection 30 days prior to the start of such activities. **Now, not so much.** In fact, thanks to Kevin Falcon, it is **entirely left at a federal level with Environment Canada** and that appears to be an iffy thing as well, according to this report from an Alberta publication, where farmers and residents are concerned about private insurance companies seeding clouds to reduce property damage :

### **No gov't monitoring of weather modification**

**Last week Alberta Environment officials washed their hands of any responsibility**, saying that if any monitoring of the activity is done it would be at the federal level and that people who call with concerns are told to contact Environment Canada.

**Environment Canada hasn't done active research in cloud seeding and "is not aware of any evidence that suggests that this process is a threat to safety,"** wrote Henry Lau, spokesperson for Environment Canada in an e-mail. He said any citizens who have concerns should contact the company that conducts cloud seeding.

But when contacted by the Gazette last week, Terry Krauss of Alberta Severe Weather Management Society said there's nothing to be concerned about and that only a small amount of chemicals are used.

~ snip~

MP Blake Richards said he hasn't received many complaints about cloud seeding but is encouraging people with concerns to contact his office.

"From the amount of research I have been able to do there doesn't appear to be any safety concerns," Richards said, adding that he's still trying to figure out who is responsible for regulating weather modification.

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“My understanding would have been it would be the province but I am looking into that.”

The Weather Modification Information Act requires any person engaged in weather modification activities in Canada to inform an administrator – but who that is hasn't been pinpointed by Alberta Agriculture, Alberta Environment, Environment Canada, the premier's office or Richards.

Wow. And this was my experience today calling first the Environment Canada offices back east, and then our local communications office. **No one really seems to know what, or who is in charge of monitoring, regulating or enforcing.** And that alarms me when I go back to look at **that 2001 snowpack augmentation feasibility study** commissioned by BC Hydro.

In an age where companies exist- and Weather Modification Inc, is but just one – that have become expert at manipulating mother nature, why would our government repeal an act that would at minimum, keep track of such activity? Clearly, the BC hydro study establishes a benefit to weather modification, at least for them, but think about other applications. **The Ministry of forests was a client of the same company. 2010 was the worst forest fire season from the last 12 years,** that left the budget decimated. Another hot dry year could leave the vast dry areas of beetlekilled timber still standing a virtual firestorm with damage and firefighting costs in the billions. **Would the ministry look to seeding clouds to increase rainfall to prevent such an occurrence from happening again? If BC Hydro wanted to increase the snowpack, why wouldnt they?**

I've got some calls out to determine just who is in charge at the federal level and how/if they monitor and track weather modification activities, and will update when I hear back. Until then, think about where you stand on this issue, and what else we don't know about our governments activities.

Share this:

<https://lailayuile.com/2011/07/28/why-did-the-bc-government-repeal-the-weather-modification-act/>

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## **RDCK changes climate goals to focus on new ideas**

<https://www.nelsonstar.com/news/rdck-climate-action-plan-public-meetings-to-be-held-this-fall-4914961>

The Ideas for Climate Action document contains 23 proposed actions

The Regional District of Central Kootenay says it has simplified and shortened its climate change document following months of public criticism.

The draft RDCK Ideas for Climate Action Plan previously had three parts: climate actions that are required by the provincial and federal governments, actions that the RDCK is already undertaking, and new ideas not yet approved by the RDCK board.

The board, at its April 18 meeting, decided to not include the first two items and publish in the document only the new ideas list, though the other actions will continue.

They decided that, as always, new ideas must be presented to the board for approval, but now they have added the requirement that the idea be presented with a business case.

The board emphasized that the Ideas for Climate Action document is not an overall plan but a list of individual things that could each be done if the board agrees.

The board also decided that funding for climate actions should be “ideally” paid for by “polluter superfunds,” in which polluters are required to pay for clean-up initiatives.

Board chair Aimee Watson, in an interview with the Nelson Star following the meeting, said there is some work to be done on the superfunds part and that is the reason for the word “ideally.” But she said it reflects a common public concern: “Don’t just tax us out of being able to live. You should be taxing the people who are causing the problem.”

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Significant actions on the list, Watson said, include mitigating floods and geohazards, which she said the RDCK has already done a lot of work on.

“When it comes down to the debate over why climate change is happening and what we should do about it, these are no-brainers because they’re physically affecting us,” Watson said. “And the more we can mitigate, the more we will at least be prepared.”

Watson said supporting farmers and irrigation infrastructure is also a significant desire on the part of the public and the board, as well as wildfire mitigation, and the ideas document contains many ideas about these.

The list in Ideas for Climate Action includes suggestions in the general areas of transportation and mobility, planning for growth, energy efficiency, supporting farmers, improving water access for farmers, protecting and conserving water, mitigating risks from floods and geohazards, wood chipping, and divestment from fossil fuel investments.

Laura Sacks of the Kootenay Climate Hub said the group applauds the RDCK for its new climate list and offered a caution about the required business cases.

“When considering the business case for new actions,” she said, “we expect they will be factoring in the high cost of not acting in response to the climate crisis we are facing.”

**Paragraph three of this article was altered on April 24 to state that the climate actions the board decided not to include in the Ideas for Climate Action Plan will still be continued although they are not published in the plan.**

READ MORE:

- Yes to wildfire mitigation, no to EVs: RDCK climate plan feedback released
- RDCK climate plan gets a rough ride
- RDCK climate plan puts rural focus on cutting greenhouse gases
- RDCK passes climate change ‘call to arms’

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- RDCK director pushes back against petition opposed to Climate Action Plan
- RDCK Climate Action Plan will have more public consultation
- Regional District of Central Kootenay cancels climate plan open houses due to safety concerns
- RDCK Climate Action Plan public meetings to be held this fall
- RDCK launches new round of climate plan consultations
- RDCK climate meetings becoming more civil, less divisive

<https://www.nelsonstar.com/news/rdck-climate-action-plan-public-meetings-to-be-held-this-fall-4914961>

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FILE NAME WEATHER MODIFICATION MAN MADE CRISIS IS NOT WHAT THEY WANT YOU TO THINK.

**Climate Change  
The man-made crisis  
is not  
what they want you to think**

After the biblical floods in Dubai, the crisis zealots have inevitably raised the level of hysteria around anthropogenic climate change.

For once, I agree with them.

Such incredible, adverse weather is indeed man-made. However, it's not climate change, just weather change. And, it's not due to ordinary people, driving their cars and cooking their food on BBQs.

It's geo-engineering, aka weather modification.

How can we be so sure? Because the lame-stream media has rolled out some Experts™, proclaiming that “the Dubai floods were definitely not due to cloud seeding.” There you are then.

The bad news is that floods are just a rare, **extreme adverse outcome of the activities of the globalists to play God.**

Routinely, these activities are poisoning the food supply and affecting all manner of other natural systems that rely on the balance of sunlight and CO2 for the planet to thrive.

So, here's a little education for all the stupid, EV-driving, carbon-offsetting, feeble-minded sheep that are aiding and abetting the systematic destruction of how beautiful planet, courtesy of Rosalind Peterson, presenting to the UN back in 2007.

Global warming is not the threat.

CO2 is not the threat.

Weather Modification Manipulation is the threat!!!!!!

[https://www.agriculturedefensecoalition.org/content/about-rosalind-peterson?utm\\_source=substack&utm\\_medium=email](https://www.agriculturedefensecoalition.org/content/about-rosalind-peterson?utm_source=substack&utm_medium=email)

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File Name WEATHER MODIFICATION WATCH THIS VIDEO AND WHAT THEM LIE -

**NOW GOVERNMENT ADMITS WHAT CHEM TRAIL ARE REAL.**

**listen to the lies**

LISTEN TO THEM LIE IN THIS VIDEO - GOVERNMENT HAS RELEASED THE FACT THAT CHEM TRAILS ARE REAL.

[https://www.youtube.com/watch?v=bkcK-l0p\\_qM](https://www.youtube.com/watch?v=bkcK-l0p_qM)

**WATCH THIS VIDEO AND SEE THE TRUTH**

Dubai is making it rain in a sweltering desert by zapping clouds with electricity using drones. A similar process has actually been going on for decades by using aircraft, cannons, and now drones to push silver iodide up into the atmosphere to heat clouds and make them rain-producing. Silver iodide has the same crystalized structure as ice, but it could be dangerous to aquatic life. So in Dubai, theytook a fleet of drones into cloud cover to use electricity, instead of silver iodide, to heat the clouds. FOX 13 Meteorologist Dave Osterberg explains what's happening and what's next. More:

<https://www.fox13news.com/tag/good-day>

<https://www.youtube.com/watch?v=0CoyfM4gR7M>

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# FILE NAME DUBAI Cloud seeding in the United Arab Emirates DID IT CAUSE THE FLOODING APRIL 2024

## Cloud seeding in the United Arab Emirates

Personal NOTE: Could it be???? Human-amplified climate change is causing extreme rainfall events to become more frequent and more intense, according to the U.S. government's Fifth National Climate Assessment.

**Cloud seeding in the United Arab Emirates is a weather modification technique used by the government to address water challenges in the country.** Cloud seeding is also referred to as man made precipitation and artificial rain making.[1] The United Arab Emirates is one of the first countries in the Persian Gulf region to use cloud seeding technology. **UAE scientists use cloud seeding technology to supplement the country's water insecurity, which stems from the extremely hot climate.**[2] They use weather radars to continuously monitor the atmosphere of the country.[3] Forecasters and scientists have estimated that cloud seeding operations can enhance rainfall by as much as 30-35% percent in a clear atmosphere, and up to 10-15% in a more humid atmosphere.[4] **This practice has caused concerns regarding the impact on the environment because it is difficult to predict the long-term global implications.**[5]

Cloud seeding rains in Dubai[citation needed]

Climate needs

The UAE has an **arid climate with less than 100mm per year of rainfall**, a **high evaporation rate of surface water and a low groundwater recharge rate**. Rainfall in the UAE has been fluctuating over the last few decades in winter season between December and March.

The climate of the UAE is a very dry region aside from the coast and the border of the UAE and Oman, where there is high humidity.[6] The **UAE is located in a dust hotspot** that contributes to the arid climate.[7] There is little to no rainfall, due to frontal systems from the west and northwest, which yields few inches of rainfall per year.[6][5] This lack of rainfall has scientists and the government worried about water security in the future.[5]

Due to industrialization and population growth, the demand for water has rapidly

increased.[7] Current resources are being depleted and scarcity issues are arising.[8] [6] As a result, the **UAE is looking to cloud seeding technologies to increase water security as well as renewability** to combat water and food scarcity that may arise.[8][9]

## History

Scientists have been experimenting with **cloud seeding technology since the 1940s**.[10] The cloud-seeding program in the **UAE was initiated in the late 1990s**, as one of the first Middle Eastern countries to utilize this technique.[11] In 2005, the UAE launched the UAE Prize for Excellence in Advancing the Science and Practice of Weather Modification in collaboration with the World Meteorological Organization[12] (WMO). **In 2010, cloud seeding began as a project by weather authorities to create artificial rain**.[13] The project, which began in **July 2010 and cost \$11 million USD, succeeded in creating rain storms in the Dubai and Abu Dhabi deserts**.[14]

## Government involvement

The UAE government developed a research program called the UAE Research Program for Rain Enhancement Science (UAEREP) in 2015.[11][7] It allows scientists and researchers to pitch their potential solutions and conduct research to improve the accuracy of cloud seeding technology.[15] After pitching research proposals, scientists are awarded grants through the UAEREP.[7] Among its key goals are advancing the science, technology, and implementation of rain enhancement and encouraging additional investments in research funding and research partnerships to advance the field, **increasing rainfall and ensuring water security globally**.[16] By early **2001**, the UAEREP was conducting research projects in cooperation with the National Center for Atmospheric Research (NCAR) in the U.S., the Witwatersrand University in South Africa, the National Aeronautics and Space Agency (NASA) in the U.S.[17]

The Program for **Rain Enhancement Science is an initiative of the United Arab Emirates** Ministry of Presidential Affairs. It is overseen by the UAE National Center of Meteorology & Seismology[18] (NCMS) based in Abu Dhabi.[19]

In **2014**, a total of **187 missions** was sent to **seed clouds in the UAE** with each aircraft taking about three hours to target five to six clouds at a cost of \$3,000 per operation.[20] In 2017, the UAE had 214 missions,[21] and in 2018, it had 184 missions, and 247 missions were launched in 2019.[11] Tests of new technologies

were done in **2020 with partners in the United States to test the use of nanomaterials for seeding.**[22]

### Technology

#### **Beechcraft King Air C90 used for cloud seeding operations**

The augmentation of rainfall considers both the ground-based and airborne processes that occur in different rain cloud types (but generally focused on convective clouds). The UAE utilizes operational aircraft-based and drone-controlled hygroscopic cloud seeding as opposed to conventional randomized aircraft seeding, as it does not take into consideration the varying properties of rain clouds, especially present in dusty and arid regions like the UAE.[7] Since 2021, **the devices have been equipped with a payload of electric-charge emission instruments** and customized sensors that fly at low altitudes and **deliver an electric charge to air molecules.**[23] Hygroscopic cloud seeding uses natural salts such as potassium chloride and sodium chloride that pre-exist in the atmosphere with **hygroscopic flares**. By introducing Hygroscopic particles, it enhances the natural rain particles which begins a collision-coalescence process.[7]

At present, the UAE mostly cloud seeds in the eastern mountains on the border to Oman to raise levels in aquifers and reservoirs.[24] The country has **75 networked automatic weather stations distributed across the country UAE**, 7 air quality stations, a Doppler weather radar network of five stationary and one mobile radar, and six Beechcraft King Air C90 aircraft distributed across the country for cloud seeding operations.[24]

### **Environmental impact**

#### **Flooding**

It is predicted that climate change will lead to higher temperatures, increased humidity and a greater risk of flooding in parts of the Gulf region. These issues could be worsened in nations like the UAE which do not have adequate drainage infrastructure to manage heavy rainfall.[25]

#### **A flooded street in Dubai in 2020 during the cloud seeding rains[citation needed]**

Cloud seeding activities conducted **in 2019** by the UAE National Center of Meteorology (NCM) as part of the **UAE Research Program for Rain Enhancement Science were carried out prior to floods in Dubai in 2019. Although the NCM has linked heavier rainfall to cloud seeding operations, they assert it was not the**

**cause of the flooding.** Commercial and residential areas were severely impacted and pumps were needed to remove excess water due to inadequate drainage systems because drainage systems could not handle the volume of water.[26] The UAE planned to invest 500 million dirhams (\$136.1 million) on flood protection and transport infrastructure after severe storms in 2020.[27]

Sharjah, one of the most populous cities in the UAE, has experienced repetitive urban flooding during the rainy season over the last three decades. **Possible additional increased rainfall intensity due to cloud seeding would require additional investment in the city's drainage systems to mitigate flood risk.**[28]

**April 2024 floods**

**Experts are doubtful that cloud seeding played a role in the UAE's April 2024 floods,** suggesting that the heavy rainfall was more likely caused by anthropogenic climate change.[29][30][31]

This section is an excerpt from 2024 Persian Gulf floods § Cloud seeding allegations. [edit]

In the aftermath of the floods, some news outlets quoted **specialist meteorologist Ahmed Habib linking the heavy downpours to the UAE's cloud seeding program.** [32] Due to the arid desert climate and high temperatures, cloud seeding has been used previously in the United Arab Emirates in order to combat water scarcity.[33]

Dismissing the allegations, Omar Al Yazeedi, the deputy director-general of the UAE's National Centre of Meteorology (NCM), said the institution "did not conduct any seeding operations **during** this event".[34] Other news commentators have also dismissed the link to cloud seeding, stating that the technology marginally increases rainfall and that the UAE's cloud seeding program is localised to the eastern part of the country, away from densely populated metropolitan areas; other experts, such as the Royal Meteorological Society, stated that cloud seeding would only have a minimal effect,[35] with others even stating that the focus on cloud seeding is "misleading".[36][37]

Scientists from the University of Reading, whose cloud seeding program is used by the UAE, denied that cloud seeding was to blame for the heavy rainfall, given that the large-scale weather pattern was predicted in advance and was too large to be influenced by cloud seeding. They added that the effects of cloud seeding are typically short-lived, lasting for a few hours.[38]

**Atmospheric aerosols**

Cloud seeding missions require firing salts and silver iodide crystals into the atmosphere.[39] **The increased concentration of particulate matter, or micro-pollutants, increases risk for respiratory illnesses.**[citation needed] In 2017, a study was conducted before and after cloud seeding missions, **which recorded an increase of particulate matter, correlating to the months of active artificial rain.**[1] Researchers attribute this to **left over silver iodine crystals that were not dispersed in the rain during the cloud seeding months.**[1] A study was conducted called the UAE Unified Aerosol Experiment (UAE2) to assess the progress and effectiveness of cloud seeding specifically in the UAE.[7] Researchers found a **significant increase in rainfall trends in areas with cloud seeding.**[7] More recently, **over 20 regions in the UAE that participated in cloud seeding experiments have a higher concentration of particulate matter.**[5][1] The overall environmental impact of cloud seeding is difficult measure due to the **inability to perform controlled experiments along with the difficulty in direct tracing.**[5]

See also

Cloud seeding

United Arab Emirates

Environmental issues in the United Arab Emirates

Arabian Desert

Abu Dhabi

Dubai Electricity and Water Authority

Sharjah Electricity and Water Authority

Particulates

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FILE NAME WEATHER MODIFICATION DUBAI FLOODS ACT AS A STARK WARNING

**THE DUBAI FLOODS ACT AS A STARK WARNING OF THE UNINTENDED CONSEQUENCES WE CAN UNLEASH WITH WEATHER MODIFICATION TECHNIQUES.**

The Dubai floods act as a stark warning of the unintended consequences we can unleash when we use such technology to alter the weather

<https://www.youtube.com/@DaneWigington>

"**Meteorologist Warns of 'Weather Wars' Between Countries**". That new headline from Newsweek continues with this, "The Dubai floods act as a stark warning of the unintended consequences we can unleash when we use such technology to alter the weather". As soon as reports like the Newsweek headline began to circulate, matrix **media immediately initiated a denial campaign** that was a complete reversal of the initial publications on what happened in Dubai and why.

The **controllers absolutely don't want the public to comprehend** the connection between climate engineering operations and weather catastrophes. Geoengineering programs are wreaking havoc all over the world, but one US state has now officially pushed back with a newly passed law banning such operations, Tennessee. All are needed in the critical battle to wake populations to what is coming, we must make every day count. Share credible data from a credible source, make your voice heard.

Dane Wigington

for more information go to the full Geoengineering Watch article:

<https://www.geoengineeringwatch.org/geoengineering-watch-global-alert-news-april-20-2024-454/>

Must view, THE DIMMING, the most comprehensive climate engineering documentary: <https://youtu.be/rf78rEAvhY>

The Catastrophic Consequences Of Climate Engineering:

<https://youtu.be/kyxmrwbTKoM>

To see firsthand film footage of the climate engineering impact on our forests and its vanishing inhabitants, view the new series: "Into The Wild, With Dane Wigington":

<https://www.youtube.com/playlist?list=PLwFtDFZDpwvtAJ2yrKO3idEKDP3miLq9>

In the attempt to answer as many questions as possible on the dire issue of climate engineering, Geoengineering Watch is producing a weekly "Climate Engineering News Q and A":

<https://www.youtube.com/playlist?list=PLwFtDFZDpwsQyIUkWcYJzaarFt40K1KM>

By submitting a question to this email [questions@geoengineeringwatch.org](mailto:questions@geoengineeringwatch.org) you are granting permission for your question and your first name to be read online. If you do not want your first name mentioned, please state that you wish to remain anonymous.

Geoengineering Watch has conducted our first ever high altitude particulate testing. Film footage of the flight and lab testing processes are featured in "The Dimming", a groundbreaking documentary that is currently in production. This is a new 12+ minute insight segment on the upcoming film. <https://youtu.be/4x3z35HA6JQ>

This is a 4+ minute trailer of the groundbreaking documentary "The Dimming":

<https://youtu.be/nT8OR1im-FA>

The latest and most effective GeoengineeringWatch.org awareness raising materials can be found at the links below:

2 sided color glossy informational flyers: <http://www.geoengineeringwatch.org/ads/>

20 page fact and photo summary booklets:

<http://www.geoengineeringwatch.org/climate-engineering-fact-and-photo-summary/>

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**FILE NAME WEATHER MODIFICATION**

**THE DIMMING**

**GEOENGINEERING VIDEO**

*Hear the Truth!*



<https://www.youtube.com/watch?v=rf78rEAvhY>

**WEATHER MODIFICATION VIDEO THE DIMMING GEOENGINEERING**

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