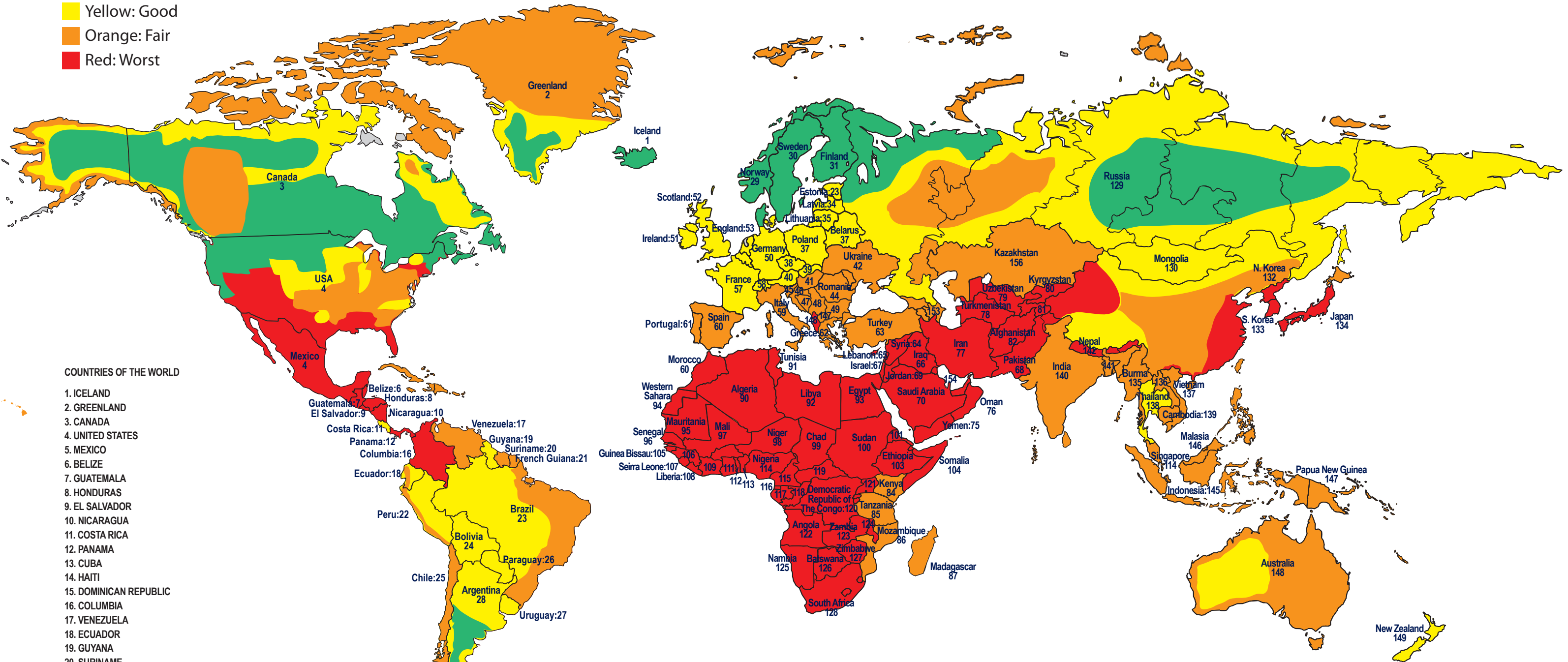


# THE WORLD IN THE FACE OF CLIMATE CHANGE

- Green: Best
- Yellow: Good
- Orange: Fair
- Red: Worst



## COUNTRIES OF THE WORLD

1. ICELAND
2. GREENLAND
3. CANADA
4. UNITED STATES
5. MEXICO
6. BELIZE
7. GUATEMALA
8. HONDURAS
9. EL SALVADOR
10. NICARAGUA
11. COSTA RICA
12. PANAMA
13. CUBA
14. HAITI
15. DOMINICAN REPUBLIC
16. COLUMBIA
17. VENEZUELA
18. ECUADOR
19. GUYANA
20. SURINAME
21. FRENCH GUYANA
22. PERU
23. BRAZIL
24. BOLIVIA
25. CHILE
26. PARAGUAY
27. URUGUAY
28. ARGENTINA
29. NORWAY
30. SWEDEN
31. FINLAND
32. DENMARK
33. ESTONIA
34. LATVIA
35. LITHUANIA
36. BELARUS
37. POLAND
38. CZECH REPUBLIC
39. SLOVAKIA
40. AUSTRIA
41. HUNGARY
42. UKRAINE
43. MOLDOVA
44. ROMANIA
45. SLOVENIA
46. CROATIA
47. BOZNA AND HERZOGOVENA
48. SERBIA
49. BULGARIA
50. GERMANY
51. IRELAND
52. SCOTLAND
53. ENGLAND
54. NETHERLANDS
55. BELGIUM
56. LUXEMBOURG
57. FRANCE
58. SWITZERLAND
59. ITALY
60. SPAIN
61. PORTUGAL
62. GREECE
63. TURKEY
64. SYRIA
65. LEBANON
66. IRAQ
67. ISRAEL
68. PALESTINE
69. JORDAN
70. SAUDI ARABIA
71. KUWAIT
72. BAHRAIN
73. JORDAN
74. UNITED ARAB EMIRATES
75. YEMEN
76. OMAN
77. IRAN
78. TURKNEMISTAN
79. UZBEKISTAN
80. KYRGYESTAN
81. TAJIKISTAN
82. AFGHANISTAN
83. PAKISTAN
84. KENYA
85. TANZANIA
86. MOZAMBIQUE
87. MADAGASCAR
88. MOROCCO
89. TUNISIA
90. ALGERIA
91. TUNISIA
92. LIBYA
93. EGYPT
94. WESTERN SAHARA
95. MAURITANIA
96. SENEGAL
97. MALI
98. NIGER
99. CHAD
100. SUDAN
101. ERITREA
102. DJIBOUTI
103. ETHIOPIA
104. SOMALIA
105. GUINEA-BISSAU
106. GUINEA
107. SIERRA LEONE
108. LIBERIA
109. COIE D'IVOIRE
110. BURKINA FASO
111. GHANA
112. TOGO
113. BENIN
114. NIGERIA
115. CAMEROON
116. EQUATORIAL GUINEA
117. GABON
118. CONGO REPUBLIC
119. CENTRAL AFRICAN REPUBLIC
120. DEMOCRATIC REPUBLIC OF THE CONGO
121. UGANDA
122. ANGOLA
123. ZAMBIA
124. MALAWI
125. NAMIBIA
126. BOTSWANA
127. ZIMBABWE
128. SOUTH AFRICA
129. RUSSIA
130. MONGOLIA
131. CHINA
132. NORTH KOREA
133. SOUTH KOREA
134. JAPAN
135. BURMA
136. LAOS
137. VIETNAM
138. THAILAND
139. CAMBODIA
140. INDIA
141. BANGLADESH
142. NEPAL
143. TIBET
144. SINGAPORE
145. INDONESIA
146. MALASIA
147. NEW GUINEA
148. AUSTRALIA
149. NEW ZEALAND

**HOW THE STATES RANK IN THE FACE OF CLIMATE CHANGE  
SCALE OF 1 (BEST) TO 10 (WORST)**

**GROUP 1**

Montana

- + Adequate water
- ++ Temperate climate
- +++ Good farmland/growing season
- b. Hydrofracking in northwestern and northeastern part of state

Idaho

- + Adequate water
- ++ Temperate climate
- +++ Good farmland/growing season
- e. Moderate fault line risk
- f. Some high unemployment in upper part of state

North Dakota

- + Adequate water
- ++ Temperate climate
- +++ Good farmland/growing season
- b. Hydrofracking in eastern half of state
- d. Some tornado activity in southeastern part of state

South Dakota

- + Adequate water
- ++ Temperate climate
- +++ Good farmland/growing season
- b. Hydrofracking in northwestern corner of state
- d. Tornado activity in eastern half of state

Oregon

- + Adequate water
- ++ Temperate climate
- +++ Good farmland/growing season
- e. Fault lines
- h. Possible flooding near the coast
- g. High foreclosure rate

Washington

- + Adequate water
- ++ Temperate climate
- +++ Good farmland/growing season
- a. Nuclear plant in southeastern WA, 20 mi. NNE of Pasco
- e. Fault lines
- h. Possible flooding near the coast

California - Northern:

- + Adequate water
- ++ Temperate climate
- +++ Good farmland/growing season
- e. Fault lines
- f. Some high unemployment
- h. Possible flooding near the coast

Northern Minnesota

- + Adequate water
- ++ Temperate climate
- +++ Good farmland/growing season

## Alaska -- Central

- + Adequate water
- ++ Potential of temperate climate
- +++ Good farmland

**GROUP 2**

## Maine

- + Adequate water
- ++ Temperate climate
- +++ Good farmland/growing season
- f. Some high unemployment
- h. Possible flooding near the coast

## Vermont

- + Adequate water
- ++ Temperate climate
- +++ Good farmland/growing season
- a. Nuclear plant in southeaster corner of the state, 5 mi. south of Brattleboro
- h. Possible flooding near the coast

## New Hampshire

- + Adequate water
- ++ Temperate climate
- +++ Good farmland/growing season
- a. Nuclear plant 13 mi. south of Portsmouth
- h. Possible flooding near the coast

## Alaska -- Peripheral

- + Adequate water
- ++ Potential of temperate climate
- +++ Good farmland
- e. Fault lines
- f. unemployment

## Massachusetts

- + Adequate water
- ++ Temperate climate
- +++ Good farmland/growing season
- a. Nuclear plant 38 mi. SE of Boston
- d. Increasing tornado frequency
- h. Possible coastal flooding
- j. Likely to declare bankruptcy

**GROUP 3**

## Wyoming

- + Adequate water
- ++ Temperate climate
- +++ Good farmland/growing season
- b. Hydrofracking in southwestern quarter of state

## New York – Northern

- + Adequate water
- +++ Good farmland/growing season
- b. Some high unemployment

**GROUP 4**

## Iowa

- ++ Temperate climate
- +++ Good farmland/growing season
- a. Nuclear plant 8 mi NW of Cedar Rapids

## Minnesota

- + Adequate water
- +++ Good farmland/growing season
- a. Nuclear plant 35 mi. NW of Minneapolis
- d. Tornados in southern third of state
- h. Flooding near the Mississippi

## Wisconsin

- + Adequate water
- +++ Good farmland/growing season
- a. Nuclear plant 27 mi ESE of Green Bay
- b. Hydrofracking in eastern part of state
- d. Tornados throughout most of the state
- h. Some flooding

## Rhode Island

- h. Possible significant coastal flooding
- j. Likely to declare bankruptcy

## North Carolina

- ++ Temperate climate
- +++ Good farmland/growing season
- a. Nuclear plant (2) 40 mi. south of Wilmington
- a. Nuclear plant 18 mi. south of Charlotte
- a. Nuclear plant (2) 17 mi. north of Charlotte
- c. Drought
- h. Possible coastal flooding
- f. Some high unemployment

**GROUP 5**

## Texas – Northeastern

- + Adequate water
- +++ Good farmland/growing season
- a. Nuclear plant 40 mi SW of Ft. Worth

## Nebraska

- + Adequate water
- ++ Temperate climate
- +++ Good farmland/growing season
- a. Nuclear plant 22 mi S of Nebraska City
- b. Hydrofracking in eastern and western part of state
- d. Tornados frequent throughout state
- e. Fault lines

## Indiana

- + Adequate water
- ++ Temperate climate
- +++ Good farmland/growing season
- b. Hydrofracking in all but the eastern border
- d. High tornado frequency
- f. Some high unemployment

Colorado

- ++ Temperate climate
- +++ Good farmland/growing season
- b. Hydrofracking in eastern and western part of state
- d. Drought - less snow in the mountains, water running out
- g. High foreclosure rate

**GROUP 6**

Arkansas

- a. Nuclear plant (2) 6 mi WNW of Russellville
- b. Some hydrodracking
- c. Drought in southern part of the state
- d. High frequency of tornados
- e. Fault lines

Ohio

- + Adequate water
- ++ Temperate climate
- +++ Good farmland/growing season
- a. Nuclear plant 35 mi NE of Cleveland
- b. Hydrofracking in more than half of the state
- d. Tornado frequency
- f. High unemployment

Kansas

- a. Nuclear plant 3.5 mi W of Burlington
- b. Hydrofracking in eastern part of state
- c. Drought in southern part of state
- d. Tornado frequency throughout state

Missouri

- a. Nuclear plant 25 mi NE of Jefferson City
- b. Hydrofracking in the northwest
- d. Tornado frequency around margin of state
- f. Some high unemployment

Hawaii

- ++ Temperate climate
- +++ Good farmland/growing season
- c. Drought/dry conditions
- e. Fault lines/Volcano
- f. High unemployment
- h. Likelihood of flooding
- j. Likely to declare bankruptcy

**GROUP 7**

Virginia

- ++ Temperate climate
- +++ Good farmland/growing season
- a. Nuclear plant (2) 40 mi NW of Richmond
- a. Nuclear plant (2) 17 mi NW of Newport News
- b. Hydrofracking along West Virginia border
- h. Possible coastal flooding

### South Carolina

- ++ Temperate climate
- +++ Good farmland/growing season
- a. Nuclear plant 26 mi. northwest of Columbia
- c. Drought
- e. Fault lines
- h. Possible coastal flooding
- f. High unemployment

### Maryland

- ++ Temperate climate
- +++ Good farmland/growing season
- a. Nuclear plant (2) 40 mi S of Annapolis
- c. Dry conditions
- h. Possible coastal flooding

### Delaware

- ++ Temperate climate
- +++ Good farmland/growing season
- a. Nuclear plant (2) 18 mi S of Wilmington
- b. Possible coastal flooding
- c. Dry conditions

### Tennessee

- + Adequate water
- ++ Temperate climate
- +++ Good farmland/growing season
- a. Nuclear plant (2) 16 mi NE of Chattanooga
- a. Nuclear plant 60 mi SW of Knoxville
- b. Hydrofracking in eastern part of state
- d. Tornados frequent throughout state
- e. Fault lines
- f. High unemployment

### Kentucky

- + Adequate water
- ++ Temperate climate
- +++ Good farmland/growing season
- b. Hydrofracking in most of state
- d. Tornados frequent in western part of state
- e. Fault lines
- f. High unemployment

## **GROUP 8**

### New Jersey

- + Adequate water
- ++ Temperate climate
- +++ Good farmland/growing season
- a. Nuclear plant 9 mi W of Toms River
- f. Areas of high unemployment
- h. Possible coastal flooding – beach is eroding
- j. Likely to declare bankruptcy

## Connecticut

- + Adequate water
- ++ Temperate climate
- +++ Good farmland/growing season
- a. Nuclear plant (2) 3.2 mi WSW of New London
- d. Tornados in eastern part of state
- j. Likely to declare bankruptcy
- h. Possible coastal flooding
- k. Air pollution
- l. High infectious disease – tick and vector-borne

## Pennsylvania

- + Adequate water
- ++ Temperate climate
- +++ Good farmland/growing season
- a. Nuclear plant (2) 17 mi. W of McCandless
- a. Nuclear plant (2) 21 mi NW of Philadelphia
- a. Nuclear plant (2) 18 mi. S of Lancaster
- a. Nuclear plant (2) 70 mi NE of Harrisburg
- a. Nuclear plant (Three Mile Island) 10 mi SE of Harrisburg
- b. Hydrofracking except for eastern 1/8th of the state
- d. Tornado frequency in western half of state
- f. Many areas of high unemployment
- h. Possible coastal flooding
- k. Air pollution

## Michigan

- + Adequate water
- ++ Temperate climate
- +++ Good farmland/growing season
- a. Nuclear plant (2) 13 mi S of Benton Harbor
- a. Nuclear plant 5 mi S of South Haven
- b. Hydrofracking throughout the entire state
- d. Tornado frequency
- f. Very high unemployment
- g. High foreclosure rate

## Illinois

- + Adequate water
- ++ Temperate climate
- +++ Good farmland/growing season
- a. Nuclear plant (2) 20 mi SSW of Joliet
- a. Nuclear plant (2) 25mi SW of Joliet
- a. Nuclear plant (2) 17 mi SW of Rockford
- a. Nuclear plant (2) 20 mi NE of Moline
- a. Nuclear plant (2) 11 mi SE of Ottawa
- b. Hydrofracking in all but the Western border
- d. High tornado frequency
- f. High unemployment
- j. Likely to declare bankruptcy
- k. Air pollution

## West Virginia

- + Adequate water
- ++ Temperate climate
- +++ Good farmland/growing season
- b. Hydrofracking throughout entire state (also coal mining)
- f. Areas of high unemployment
- m. Mining

## Georgia

- a. Nuclear plant (2) 20 mi S of Vidalia
- a. Nuclear plant (2) 26 mi SE of Augusta
- b. Hydrofracking in upper west corner of state
- c. Drought
- d. Tornado frequency throughout state
- g. High foreclosure rate
- h. Coastal flooding

**GROUP 9**

## Southern New York

- + Adequate water
- ++ Temperate climate
- +++ Good farmland/growing season
- a. Nuclear plant (2) 6 mi NE of Oswego
- a. Nuclear plant 6 mi NE of Oswego
- a. Nuclear plant 20 mi NE of Rochester
- a. Nuclear plant 24 mi N of New York City
- b. Hydrofracking throughout all except northern NY
- d. Some tornado frequency in southeastern portion of NY
- e. Fault lines
- h. Likelihood of coastal flooding
- k. Air pollution

## Most of Texas

- a. Nuclear plant (2) 90 mi SW of Houston
- b. Hydrofracking throughout the state
- c. Extreme drought
- d. Tornados frequent in northern and eastern part of TX
- i. High temperatures

## Utah

- b. Hydrofracking in eastern part of state
- c. Drought
- e. Fault lines
- i. High temperatures

## Alabama

- a. Nuclear plant (3) 32 mi W of Huntsville
- a. Nuclear plant (2) 18 mi SE of Dothan
- b. Hydrofracking in northern half of state
- c. Severe drought in southern half of state
- d. Tornados frequent throughout state
- f. High unemployment
- h. Coastal flooding
- i. High temperatures
- k. Coast destroyed from BP Gulf oil spill



## Nevada

- c. Drought
- e. Fault lines
- f. High unemployment in the southern part of the state
- i. High temperatures

## Oklahoma

- b. Some hydrofracking
- c. Extreme drought
- i. High temperatures

## New Mexico

- b. Hydrofracking in northwestern and southeastern parts of state
- c. Drought
- e. Fault lines
- i. High temperatures

**GROUP 10**

## Louisiana

- a. Nuclear plant 24 mi NNW of Baton Rouge
- a. Nuclear plant 24 mi W of New Orleans
- b. Hydrofracking in northern half of state
- c. Severe drought
- d. Tornados frequent in northern half of state
- h. Coastal flooding
- I. High temperatures
- j. Likely to declare bankruptcy
- k. Air pollution/coastal pollution from BP Gulf oil spill

## Arizona

- a. Nuclear plant (3) 50 mi W of Phoenix
- c. Drought
- e. Fault lines
- f. High unemployment
- i. High temperatures

## Mississippi

- a. Nuclear plant 20 mi S of Vicksburg
- b. Hydrofracking in southern and northeastern parts of state
- c. Severe drought in southern part of state
- d. Tornados frequent throughout state
- f. High unemployment
- h. Coastal flooding
- i. High temperatures
- k. Air pollution/coastal pollution from BP Gulf oil spill

## Florida

- a. Nuclear plant (2) 20 mi S of Miami
- a. Nuclear plant (2) 10 mi SE of Ft. Pierce
- a. Nuclear plant 80 mi N of Tampa
- c. Severe drought throughout the state
- d. Tornados in southwestern part of state
- f. High unemployment
- g. High foreclosure rate
- h. Coastal flooding
- i. High temperataures
- k. Western coast damaged from BP gulf oil spill

Southern California

- a. Nuclear plant (2) 12 mi WSW of San Louis Obispo
- a. Nuclear plant (2) 45 mi SE of Long Beach
- c. Drought
- e. Fault lines
- f. High unemployment
- h. Coastal flooding
- g. High foreclosure rates

**OTHER COUNTRIES AND REGIONS WITH A SUSTAINABLE FUTURE****BEST – GREEN**

FINLAND  
SWEDEN  
NORWAY  
DENMARK  
ICELAND  
NEW ZEALAND  
NORTHERN CANADA  
SOUTHERN TIP OF SOUTH AMERICA  
SCOTLAND

**GOOD – YELLOW**

EASTERN AND CENTRAL CANADA  
GERMANY  
SWITZERLAND  
POLAND  
COSTA RICA  
BOLIVIA  
SURINAME  
CHILE  
ARGENTINA  
PERU  
URUGUAY  
BRAZIL  
NORTHERN CHINA  
TIBETAN PLATEAU  
CENTRAL RUSSIA  
CENTRAL AUSTRALIA

**FAIR – ORANGE**

AUSTRALIA  
WESTERN EUROPE  
REST OF UK  
SOUTHWESTERN SOUTH KOREA  
CENTRAL SOUTH CHINA  
SOUTHWESTERN AFRICA

**WORST – RED**

MOST REMAINING COUNTRIES HAVE EXTREME BARRIERS TO SUSTAINABILITY

## **Brooklyn Bridge Park Receives Solar Powered Charging Station to Power Electric Vehicles March 15, 2011 / Beautiful Earth Group**

For immediate release: March 15, 2011

Contact: Amanda Cleary, [acleary@beautifulearthgroup.com](mailto:acleary@beautifulearthgroup.com), 718-488-8426

### **BROOKLYN BRIDGE PARK RECEIVES SOLAR-POWERED CHARGING STATION TO POWER ELECTRIC VEHICLES**

Beautiful Earth Group's charging station is first of its kind in New York City

BROOKLYN, NY – Brooklyn Bridge Park and Beautiful Earth Group (BE), a Brooklyn-based renewable energy company, announced today the arrival of a state-of-the-art solar-powered electric vehicle charging station to Brooklyn Bridge Park – a world-class 85-acre sustainable waterfront park with iconic views of the New York Harbor and Manhattan skyline.

Designed and built by BE, the station is the first solar-powered charging station in New York City and one of only a few in the world. Brooklyn Bridge Park will use the donated station to charge its electric service vehicles (EVs) using only the power of the sun. This project greatly enhances the Park's already impressive sustainability efforts, which include the reuse of materials from demolished buildings, use of native plant species, reintroduction of marine habitats and management of rainwater and runoff.

Using solar power to operate its EVs will yield significant cost savings for Brooklyn Bridge Park – more than \$200,000 in gasoline costs, and tens of thousands of dollars in electricity costs, over the 25-year lifetime of the project. More than 530 tons of CO<sub>2</sub> would have been emitted during this period had the Park chosen to use traditional service vehicles.

“On behalf of Brooklyn Bridge Park, I thank Beautiful Earth for the gift of this pioneering solar-powered charging station for the park's fleet of electric vehicles,” said President of Brooklyn Bridge Park Regina Myer. “Brooklyn Bridge Park is New York's premiere sustainably-built and operated public park and the charging station furthers our mission to honor the environment and conserve resources. We are thrilled to partner with one of Brooklyn's most innovative technology companies and to help demonstrate the future of renewable energy.”

“There are ambitious emissions reductions goals in PlaNYC, our long-term vision for a greener, greater New York,” said David Bragdon, Director of the Mayor Bloomberg's Office of Long-Term Planning and Sustainability. “The Beautiful Earth charging station at Brooklyn Bridge Park and other steps we have taken to green our fleet of vehicles will help us meet our goal and set an example for the thousands of visitors that will enter the park and see the charging station.”

Constructed with two upcycled, decommissioned steel shipping containers stacked on top of each other, BE's charging station is off-grid, entirely powered by 24 photovoltaic panels on the roof, which catch the sun's rays throughout the day and store them as electricity in battery packs for 24/7, on-demand use. With production of 5.6 kilowatts, the station also stores enough energy to power a small home and can charge five electric service vehicles and a full-size electric car as they come and go.

“We are honored to contribute to the sustainability of this 21st century park, one in which an underused stretch of waterfront has been majestically transformed and opened to the public in an environmentally-sensitive way,” said Beautiful Earth Group President and CEO Lex Heslin. “We look forward to a long, fruitful and emissions-free collaboration.”

BE originally operated its solar-powered EV charging station on an industrial lot in Red Hook before donating it to Brooklyn Bridge Park. To build the station, BE purchased photovoltaic panels made at a Sharp Electronics plant in Tennessee; a racking system from Unirac in New Mexico; recycled containers from a local New York vendor; batteries, which are 97 percent recyclable, from the Trojan Battery Company in Georgia; inverters from OutBack Power Systems in Washington; and the solar array's frame from U.S. Fence Systems in Brooklyn.

An additional benefit of the charging station is that it is modular – it can be deconstructed, moved and reassembled in less than a day – and it serves as a model for other parks and small businesses looking to use clean energy for their vehicles. The charging station is scheduled to become part of a larger New York Center for Sustainable Energy that will be built and unveiled in the Park this spring.

BE supports the use of electric vehicles as a crucial step toward long-term sustainability in transportation and as an innovative solution that will contribute to New York's PlaNYC initiative, which seeks a 30 percent reduction in the City's carbon emissions by 2030.

BE broke ground in December 2010 on two 19 MW photovoltaic (PV) electricity generating plants in Southern California. With a total project cost of approximately \$170 million, BE's Del Sur I and II projects located in Lancaster, CA will supply electricity to over 8,000 homes in the area. BE is also investing extensively in EV charging stations and other "cleantech" projects and services throughout the United States and Asia. The company has plans to develop an Asian headquarters (HQ), most likely in Japan, to serve its submarkets and the growing demand in that region, as well as its partners and affiliates, such as Beautiful China Group™.

Beautiful Earth Group (BE; [www.beautifulearthgroup.com](http://www.beautifulearthgroup.com)), a Brooklyn-based sustainable energy company founded in 2008, develops, owns and operates utility-scale solar power and wind power generating facilities, as well as EV charging infrastructure. BE invests exclusively in non-carbon emitting electricity generation and seeks to promote long-term green solutions towards a goal of sustainability.

Brooklyn Bridge Park Corporation, known as Brooklyn Bridge Park, is the not-for-profit entity responsible for the planning, construction, maintenance and operation of Brooklyn Bridge Park, an 85-acre sustainable waterfront park stretching 1.3 miles along Brooklyn's East River shoreline.

Brooklyn Bridge Park is one of the nine waterfront destinations that comprise NYHarborWay, an initiative of the Bloomberg Administration to make the New York Harbor a major recreational destination for New Yorkers and visitors. Spearheaded by NYC & Company, the initiative eventually will connect the nine major waterfront points of interest by ferry or bike greenways. In addition, NYHarborWay will develop a cohesive programming, marketing and communications platform which will drive visitation to the nine waterfront sites. In addition to Brooklyn Bridge Park, the destinations are Governors Island, Hudson River Park, The Battery, Ellis Island, Liberty Island, Atlantic Basin, East River Esplanade and Liberty State Park.

## **Connecticut Passes America's First Full 'Green Bank,' Proving Clean Energy is a Bipartisan Issue**

By Stephen Lacey on Jun 9, 2011 at 10:02 am

Clean energy advocates have been pushing the U.S. Congress to pass the Clean Energy Development Administration (CEDA). CEDA would act as a "green bank" to help provide financing for clean energy companies that may face barriers in funding innovative technologies or first-of-a-kind projects. This program would be instrumental in helping drive down the cost of technologies and the cost of financing — all while driving up the value for American consumers and businesses.

CAP's Bracken Hendricks and Lisbeth Kaufman report on Connecticut's effort to lead the way on clean energy financing.

This week, Connecticut Governor Dan Malloy signed into law the nation's largest "Green Bank" program. (AP Photo/Fred Beckham)

While Gov. Christie works to dismantle clean energy in New Jersey, his neighbor, Connecticut Gov. Malloy just signed a major energy law comprising a broad-based clean energy and economic development program. The Law, SB1243, passed unanimously with bi-partisan support, will reform Connecticut's energy system to cut costs for consumers and transition to cleaner energy. With a 36-0 vote in the Senate and a 139-8 vote in the House, Gov. Malloy and the Connecticut Legislators demonstrated that clean energy can gain solid bi-partisan support:

House Minority Leader Lawrence F. Cafero Jr., R-Norwalk, said in a partisan year, the energy bill "was a refreshing respite. It was a classic example of what you can do when you sit down with people on all sides of an issue."

The law will combine the former Department of Environmental Protection (DEP) with the former Public Utility Control to create a Department of Energy and Environmental Protection (DEEP) that will oversee the energy system reform. DEEP will be run by the current DEP commissioner, Dan Esty, who is also an environmental Professor, Lawyer and Policy maker from Yale, and author of the prize-winning book "Green to Gold: How Smart Companies Use Environmental Strategy to Innovate, Create Value, and Build Competitive Advantage." Esty, who spoke about the need for comprehensive energy policy at a CAP-hosted conference in November, was a major architect of the bill.

One of the Republican legislators' most favored provisions in the law is the Clean Energy Finance and Investment Authority (CEFIA), the nation's first full-scale Green Bank. The proposal comes with a low price tag for taxpayers because it repurposes an existing fund within the state, with which the CEFIA will leverage much larger amounts of private capital. It will take over the current Clean Energy Fund to drive investment and get major new clean energy projects built in Connecticut.

The CEFIA is essentially a state version of the Energy Independence Trust (EIT), which the Center for American Progress first proposed last year with the Coalition for Green Capital in a paper Cutting the Cost of Clean Energy.

The CEFIA is a huge step forward for Connecticut, but it is also an important example for the nation by demonstrating how to cut the cost of investment in renewables and energy efficiency. By providing low-cost financing specifically for clean energy projects, the CEFIA will incentivize new job creating investments in projects, even as it lowers the price of clean and sustainable electricity. By helping bring the industry to scale, and drive new technology "down the cost curve," Connecticut is helping consumers everywhere.

As more renewable energy is deployed and new energy efficient products come to market, companies will take advantage of economies of scale to decrease the costs of building projects, reaping real benefits for consumers. The CEFIA can serve as a prototype for other State Green Banks, and for federal policy like the Clean Energy Deployment Administration proposed in the Senate to commercialize new technologies and the Energy Independence Trust which will help those technologies reach the market at scale.

Though the U.S. invented and improved many of the clean energy technologies used today, in recent years we have fallen behind in the clean energy race. It's not that clean energy is scarce, expensive, or bad for business, as opponents would have you believe. Rather, a lack of comprehensive energy policy combined with outdated subsidies for fossil fuels, has created an unfriendly investment environment for clean energy.

The U.S. needs smart policies, like Connecticut's new Clean Energy Finance and Investment Authority, to harness our clean energy potential and further drive down the price of clean energy. Gov. Malloy and the bipartisan work of the Connecticut legislature have made a major advance in U.S. clean energy policy. The Center for American Progress salutes their leadership. Other states would do well to follow their example.

— Bracken Hendricks and Lisbeth Kaufman

June 9, 2011

Hi All,

The Hell's Kitchen Farm Project is breaking ground on a rooftop farm and we need you to make this grassroots project possible! On Thursday, June 16th from 9am to 3pm we will be creating a bucket brigade of volunteers to get the soil to the roof! Our rooftop farm will provide much-needed fresh produce to food pantry customers in the Hell's Kitchen neighborhood while also educating community members on urban agriculture and nutrition. This project is only possible with the work of volunteers! We will have a fun, strenuous day of volunteering and learning! Come prepared for a workout and dress appropriately for the weather! We recommend bringing work gloves, sunscreen, and water if you can (we will have some water on site). Lunch provided. Come to Metro Baptist Church, 410 West 40th Street at 9am! The church is located between 9th and 10th Avenues. We are conveniently located off the A/C/E trains at 42nd Street-Port Authority and within walking distance of the 1/2/3/N/Q/R/7 trains at 42nd Street-Times Square.

Those interested in volunteering should RSVP to Anthony Reuter at [hellskitchenfarmproject@gmail.com](mailto:hellskitchenfarmproject@gmail.com) (walk up volunteers still welcome!)

Anthony Reuter

Coordinator

Hell's Kitchen Farm Project

(716) 759-HKFP

[hellskitchenfarmproject@gmail.com](mailto:hellskitchenfarmproject@gmail.com).

If you have any questions about this volunteer effort, please do not hesitate to contact me:

Betty Mackintosh

212-243-2786



June 8, 2011 06:15pm EST

## **Massive Solar Flare Misses Earth, but Are We Ready for the Big One?**

Although yesterday's solar flare won't seriously harm the Earth, the potential for an extreme event is on the rise. Is the world prepared?

By Peter Pachal

The Sun roared out a huge solar flare yesterday. NASA caught it on film, ranking the spectacular blast as a Class-M flare, just one spot below the the most disruptive type of flare, X. Even so, NASA says it will give Earth a mere "glancing blow," and the National Weather Service expects it will cause only minor disruptions to satellites and power grids.

It could have been much worse. For centuries, solar flares have been responsible for a multitude of earth-bound calamities, from blackouts to disrupted communications to strange lights in the sky. In 1859, the biggest flare on record hit, creating auroras worldwide and interrupting telegraph service for weeks. Considering today's connected world—and our reliance on satellites—a major solar storm could be disastrous.

The sun is entering a particularly active time, says NASA, and big flares like the one from yesterday will likely be common during the next few years, with solar activity expected to peak around 2013. Most solar flares will only cause minor problems with satellites and power grids, but there's always a chance that a monster like the one from 1859 could hit.

"The worst-case scenario is an extreme event," says Michael Hesse, chief of NASA's Space Weather Laboratory at the Goddard Space Flight Center in Maryland. "If it were to happen and we don't take any precautions, it would probably knock out our power grid for an extended period of time and destroy a sizable fraction of our satellite infrastructure."

"This is not something we expect to happen tomorrow," he cautions. "But it's like the impact of a hurricane on a specific location. You don't expect it to happen tomorrow, but you might want to think about if it were to happen."

### **Anatomy of a Solar Flare**

It helps to understand just what a solar flare is, and how it affects technology. The initial burst from the surface of the sun sends out massive amounts of electromagnetic radiation, particularly x-rays. These travel toward the earth at the speed of light and can cause some problems with communication, but they're typically temporary and not that serious.

Depending on where the eruption is located on the sun, the flare also creates a huge amount of high-energy particles, which can achieve energies in the order of hundreds of millions of electron volts. That's enough to be "very hazardous to spacecraft," says Michael Hesse.

But that's not the worst of it. A solar flare can also shoot out what's called a "corona mass ejection," a stream of particles that moves much slower than the speed of light but still with enough force to cause serious damage. Typically, this mass hits the earth about one to three days after the initial flare. How fast it gets here depends on the magnitude of the burst, and the faster it goes, the greater the danger. However, not all ejections actually hit the earth. Hesse estimates about one in ten flare ejections impact the earth. The ejection from yesterday's flare will apparently miss.

If a corona ejection is powerful enough, and the earth is in its path, look out. Satellites are the most threatened, for obvious reasons, and a serious flare could damage or even destroy them, Hesse says. For regular people, that

could mean no GPS, no satellite TV or radio, and disrupted communications for anything that relies on satellites as part of its network. The consequences to businesses can be even more severe, as satellites and GPS are intertwined with many other industries. For example, companies use GPS to time-stamp financial transactions.

"Satellites can get irradiated," Hesse explains. "Radiation levels in the magnetosphere can increase substantially, and that can be harmful to satellites. GPS can be substantially affected. Devices will lose lock."

The interaction between the corona ejection and the earth's atmosphere and magnetic field is how solar flares affect the power grid. When those particles hit the ionosphere, they create a voltage between the atmosphere and the earth. As a result, power systems that use the earth as a grounding voltage (read: all of them) no longer work properly, which can disrupt power delivery to large areas.

Earth's atmosphere and magnetic field shield the surface from any direct effects of a solar flare. Generally, terrestrial communication such as cell-phone networks (2G, 3G, and 4G), TV and radio broadcasting, and Wi-Fi aren't affected much by solar storms, if at all. However, if the power grid goes down for extended periods, so too will wireless networks and cell-phone towers. And good luck switching on your TV or radio.

### Preparing for the Worst

So how can we prepare for the very real possibility of "the big one"—a colossal solar storm hitting the earth in the next few years? Satellite owners (including the government) can do two things: first, they can harden their birds to be resistant to radiation, which can be expensive. Second, when data suggests a solar flare is about to strike, they can switch off as many systems as possible on the satellites, since typically they're more likely to fail when energized.

Power plants have a much more troublesome dilemma in the event of a major storm. Faced with a potentially massive blackout that could last for days or weeks, they may need to contemplate a rolling, controlled blackout for the duration of a massive solar flare.

"A controlled blackout is much better than a power outage that takes weeks or months," says Hesse. "If you know in advance, you can bring down the load. In the extreme case, it may be the lesser evil. Of course, a decision like that has to be based on very, very solid evidence."

The key to having that evidence is refined science in predicting solar flares. While progress is being made, Hesse says predictive models for space weather aren't anywhere near the accuracy of those used for the terrestrial variety.

"I think the National Weather Service does a good job forecasting weather. Space weather is not a mature science. We actually have many things that we don't really understand properly. We're doing a pretty good job, but we need to do more to be able to really say with confidence, 'Tomorrow at this time, it would be a good idea if this satellite system were turned off.'"

## **Solar Flare Sparks Biggest Eruption Ever Seen on Sun**

Enormous ejection of particles into space shocks scientists

Dave Mosher

National Geographic News

Published June 8, 2011

A mushroom of cooled plasma popped like a pimple and rained onto the surface of the sun yesterday—shooting perhaps the largest amount of solar material into space ever seen, scientists say.

The solar flare—an unusually bright spot on the sun—wasn't surprising as a "moderate" event. Space observatories in the past year recorded about 70 such solar flares, each roughly ten times weaker than "extreme" flares, of which only two have occurred since 2007.

Instead, what shocked scientists was the unusual amount of material that lofted up, expanded, and fell back down over roughly half the surface area of the sun. The event's simultaneous launch of particles into space is called a coronal mass ejection (CME).

"This totally caught us by surprise. There wasn't much going on with this spot, but as it came from behind the sun, all of the sudden there was a flare and huge ejection of particles," said astrophysicist Phillip Chamberlin of NASA's Solar Dynamics Observatory (SDO), one of several spacecraft that recorded the event.

"We've never seen a CME this enormous."

### **Solar Flares May Threaten Power Grids**

Chamberlin said it will take some time to calculate the energy and mass of electrons and protons blasted into space. But he noted the volume occupied a space hundreds of times bigger than a single Earth.

The ejection of particles burst from the right limb of the sun and sprayed into space, so the blast will miss Earth—though the explosion may brighten auroras near Earth's poles, Chamberlin said.

But he warned space-weather experts are concerned about future solar events.

The sun's 11-year cycle of activity, driven by tangled surface magnetic fields, will hit its maximum in late 2013 or early 2014. Magnetic messiness will peak around that time and prompt nasty solar storms.

"We'll probably see [extreme] flares every couple of months instead of years," Chamberlin said.

If one of these powerful flares—and its coronal mass ejection—faces Earth, the particles will pound satellite components with charged particles, short some out, and potentially cripple them.

On the planet's surface, extra currents of solar particles drive extra electric current through power lines and heat them up. A solar storm in 1859, for example, caused telegraph lines to burst into flames. Power companies distribute loads to avoid such a disaster, but energetic solar storms could still blow transformers and lead to power outages, especially during heat waves like the one sweeping the eastern U.S. this week.

"Despite great countermeasures, the power grid is still vulnerable. We could be in for some serious problems," Chamberlin said.

## Iceland Lake Disappearing Into New Crack in Earth

Bijal P. Trivedi

for National Geographic Today

October 1, 2001

Icelanders are accustomed to their land being stretched, split, and torn by violent earthquakes and haphazardly rebuilt by exploding volcanoes. But everyone was surprised when a large lake began to disappear into a long fissure created by one of last summer's earthquakes.

The draining lake is an oddity even by Icelandic standards, and has lured hordes of curious onlookers to its barren shores.

"If you put your ear to the ground, you can hear the lake draining," said geologist Amy Clifton of the Nordic Volcanological Institute in Reykjavik, Iceland. "It sounds like water going down the sink."

Last year, during a leisurely Sunday drive, a geologist noticed a large gash in the landscape about 20 kilometers (13 miles) from Reykjavik and reported it to Clifton. When she arrived she found a fissure—about a foot wide and 400 meters (1,280 feet) long—that led directly into Lake Kleifarvatn and disappeared beneath the water.

Lake Kleifarvatn, which measured about six kilometers (3.7 miles) long and 2.3 kilometers (1.4 miles) wide last year, has shrunk dramatically. Now it is only 3.5 kilometers long and roughly 1.8 kilometers wide, said Clifton.

Kleifarvatn is draining at about one centimeter (one-third of an inch) a day, according to Clifton. "You can almost see the lake level drop," she said.

Summerhouses that were once mere steps from waterfront are now more than a kilometer away from the water's edge. The placid waters have dropped more than four meters in the last year. In their place is a barren lake bed speckled with sulphur-rimmed thermal springs that spit boiling water and mud.

Clifton spends much of her time mapping and measuring "rips, gashes, and holes" in the Icelandic landscape. Describing herself as a "walking pencil," because her treks are all mapped by global positioning system (GPS) technology, she investigates open cracks, torn vegetation, rock falls, sinkholes, and other disturbances and tries to determine what caused them.

But what phenomenon created the large fissure at Lake Kleifarvatn is an enigma. "I couldn't find an earthquake in our database that was big enough to cause such a huge rupture in the surface," said Clifton.

She and some of her colleagues think a "quiet earthquake" may be responsible. Explaining such a scenario, Clifton said the water may have "lubricated the fault lines, allowing them to slide quietly and slowly, preventing the shock waves that would normally accompany an earthquake."

The earthquake thought to be responsible for the fissure at Lake Kleifarvatn occurred last year on June 17, about 80 kilometers (49 miles) east in the South Icelandic seismic zone. "No one ever expected earthquakes in this region to affect the surface in the Reykjanes Peninsula, where Lake Kleifarvatn is located," said Clifton.

Clifton hopes to eventually understand the relationship between the movement of faults deep within Earth and their surface effects in the region. Such knowledge is important for mapping areas that may be subject to future hazards, especially in regions where the population is growing.

## **Giant crack in Africa formed in just days**

22:17 04 November 2009 by MacGregor Campbell

A crack in the Earth's crust – which could be the forerunner to a new ocean – ripped open in just days in 2005, a new study suggests. The opening, located in the Afar region of Ethiopia, presents a unique opportunity for geologists to study how mid-ocean ridges form.

The crack is the surface component of a continental rift forming as the Arabian and African plates drift away from one another. It began to open up in September 2005, when a volcano at the northern end of the rift, called Dabbahu, erupted.

The magma inside the volcano did not reach the surface and erupt as a fountain of lava – instead, it was diverted into the continental rift underground. The magma cooled into a wedge-shaped "dike" that was then uplifted, rupturing the surface and creating a 500-metre-long, 60-metre-deep crack.

Using sensor data collected by universities in the region, researchers led by Atalay Ayele of Addis Ababa University in Ethiopia reconstructed the sequence of seismic events that led to the crack's formation. They found that a 60-kilometre-long, 8-metre-wide dike of solidified magma formed in the rift, causing the crack, in a matter of days.

### **'Stunning' ferocity**

Similar dikes in Iceland are typically around 10 kilometres long and 1 metre wide and can take years to form. The new study shows the formation of dikes can occur in larger segments – and over much shorter periods of time – than previously thought.

"The ferocity of what we saw during this episode stunned everyone," says Cynthia Ebinger, a team member at the University of Rochester in New York.

While the Mount Dabbahu rift is still hundreds of kilometres inland, Ebinger says it could continue to widen and lengthen. "As the plates keep spreading apart, it will end up looking like the Red Sea," she says.

### **New ocean**

Eventually it could reach the east coast of Ethiopia and fill up with seawater. "At some point, if that spreading and rifting continues, then that area will be flooded," says Ken Macdonald, a marine geophysicist at the University of California, Santa Barbara, who was not involved with the study.

Ebinger says this won't happen any time soon – it would take around 4 million years for the crack to reach the size of the Red Sea. Other areas in the Afar region are below sea level, however, and could see flooding before that if similar rifting occurs near the coastal volcanoes to the north and east that form a natural levee against the sea.

Macdonald says the process of continental plates spreading apart and filling in with magma is analogous to what happens on the deep seafloor at mid-ocean ridges, which are difficult to study because they lie a few kilometres under water. "This is very exciting in terms of its implications for the deep ocean and how mid-ocean ridges work," he told New Scientist.

## **Tropical regions to get even hotter summers within 20 years 'due to global warming'... and it's here to stay**

By Daily Mail Reporter

Last updated at 4:34 PM on 7th June 2011

- North America, southern Europe and China all likely to undergo extreme temperature shifts within 60 years

Tropical regions in Africa, Asia and South America could see 'the permanent emergence of unprecedented summer heat' in the next 20 years, scientists have warned.

The tropics and much of the Northern Hemisphere are likely to experience an irreversible rise in summer temperatures if greenhouse gas emissions continue at their present rate, a study claims.

Researchers at Stanford University said North America - including the U.S. - southern Europe and China are likely to undergo extreme summer temperature shifts within 60 years.

This dramatic change could have severe consequences for human health, agricultural production and ecosystem productivity.

Lead author Noah Diffenbaugh said: 'According to our projections, large areas of the globe are likely to warm up so quickly that, by the middle of this century, even the coolest summers will be hotter than the hottest summers of the past 50 years.'

He added: 'When scientists talk about global warming causing more heat waves, people often ask if that means that the hottest temperatures will become "the new normal".'

'That got us thinking - at what point can we expect the coolest seasonal temperatures to always be hotter than the historically highest temperatures for that season?'

To determine the seasonal impact of global warming during the coming decades, Dr Diffenbaugh and co-author Martin Scherer analysed more than 50 climate model experiments.

Among these were computer simulations of the 21st century when global greenhouse gas concentrations are expected to increase, and simulations of the 20th century that accurately 'predicted' Earth's climate during the last 50 years.

Their analysis revealed that many parts of the planet could experience a permanent spike in seasonal temperatures within 60 years.

Dr Diffenbaugh said: 'We also analysed historical data from weather stations around the world to see if the projected emergence of unprecedented heat had already begun.'

'It turns out that when we look back in time using temperature records, we find that this extreme heat emergence is occurring now, and that climate models represent the historical patterns remarkably well.'

According to both the climate model analysis and the historical weather data, the tropics are heating up the fastest.

The scientists found that the most immediate increase in extreme seasonal heat occurs in the tropics, with up to 70 per cent of seasons from 2010 to 2039 exceeding the late-20th century maximum.

Tropical regions may see the most dramatic changes first, but wide swathes of North America, China and Mediterranean Europe are also likely to enter into a new heat regime by 2070, according to the study.

As an example of the severe consequences of such a drastic change, Dr Diffenbaugh pointed to record heat waves in Europe in 2003 that killed 40,000 people.

He also cited studies showing that projected increases in summer temperatures in the Midwestern U.S. could reduce the harvest of staples, such as corn and soy beans, by more than 30 per cent.

Dr Diffenbaugh was surprised to see how quickly the new, potentially destructive heat regimes are likely to emerge, given that the study was based on a relatively moderate forecast of greenhouse gas emissions in the 21st century.

The results will be published in the journal *Climatic Change*.

## Scientists say global warming behind recent extreme weather

By RENEE SCHOOFF | McClatchy-Tribune

Published: May 26, 2011

WASHINGTON --

The deadliest tornadoes in decades. Severe flooding on the Mississippi River. Drought in Texas, and heavy rains in Tennessee.

What's up with the weather?

Scientists say there are connections between many of the severe weather events of the past month and global warming.

"Basically, as we warm the world up, the atmosphere can hold more moisture in it," said Anne Jefferson, an assistant professor in the geography and Earth science department at the University of North Carolina, Charlotte.

"Weather patterns that used to be limited to the South move farther north now," she said. "Both of those things together will increase the frequency with which we see these big rainstorms, and those are likely to increase flooding in the future."

Flooding on the Mississippi has become more frequent and more extensive since about 1950, Jefferson said. This year's huge flood was created by snowmelt and rain-on-snow in the upper Mississippi River basin, and very intense rain in its middle regions.

"Climatically we have a higher frequency of rain-on-snow events, a real recipe for flooding," she said. "Also you're getting more warm, moist air from the Gulf of Mexico farther north up the Mississippi. It's both a warming and, more so, the fact that the weather patterns have changed and are projected to continue to change, so the precipitation patterns are changing."

Scientists say these changes are part of the general shift in the world's climate known as global warming — primarily the result of billions of tons of heat-trapping gases released into the atmosphere from burning fossil fuels, as well as deforestation.

A report by the National Academy of Sciences on managing climate risks put it this way: "Climate change is occurring, is very likely caused primarily by the emission of greenhouse gases from human activities, and poses significant risks for a range of human and natural systems."

Scientists have observed increases in heavy downpours, rising temperatures, longer growing seasons and earlier snowmelts. They predict that rainfall will become more concentrated in heavy downpours, with longer dry periods in between. Dry places are expected to get drier, while rainy places get wetter.

The study of long-term statistical trends shows an increase in heat waves and heavy rainfalls, said Katharine Hayhoe, a climate scientist at Texas Tech University.

Kevin Trenberth, a senior scientist in the climate analysis section at the National Center for Atmospheric Research, said that when warmth and moisture at the surface builds up, one atmospheric response is to transport it upward, a process known as convection. That's what causes intense thunderstorms, tropical storms and hurricanes, he said.



The main driver of super-cell thunderstorms — those with deep rotating updrafts — is warm, moist air near the surface, he said. "In terms of climate change, the main sources of warm, moist air in the regions that have been hit are out of the Gulf of Mexico or out of the tropical Atlantic. This sets the stage for the atmosphere becoming very unstable."

What happened in the case of the three big tornado outbreaks in April and May was that normal weather systems tapped into the moisture out of the Gulf and became massive super-cell thunderstorms that set the stage for very large tornadoes, Trenberth said.

Tornadoes also depend on wind shear, a weather component that normally occurs at this time of year, he added.

Jeff Masters, a meteorologist and co-founder of the website Weather Underground, writing on his WunderBlog on Tuesday, said that this year's violent tornado season is "either a fluke, the start of a new trend, or an early warning symptom that the climate is growing unstable and is transitioning to a new, higher energy state with the potential to create unprecedented weather and climate events.

"All are reasonable explanations, but we don't have a long enough history of good tornado data to judge which is most likely to be correct."

Over the past 50 years, the average U.S. temperature has risen more than 2 degrees Fahrenheit, precipitation has increased an average of 5 percent, and many types of extreme weather events have increased in frequency and intensity. With hurricanes, only the intensity rose.

## CRAFTS AND HOBBIES

Baked goods (cupcakes, cookies, pies, cakes)

Basket weaving

Balloon animals

Banner making

Beadwork

Bee keeping

Bookbinding

Cabinetmaking

Candle making

Canning

Carpentry

Calligraphy

Canvas work

Card making

Ceramics

Chip carving

Collage

Corn dolly making

Cross stitch

Crocheting

Curve stitching

Decoupage

Decorative painting

Doll clothes making

Doll making

Doll house construction

Doll house furnishing

Embroidery

Embroidered pet ID collars

Embossing

Egg decorating

Etching

Fabric crafts

Felting

Floral design

Fretwork

Gift baskets

Glassblowing

Holiday-themed cards and other items

Iris folding

Jewelry making

Knitting

Lace-making

Lapidary (working with stones)

Lucet (technique for making cord)

Macrame

Marbling

Metalworking

Millinery

## **CRAFTS AND HOBBIES**

Miniatures

Mosiacs

Needlework

Origami

Parchment craft

Patchwork

Paper filigree

Paper making

Paper modeling

Papier mache

Pioneering (building rustic structures by lashing together poles and spars)

Polymer clay sculpting

Pop-up book making

Pottery

Pressed flower craft

Printmaking

Purse making

Quilting

Ribbon embroidery

Rug making

Rubber stamp making

Scrapbooking

Sculpture

Shoemaking

Sewing

Silversmithing

Spinning

Soap making

Stained glass making

Straw marquetry (making sculptures out of or decorating with straw)

String art

Tapestry weaving

Tatting

T-shirt art

Toy making

Weaving

Wood burning

Wood crafts

Wood turning

Woodworking

## ECO-VILLAGES IN THE UNITED STATES

### ARIZONA

Douglas – Sacred Garden Sanctuary: <http://sacredgardensanctuary.org/>  
 Mayer – Arcosanti: <http://www.arcosanti.org/>  
 Mesa – The Grove: <http://www.hostinghelps.com/thewiccangrove/index.html>  
 Phoenix – Phoenix Cooperative Exchange: no website. Email: [brianm9943@aol.com](mailto:brianm9943@aol.com)  
 Prescott – Manzanita Village: <http://www.manzanitavillage.com/>  
 Sedona – Aquarian Concepts Community: <http://www.aquarianconcepts.com/>  
 Tumacacori – Global Community Communications Alliance:  
<http://www.globalcommunitycommunicationsalliance.org/>  
 Tubac – Global Community Communications Alliance: <http://www.gccalliance.org/>

### CALIFORNIA

Cantil – The Cell Habitat: <mailto:rick@advancedlearningacademy.org>  
 Kenwood – Eden Project: <http://www.edenvillage.net/>  
 Los Angeles – Los Angeles Eco-Village: <http://www.ic.org/laev>  
 Nevada City – Nevada City Ecovillage: no website. Email: [info@ecovillager.com](mailto:info@ecovillager.com)  
 Oakland – 611 Ecovillage: <http://www.611ecovillage.com/>  
 Oxnard – Project Sunstone: <http://www.projectsunstone.com/>  
 San Diego – San Diego Ecovillage: <http://www.sandiegoecovillage.com/>  
 San Mateo – San Mateo Ecovillage: <http://www.greensolutions.org/smcc.htm>  
 Sebastopol – Green Valley Village: <http://www.greenvalleyvillage.com/>  
 Soquel – The Happy Brigade Community: <http://www.happybrigade.com/>  
 Sonoma – Rancho Estrella: <http://www.rustlingridge.com/>

### COLORADO

Boulder – Prairie Sage: <http://www.frontrangeecotown.com/>  
 Boulder – Hummingbird Ranch: <http://www.globalfamily.net/website/60-hummingbird.html>  
 Boulder – Gaia University: <mailto:info@gaiauniversity.org>  
 Moffat – EarthArt Village: <http://www.earthart.org/>  
 Paoria – Eden Ranch Community: <http://www.edenranch.com/>  
 San Luis – Colorado Ecovillage: <http://coloradoecovillage.com/>  
 Weston: –Earth Mountain Education Farm: <http://earthmountainfarm.org/index.htm>

### CONNECTICUT

Terra Nostra – Middletown: <mailto:crazeway@yahoo.com>

### GEORGIA

Atlanta – Big Island Cohousing and Ecovillage: <http://www.geocities.com/noahglassman/>  
 Hiawassee – Enota Mountain Ecovillage: <http://www.enota.org%20&%20www.enota.com/>  
 Jeffersonville – Yonders Farm: <http://yondersfarm.net/>

### HAWAII

Hana – Olahomua: <mailto:olahonua@maui.net>

### IOWA

Fairfield– Abundance Ecovillage: <http://www.abundance-ecovillage.com/>

**KENTUCKY**

Berea – Berea College Ecovillage: <http://www.berea.edu/sens/ecovillage/>

**ECO-VILLAGES IN THE UNITES STATES****MAINE**

Perry – Peskotomuhkati Nation: <mailto:peskotomuhkati@gmail.com>

**MARYLAND**

Freeland – Heathcote Community: <http://www.heathcote.org/>

**MASSACHUSETTS**

Petersham– Earthlands: <http://www.tiac.com/users/elandspc/>

Jamaica Plain– Heartbeat Collective: <mailto:orionk@gmail.com>

Colrain– Katywil: <http://www.katywil.com/>

Newburyport– Odonata Ecovillage: <http://odonatavillage.org/>

Berlin– Sawyer Hill Ecovillage: <http://www.sawyerhill.org/>

Shutesbury– Sirius Community: <http://www.siriuscommunity.org/>

**MICHIGAN**

Detroit–Ecovillage Detroit: <http://www.adamah.org/ecovillage/ecovillage.html>

Ann Arbor– Hei Wa House: <http://www.ic.org/heiwa/>

Nazareth – Manitou Arbor Ecovillage: <http://www.manitouarbor.org/>

Flint– Michigan Ecovillage: <http://www.michiganecovillage.com/>

**MISSISSIPPI**

Oxford– Upland Hills Learning Community: <http://uplandhills.org/>

**MINNESOTA**

Fridley – Island Park Sustainable Community: <http://www.islandparkmn.com/>

**MISSOURI**

Cabool – Solaris Valhalla CSA Farm and Education Center: <http://www.svfarm.org/>

Caulfield – Ravenwood Eco-village: <mailto:Ravenleigh1952@yahoo.com>

Rutledge – Dancing Rabbit Ecovillage - <http://www.dancingrabbit.org/>

Tecumseh – East Wind Community: <http://www.eastwind.org/>

Zanoni – Heartwood Hamlet: <http://www.ruralize.com/heartwoodhamlet.html>

**MONTANA**

Corvalis – Western Cultural Heritage Village: <http://www.wchi.net/>

Potomac – Sundog Ecovillage: <http://sundogecovillage.org/>

**NEW MEXICO**

Las Vegas – Bodhi Farms: <http://www.bodhifarms.com/>

Ojo Caliente – Broken Earth Tribal Pueblo: <http://www.brokenearth.org/ecovillage>

Santa Fe – Ecovercity: <http://www.ecoversity.org/>

Santa Fe – Pinon Ecovillage: <http://www.pinon-ecovillage.org/>

Silver City – Southwest Sufi Community: <mailto:rabiya@zianet.com>

**NEW YORK**

Bradford – Stuberdorf Solar Village: <http://www.stuberdorfsolarvillage.com/>

Greenfield Park – Point of Infinity: <http://www.newagepointofinfinity.com/>

Ithaca – Aurora Dwelling Circle: <http://newearthliving.net/>

Ithaca – Ecovillage at Ithaca: <http://www.ecovillage.ithaca.ny.us/>

Ithaca – White Hawk Ecovillage: <http://www.whitehawk.org/>

## **ECO-VILLAGES IN THE UNITES STATES**

### **NORTH CAROLINA**

Black Mountain – Earthaven Ecovillage: <http://earthaven.org/>

Gerton – Hickory Nut Forest Eco-Community: <http://www.hickorynutforest.com/>

Mill Spring – Zendik Farm: <http://www.zendik.org/>

### **OHIO**

Akron – The NEOhaus Ecovillage: <http://www.theneohaus.com/>

Cleveland – Cleveland Ecovillage: <http://www.detroitshoreway.org/>

### **OREGON**

Cottage Grove – Cerro Gordo: [http://www.pdss.com/cg/Cerro\\_Gordo.html](http://www.pdss.com/cg/Cerro_Gordo.html)

Deadwood – Alpha Farm: <http://www.pioneer.net/~alpha/>

Dexter – Lost Valley Educational Center: <http://www.lostvalley.org/>

Eastern Oregon – Oregon Working Group for an Eastern Oregon Ecovillage:  
<http://www.geocities.com/oregonworkinggroup>

### **PENNSYLVANIA**

Cashtown – Hundredfold Farm: <http://www.hundredfoldfarm.org>

Philadelphia – Green Village Philadelphia: <http://www.greenvillagephiladelphia.org/>

West Grove – Three Groves Ecovillage: <http://www.threegrovesecovillage.org/>

Winfield – Eco Community Farm: <mailto:pjc@dejazzd.com>

### **SOUTH CAROLINA**

Salem – Nature’s Spirit: <http://www.naturesspirit.org/>

### **TENNESSEE**

Arlington – Elfentree: <mailto:elfentree@aol.com>

Jefferson City – NuTribe Ecovillage: <mailto:watalu.eyaani@gmail.com>

Liberty – Sun Valley Community: <mailto:sunvalley@dekalb.net>

Summertown – The Farm: <http://www.thefarm.org/>

Washburn – Narrow Ridge Earth Literacy Center: <http://www.narrowridge.org/>

Whitwell – Moonshadow: <mailto:mediarights@bledsoe.net>

### **TEXAS**

Austin – Oak Village Commons: <http://www.oakhillcohousing.org/>

Laredo – La Flor del Agua: <http://www.laflordelagua.com/>

Rusk – Dancing Bear Ecovillage: <mailto:dancingbearecovillage@yahoo.com>

### **VERMONT**

Brandon – Neshobe Farm: <http://www.neshobefarm.com/>

### **VIRGINIA**

Arlington – Gesundheit Institute: <http://www.patchadams.org/>

Buena Vista – Living Earth Ecovillage: <http://www.livingearthecovillage.com/>

Floyd – Abundant Dawn Community: <http://www.abundantdawn.org/>

Lynchburg – Claytor Nature Study Center: <http://www.lynchburg.edu/claytor>

Mineral – Acorn Community: <http://www.ic.org/acorn/>

## **ECO-VILLAGES IN THE UNITES STATES**

### **WASHINGTON**

Arlington – Jordan Village: <http://www.jordanvillage.net/>

Bainbridge Island – Sacred Groves: <http://www.sacredgroves.com/>

Bellingham – Friends of the Trees Society: <http://www.friendsofthetrees.net/>

Bellingham – MoonShire: <mailto:benems@hotmail.com>

Bothell – Clearwater Commons: <http://www.clearwatercommons.com/>

Elk – Dapala Farm: <http://directory.ic.org/records/?action=view&page=view&re>

Hoodspport – Mountain Treehouse Ecovillage: <mailto:eric.nemo@gmail.com>

Monroe – Alderleaf Farm and Wilderness College: <http://www.wildernesscollege.com/>

Port Townsend – Port Townsend Ecovillage: <http://www.ptecovillage.org/>

### **WISCONSIN**

La Farge – Dreamtime Village: <http://www.dreamtimevillage.org/>

## **RESOURCES FOR LIVING A SUSTAINABLE LIFE**

**Below are some further resources for additional reading and information to assist you in living a more sustainable life.**

### **GENERAL BACKGROUND & INSPIRATIONAL**

- Abram, David. *The Spell of the Sensuous: Perception and Language in a More Than Human World*. 1996
- Archer, David. *The Long Thaw: How Humans are Changing the Next 100,000 Years of Earth's Climate*. 2008
- Berry, Thomas. *The Dream of the Earth*. 2006
- Jensen, Derrick. *Listening to the Land: Conversations about Nature, Culture and Eros*. 2008
- Kempf, Herve. *How the Rich are Destroying the Earth*. 2009
- Lappe, Frances Moore. *Getting a Grip; Clarity, Creating and Courage in a World Gone Mad*. 2008.
- Hawkins, Paul. *Blessed Unrest: How the Largest Social Movement in History is Restoring Grace, Justice and Beauty to the World*. 2008
- Hawkins, Paul and Lovins, Amory. *Natural Capitalism: Creating the Next Industrial Revolution*. 2008
- McDonough, William. *Cradle to Cradle: Remaking the Way We Make Things*. 2006
- McKibben, Bill. *Deep Economy: The Wealth of Communities and the Durable Future*. 2007.
- McKibben, Bill. *The End of Nature*. 2006/
- Meadows, Donella. *Thinking in Systems: A Primer*. 2009
- Nestle, Marion. *What to Eat*. 2007
- Null, Gary. *Living in the Moment: Prescription for the Soul*. 2008
- Roszak, Theodore. *The Voice of the Earth: An Exploration of Ecopsychology*. 2001
- Lovelock, James. *The Vanishing Face of Gaia: A Final Warning*. 2009
- Lovelock, James. *Gaia: A New Look at Life on Earth*. 2000
- Speth, James Gustave. *The Bridge at the Edge of the World: Capitalism, the Environment and Crossing from Crisis to Sustainability*. 2008

### **BEEKEEPING**

- Benjamin, Alison. *Keeping Bees and Making Honey*. 2008
- Conrad, Ross. *Natural Beekeeping: Organic Approaches to Modern Apiculture*. 2007
- Flottum, Kim & Blackiston, Howland. *Beekeeping for Dummies*. 2009
- Flottum, Kim. *The Backyard Beekeeper: An Absolute Beginner's Guide to Keeping Bees in Your Yard and Garden*. 2005



## **COMMUNITY & NEIGHBORHOOD**

Gershon, David. *Livable Neighborhood: A Program to Make Life Better on the Street Where You Live*. 2009

Henderson, Elizabeth. *Sharing the Harvest: A Citizen's Guide to Community Supported Agriculture*. 2008.

Holmgren, David (founder of Permaculture), *Future Scenarios: How Communities Can Adapt to Peak Oil and Climate Change*. 2009

Hopkins, Alix. *Groundswell: Stories of Saving Places, Finding Community*. 2008.

Jackson, Hildur. *Ecovillage Living: Restoring the Earth and Her People*. 1998.

## **ENERGY**

Bowman, Ron. *The Green Guide to Power: Thinking Outside the Grid*. 2008.

Gipe, Paul. *Wind Energy Basics: A Guide to Home and Community Scale Wind-Energy Systems*. 2009

Davidson, Joel. *The New Solar Electric Home: The Complete Guide to Photovoltaics for Your Home*. 2009

## **GARDENING**

Bell, Graham. *The Permaculture Way: Practical Steps to Create a Self-Sustaining World*. 2007

Coleman, Eliot, *The Winter Harvest Handbook*, 2009

Coleman, Eliot, *New Organic Grower*, 1989

Flores, Heather. *Food Not Lawns: How to Turn Your Yard into a Garden and Your Neighborhood into a Community*. 2008.

Hall, Jenny. *Growing Green: Animal-Free Organic Techniques*. 2007

Hart, Robert. *Forest Gardening: Cultivating an Edible Landscape*. 2008

Hemenway, Taby. *Gaia's Garden: A Guide to Homescale Permaculture*. 2009

Jacke, Dave. *Edible Forest Gardens: Ecological Vision and Theory for Temperate Climate Permaculture*. 2007

Jacke, Dave. *Edible Forest Gardens, Volume 2: Ecological Design and Practice for Temperate Climate Permaculture*. 2008

Kourik, Robert. *Drip Irrigation for Every Landscape and All Climates*. 2009

Laughton, Rebecca. *Surviving and Thriving On the Land: How to Use Your Time and Energy to Run a Successful Smallholding*. 2009

Logsdon, Gene. *Small-Scale Grain Raising: An Organic Guide to Growing, Processing and Using Nutritious Whole Grains for Home Gardeners and Local Farmers.*, 2009

Otto, Stella. *The Backyard Orchardist: A Complete Guide to Growing Fruit Trees in the Home Garden*. 2007

Poisson, Leandre. Solar Gardening: Growing Vegetables Year-Round the American Intensive Way. 2007

Ruppenthal, RJ. Fresh Food From Small Spaces: The Square-Inch Gardener's Guide to Year-Round Growing, Fermenting and Sprouting. 2009

Scott, Nicky. Composting: An Easy Household Guide.

Toensmeier, Eric. Perennial Vegetables: A Gardener's Guide to Over 100 Delicious and Easy to Grow Edibles. 2008.

Tozer, Frank. The Organic Gardener's Handbook. 2008

Tozer, Frank. The Vegetable Growers Handbook. 2008

Warren, Piers. How to Store Your Garden Produce. 2008

## **GREEN PRODUCTS**

Seireeni, Richard. The Gort Cloud: The Invisible Force Powering Today's Most Viable Green Brands. 2008

## **SUSTAINABLE BUSINESS & INVESTMENT**

Clift, Jan. Greening Your Office: From Cupboard to Corporation. 2007.

Esty, Daniel. Green to Gold: How Smart Companies Use Environmental Strategy to Innovate, Create, Value and Build Competitive Advantage. 2009

Henderson, Hazel. Ethical Markets: Growing the Green Economy. 2008.

Makower, Joel. Strategies for the Green Economy: Opportunities and Challenges in the New World of Business. 2008

Melaver, Martin. Living Above the Store: Building a Business that Creates Value, Inspires Change and Restores Land and Community. 2009

Tasch, Woody. Slow Money: Investing as if Food, Farms and Fertility Mattered. 2009

## **SUSTAINABLE LIVING**

Barnes, Peter. Climate Solutions: A Citizen's Guide to What Works, What Doesn't and Why. 2008.

Clift, Jon, Climate Change: Simple Things You Can Do to Make a Difference, 2009

Gershon, David. Green Living Handbook: A 6-Step Program to Create an Environmentally Sustainable Lifestyle. 2009

Greer, Beth. Super Natural Home: Improve Your Health, Home and Planet One Room at a Time. 2009.

Hren, Stephen and Rebekah. The Carbon Free Home: Thirty Six Remodeling Projects to Help Kick the Fossil-Fuel Habit. 2008

Nabhan, Gary. Renewing America's Food Traditions: Saving and Savoring the Continent's Most Endangered Foods. 2008.

Pollard, David. Find the Sweet Spot: The Natural Entrepreneur's Guide to Responsible, Sustainable, Joyful Work. 2009

Scott, Nicky. Reduce, Reuse, Recycle: An Easy Household Guide. 2006

Stein, Matthew. When Technology Fails: A Manual for Self-Reliance, Sustainability, and Surviving the Long Emergency. 2008.

Stoner, Tom and Rapp, Carolyn. Open Spaces, Sacred Places: Stories of How Nature Heals and Unifies. 2009

## **TOXIC ENVIRONMENT**

Baker, Nena. The Body Toxic: How the Hazardous Chemistry of Everyday Things Threatens Our Health and Well-Being. 2008

Blanc, Paul. How Everyday Products Make People Sick: Toxins at Home and in the Workplace. 2007

Davis, Devra. The Secret of the War on Cancer. 2008.

Shabecoff, Philip. Poisoned Profits: The Toxic Assault on Our Children. 2008

Shapiro, Mark. Exposed: Toxic Chemistry in Everyday Products and What's at Stake for American Power. 2009

Smith, Jeffrey. Seeds of Deception: Exposing Industry and Government Lies about the Safety of the Genetically Engineered Foods You're Eating. 2007

Smith, Jeffrey. Genetic Roulette: The Documented Health Risks of Genetically Engineered Foods. 2008.

Thomas, Patricia. What's In This Stuff?: The Hidden Toxins in Everyday Products. 2008

## **URBAN LIVING**

Jones, Van. The Green Collar Economy: How One Solution Can Fix Our Two Biggest Problems. 2008.

Wiland, Harry and Bell, Dale. Edens Lost and Found: How Ordinary Citizens are Restoring Our Great American Cities. 2008.

## **VEGAN & VEGETARIAN LIFESTYLE**

Masson, Jeffrey. The Face on Your Plate: The Truth About Food. 2009

Myers, Adrian. Organic Futures: A Case for Organic Gardening. 2008.

Null, Gary. Food Mood Connection: Nutritional & Environmental Approaches to Mental Health and Physical Well-Being. 2008

Pirello, Christina. This Crazy Vegan Life: A Prescription for an Endangered Species. 2008

Pollan, Michael. In Defense of Food: An Eater's Manifesto. 2009

Pollan, Michael. The Omnivore's Dilemma: A Natural History of Four Meals. 2007.

Robbins, John. The Food Revolution: How Your Diet Can Help Save Your Life & Our World. 2001

Roberts, Paul. The End of Food. 2008

## **Gary Null Lecture – June 3, 2011**

### **GREEN RESOURCES**

#### **Sustainable Living**

Chelsea Green Publishing: [www.chelseagreen.com](http://www.chelseagreen.com)

Omega Center for sustainable living, Rhinebeck, NY: [www.eomega.com](http://www.eomega.com)

#### **Farming and Gardening**

Genesis Farm, sustainable farm in New Jersey: <http://www.genesisfarm.org/>

Courses on Farming at Genesis Farm:

[http://www.genesisfarm.org/program.taf?\\_function=chron](http://www.genesisfarm.org/program.taf?_function=chron)

General Farming: <http://www.genepax.com/>

Cornell Cooperative Extension: [www.gardening.cornell.edu](http://www.gardening.cornell.edu)

Biodynamic Farming and Gardening Association: [www.biodynamics.com](http://www.biodynamics.com)

Northeast Organic Farming Association: [www.nofa.org](http://www.nofa.org)

The Sustainable Vegetable Garden by John Jeavons and Carol Cox

The Resilient Gardener – Food Production and Self-Reliance in Uncertain Times by Carol Deppe

#### **Rooftop gardening**

Lufa farms: [www.lufa.com](http://www.lufa.com)

Eagle Street Rooftop Farms, Brooklyn, NY: [www.rooftopfarms.org](http://www.rooftopfarms.org)

Vertical Farming: [www.verticalfarms.org](http://www.verticalfarms.org)

Urban Agriculture News: [www.urbanagriculture-news.com](http://www.urbanagriculture-news.com)

#### **Organic Seed Sources:**

Seeds of Change: <http://www.seedsofchange.com/>

Seed Alliance: [http://www.seedalliance.org/Seed\\_Companies\\_Selling\\_Organic\\_Seed/](http://www.seedalliance.org/Seed_Companies_Selling_Organic_Seed/)

Sustainable Seed Company: <http://sustainableseedco.com/>

Seed Savers: <http://www.seedsavers.org/>

#### **The Transition Movement**

The Transition Network: <http://transitionus.org/transition-101>

The Transition Handbook – From Oil Dependency to Local Resilience by Ron Hopkins

The Transition Timeline by Shaun Chamberlin and Ron Hopkins

#### **Eco-villages (Intentional Communities)**

Global Village Network: <http://gen.ecovillage.org/>

Fellowship for Intentional Communities: <http://directory.ic.org/records/ecovillages.php>

Ecovillage: <http://www.ecovillages.com/index.php>

Living Routes: Study Abroad in Eco Villages:

<http://www.livingroutes.org/programs/village.htm>

## **Homesteading**

<http://www.homestead.org/>

<http://nyhomesteader.blogspot.com/>

<http://www.daycreek.com/dc/html/ssmenu.htm>

<http://frugalhomesteading.com/>

<http://www.motherearthnews.com/Do-It-Yourself.aspx>

<http://www.manytracks.com/homestead.htm>

## **Living off the Grid**

<http://off-grid-living.com/>

<http://www.off-grid.net/>

<http://frugaldad.com/2009/04/05/living-off-the-grid/>

## **Housing Alternatives:**

Using straw bales to construct environmentally friendly houses

<http://greenliving.about.com/od/architecture/design/a/Green-Building-Straw-Bale.htm>

[www.strawbale.com](http://www.strawbale.com)

Small houses that can be constructed from a plan

<http://tinygreencabins.com/>

<http://www.tumbleweedhouses.com/>

<http://www.tinyhousedesign.com/>

## **Solar Energy -- How to evaluate the benefits**

Important issues when evaluating solar energy for your home:

<http://www.submityourarticle.com/articles/Sam-Deane-4787/solar-power-52903.php>

[http://www.howstuffworks.com/framed.htm?parent=green-](http://www.howstuffworks.com/framed.htm?parent=green-home.htm&url=http://findsolar.com/)

[home.htm&url=http://findsolar.com/](http://findsolar.com/)

<http://www.builditsolar.com/index.htm>

<http://www.solarhaven.org/PVSystem.htm>

How to install solar panels: [http://www.ehow.com/how\\_2153725\\_install-solar-electric-panels.html](http://www.ehow.com/how_2153725_install-solar-electric-panels.html)

A Solar Buyer's Guide for the Home and Office by Stephen Hren and Rebecca Hren

## **Energy Incentives**

Solar power incentive map: [http://www.howstuffworks.com/framed.htm?parent=green-](http://www.howstuffworks.com/framed.htm?parent=green-home.htm&url=http://findsolar.com/)  
[home.htm&url=http://findsolar.com/](http://findsolar.com/)

Database of state incentives for renewables and efficiencies: <http://www.dsireusa.org/>

## **Wind Power**

Water Pumping Windmills

Aermotor windmills: <http://www.aermotorwindmill.com/> -

Backwoods Home Magazine:

<http://www.backwoodshome.com/articles2/ainsworth90.html>

By Example: [http://byexample.com/projects/current/submersible\\_well\\_pump/](http://byexample.com/projects/current/submersible_well_pump/)

## **Wind Turbines**

Homebrew Wind Power by Dan Bartman and Dan Fink. Book on do it yourself wind power

Xzeres wind turbine: <http://www.xzeres.com/products/xzeres110/>

Course in Oregon on how to make your own wind turbine:

[http://www.oregonlive.com/oregon-](http://www.oregonlive.com/oregon-city/index.ssf/2011/05/clackamas_community_college_offers_class_on_do-it-yourself_wind_turbines.html)

[city/index.ssf/2011/05/clackamas\\_community\\_college\\_offers\\_class\\_on\\_do-it-yourself\\_wind\\_turbines.html](http://www.oregonlive.com/oregon-city/index.ssf/2011/05/clackamas_community_college_offers_class_on_do-it-yourself_wind_turbines.html)

## **Converting your car to run on water**

[http://www.squidoo.com/improve\\_the\\_fuel\\_economy\\_of\\_your\\_car\\_use\\_water\\_as\\_fuel](http://www.squidoo.com/improve_the_fuel_economy_of_your_car_use_water_as_fuel)

<http://hubpages.com/hub/how-to-improve-your-car-with-water>

## **Slow Money Movement**

<http://www.slowmoney.org/>

<http://ecopreneurist.com/>

<http://theabundancefoundation.org/>

<http://enviroinstitute.org/>

## **Best Green Jobs for the Next Decade**

From FastCompany.com

- Farmer
- Forester
- Solar Power Installer
- Energy Efficiency Builder
- Wind Turbine Fabricator
- Conservation Biologist
- Green MBA and Entrepreneur
- Recycler
- Sustainability Systems Developer
- Urban Planner

### **From inventorspot.com**

- Eco-Tourism Jobs
- Bicycle Technicians
- Organic Farming Specialist
- Wind Energy Developers
- Environmental Engineers
- Corporate Social Responsibility Professionals
- iPod/iPhone Doctors
- Hydrologists
- Environment Refuse Processors
- Jobs in Green Car Manufacturing

### **Green Employment Websites:**

Green Dream Jobs - [www.sustainablebusiness.com](http://www.sustainablebusiness.com)

Green Jobs Network - [www.greenjobs.net](http://www.greenjobs.net)

Green Building Jobs - [www.greenbuildingsjobs.com](http://www.greenbuildingsjobs.com)

Greenprofs - [greenprofs.com](http://greenprofs.com)

## **TOP 10 GREEN CITIES IN THE UNITED STATES**

PORTLAND, OR

SAN FRANCISCO, CA

BOSTON, MA

OAKLAND, CA

EUGENE, OR

CAMBRIDGE, MA

BERKELEY, CA

SEATTLE, WA

CHICAGO, IL

AUSTIN, TX

(From Mothernaturenetwork.com)

## **WHERE NOT TO LIVE AS A RESULT OF CLIMATE CHANGE**

**COASTAL AREAS:** Projected increases in sea levels around the world are predicted to devastate coastal areas. Washington DC, parts of New England, the Mid-Atlantic states and Southern Florida will be largely underwater, in addition to areas on the West Coast, such as Portland.

**SOUTHWEST:** Water supplies are becoming scarce and it is predicted that there will be a permanent drought in the Southwest, rendering the area uninhabitable and eliminating most agriculture. As the Colorado River recedes, there will be increasing drought in Southern California, Nevada, Colorado, Arizona, and New Mexico. Other states currently suffering the worst drought in years are Oklahoma, Kansas, New Mexico, Southern Arizona and Northwest, West, and Southern Texas.

**FAULT LINES:** The entire west coast is especially vulnerable to earthquakes, as are many other parts of the United States.

**NORTHWEST:** Declining snowfall is reducing water supplies, while sea level rises will result in increased loss of land. Salmon and other cold water species will experience stress from rising temperatures and declining summer streams. Agriculture is already under pressure from reduced water availability.

**NORTHEAST:** Severe flooding due to sea level rises and heavy downpours is likely to occur more frequently. Agriculture will be adversely affected. Extreme heat and declining air quality are likely to pose health problems

**SOUTHEAST:** Rising sea levels and increased hurricane intensity and associated storms will be among the most serious consequences of climate change. Increased temperatures will cause heat related stresses on people, plants, and animals. Decreased availability of potable water will have a devastating effect on the ecosystems.

## **TOP 10 STATES MOST LIKELY TO DECLARE BANKRUPTCY**

Rhode Island  
Connecticut  
Massachusetts  
Illinois  
Hawaii  
New Jersey  
New Hampshire  
Indiana  
Louisiana  
Oklahoma

(From Newsweeks'dailybeast.com)



## **10 MOST DANGEROUS CITIES IN AMERICA**

Flint, MI  
Detroit, MI  
St. Louis, MO  
New Haven, CT  
Memphis, TN  
Oakland, CA  
Little Rock, AR  
Baltimore, MD  
Rockford, IL  
Stockton, CA

According to FBI crime data, 2010

## **TOP 10 STATES WITH THE HIGHEST FORECLOSURE RATES**

Nevada  
Arizona  
California  
Utah  
Idaho  
Michigan  
Florida  
Georgia  
Colorado  
Oregon

(From CNBC.com)

## Recommended Reading

Arendt, Hannah. *Between Past and Future* (Penguin Classics)

Bang, Jan Martin, *Ecovillages: A Practical Guide to Sustainable Communities* (New Society Publishers)

Barker, Allen. *Science and Technology of Organic Farming* (CRC Press)

Carson, Rachel. *Silent Spring* (Houghton Mifflin)

Coleman, Eliot, *The Winter Harvest Handbook: Year Round Vegetable Production Using Deep Organic Techniques and Unheated Greenhouses* (Chelsea Green)

Hawken, Paul; Lovins, Amory. *Natural Capitalism: Creating the Next Industrial Revolution* (Back Bay Books)

Hawken, Paul. *Blessed Unrest: How the Largest Movement in the World Came into Being and Why No One Saw It Coming* (Honore, Carl. *In Praise of Slowness: Challenging the Cult of Speed* (

Hopkins, Rob. *The Transition Handbook: From Oil Dependency to Local Resilience* (Chelsea Green)

Leafe, Diana. *Creating a Life Together: Practical Tools to Grow Ecovillages and Intentional Communities* (New Society Publishers)

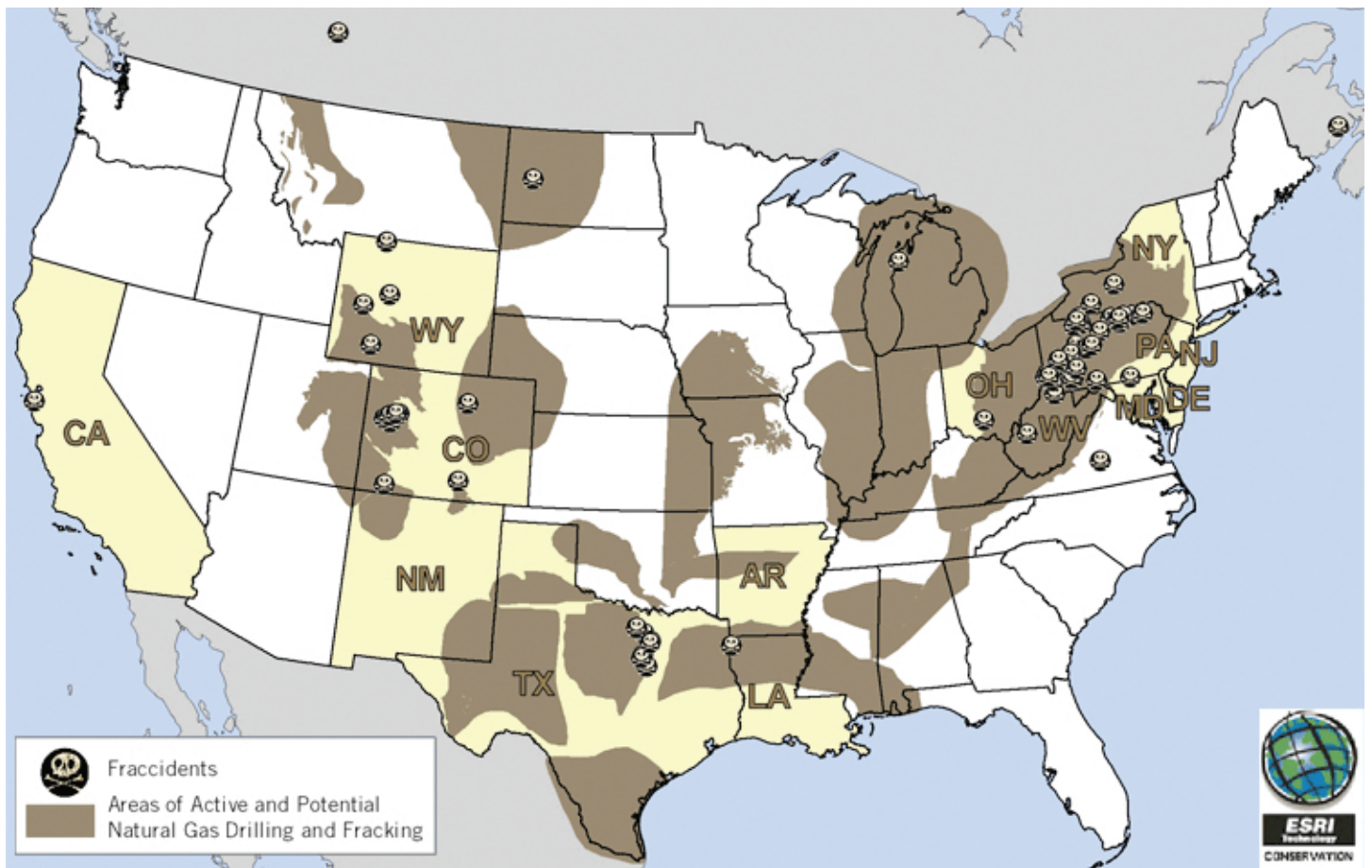
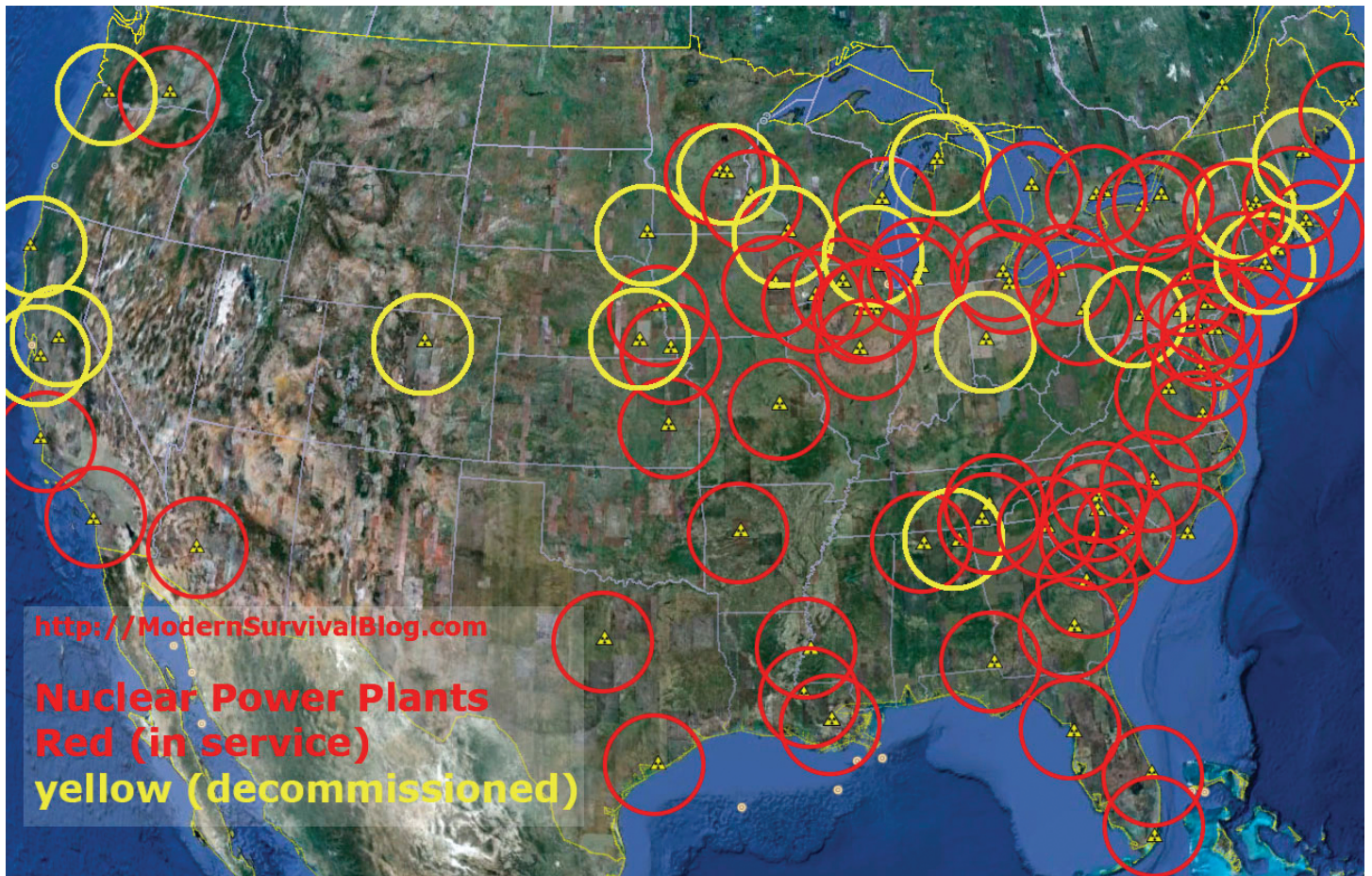
Smith, Jeffrey. [Genetic Roulette: The Documented Health Risks of Genetically Engineered Foods](#) (Chelsea Green)

Smith, Jeffrey. *Seeds of Deception: Exposing Industry and Government Lies About the Safety of the Genetically Engineered Foods You're Eating* (Rodale, Maria. *Organic Manifesto: How Organic Food Can Heal Our Planet, Feed the World, and Keep Us Safe* (Rodale Books)

Schumacher, EF. *Small Is Beautiful: Economics as if People Mattered* (Harper Perennial)

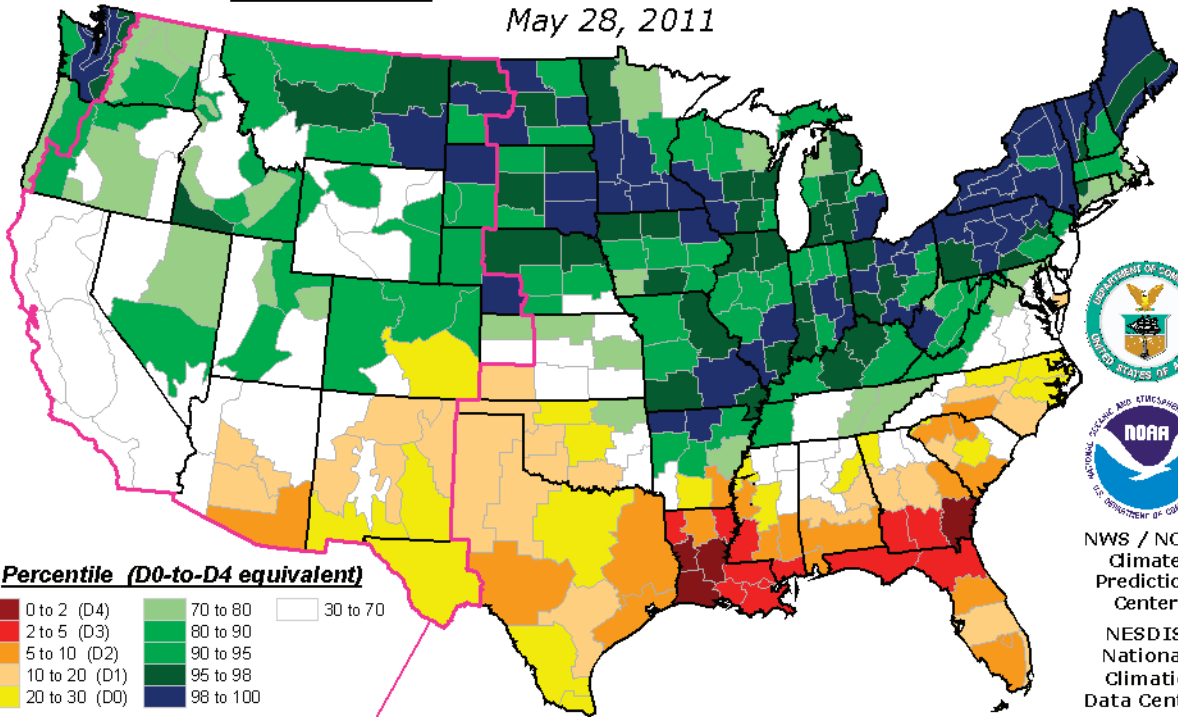
Tasch, Woody. *Inquiries Into the Nature of Slow Money: Investing as if Food, Farms, and Fertility Mattered* (Chelsea Green)

Walker, Liz. *Choosing a Sustainable Future: Ideas and Inspiration from Ithaca, NY* (New Society Publishers)

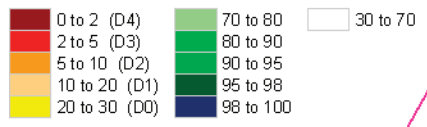


# Objective Long-Term Drought Indicator Blend Percentiles

May 28, 2011



**Percentile (D0-to-D4 equivalent)**



**Inputs (as percentiles):**

- 25% Palmer Hydrologic Index
- 20% 24-Month Precipitation
- 20% 12-Month Precipitation
- 15% 6-Month Precipitation
- 10% 60-Month Precipitation
- 10% CPC Soil Moisture Model

**Western Formulation Inputs (as percentiles):**

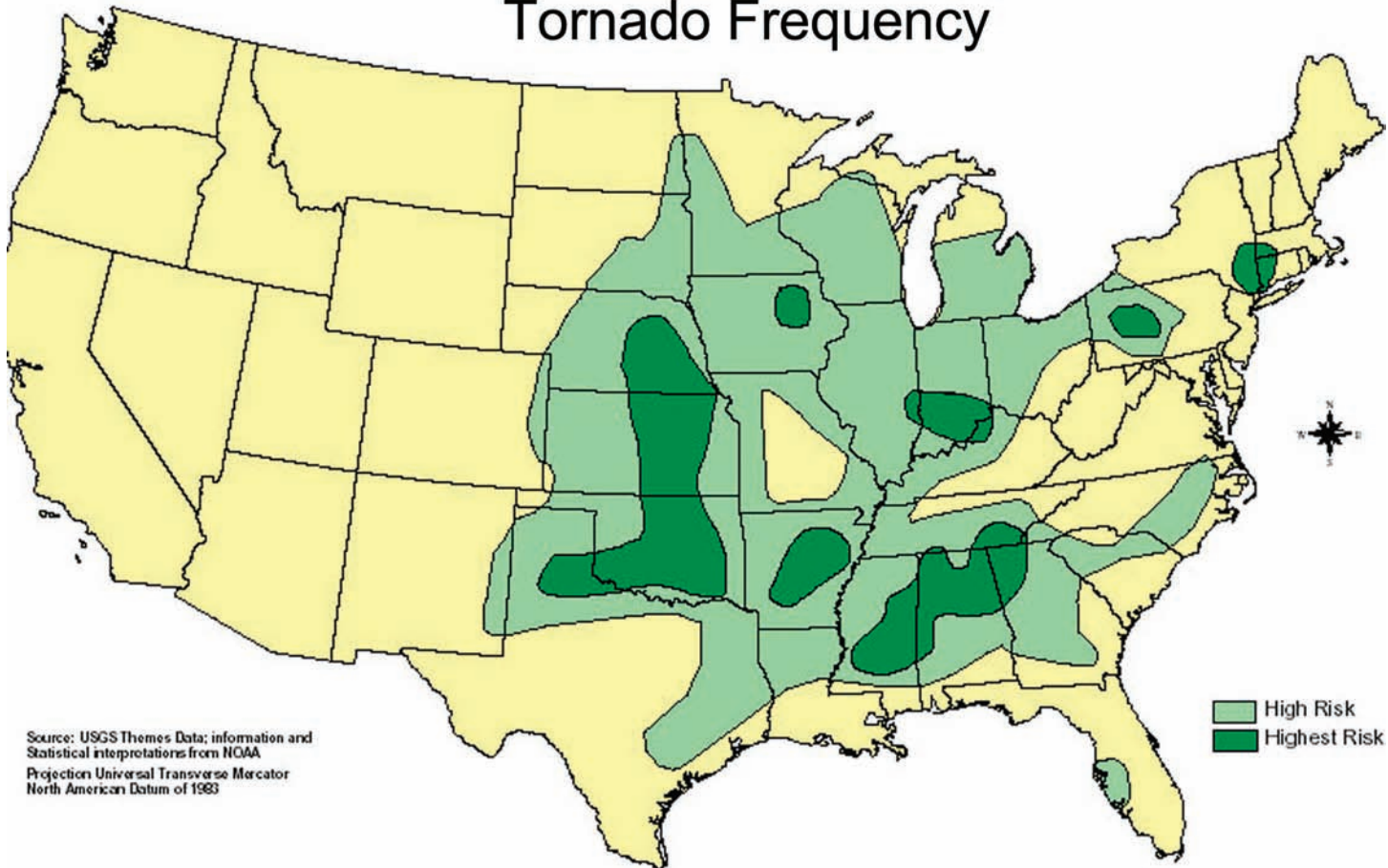
- 30% Palmer Hydrologic Index
- 30% 60-Month Average Z-Index
- 10% 60-Month Precipitation
- 10% 24-Month Precipitation
- 10% 12-Month Precipitation
- 10% CPC Soil Moisture Model

This map approximates impacts responding to precipitation over the course of several months to a few years, such as reservoir content, groundwater, and lake levels. **HOWEVER, THE RELATIONSHIP BETWEEN INDICATORS AND WATER SUPPLIES CAN VARY MARKEDLY WITH LOCATION, SEASON, SOURCE, AND MANAGEMENT PRACTICE. Do not interpret this map too literally.**

This map is based on preliminary climate division data. Local conditions and/or final data may differ. See the detailed product suite description for more details.

NWS / NCEP  
Climate  
Prediction  
Center  
NESDIS  
National  
Climatic  
Data Center

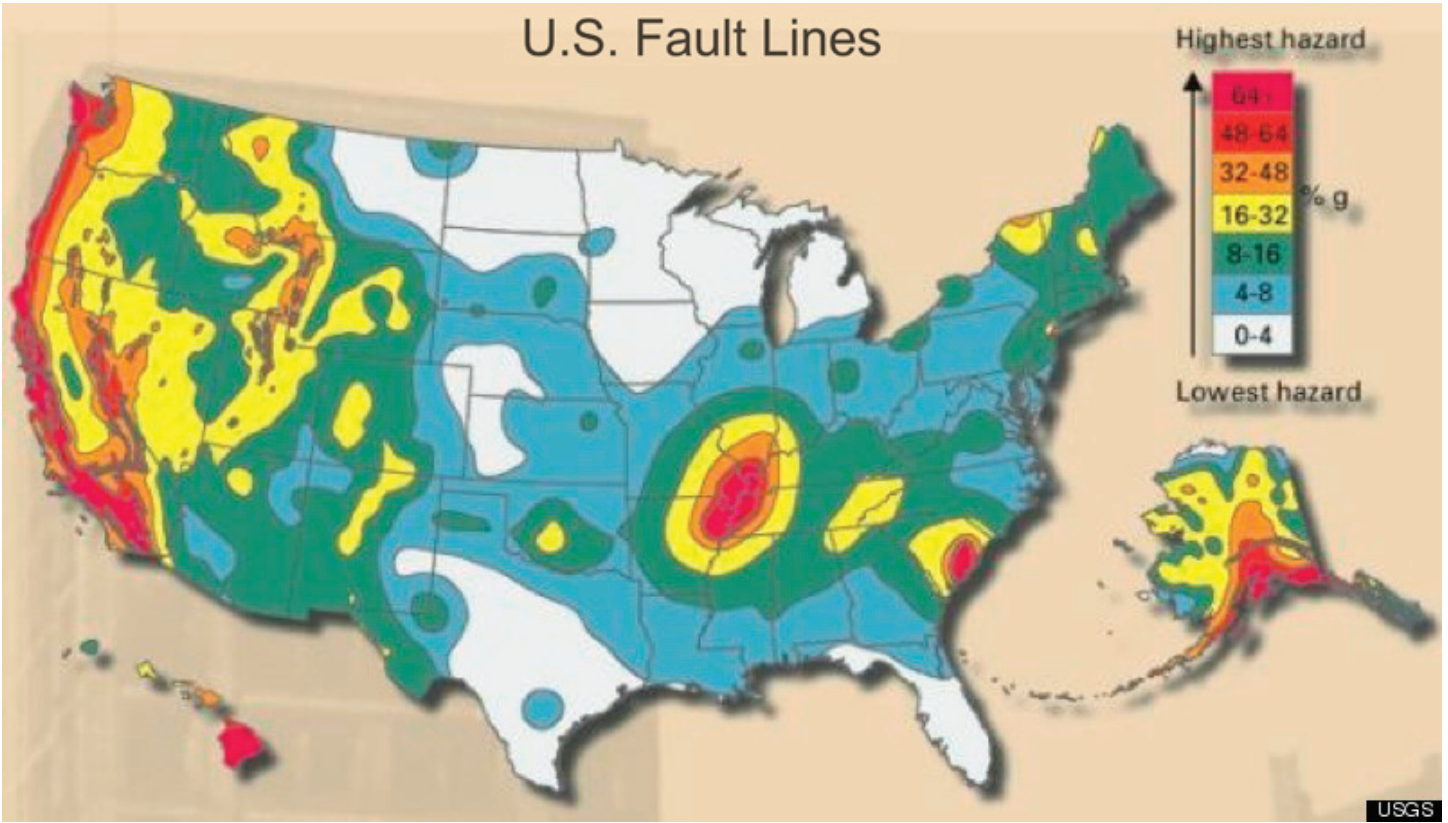
# Tornado Frequency



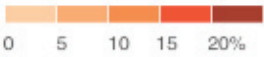
Source: USGS Themes Data; information and Statistical interpretations from NOAA  
Projection Universal Transverse Mercator  
North American Datum of 1983

High Risk  
Highest Risk

# U.S. Fault Lines



Unemployment rate



June '10 unemployment rate: **9.6%**  
One-year change: -0.1 pct. pts.

