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The Torrent

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Our Wild Weather – Oh, What A Difference A Year Makes!!

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Ah, remember last summer . . . the heat waves, dry sunny days and long beach weekends. At this point last year, Connecticut had approximately 35 days with temperatures over 90^0F. What happened this year? We have had only about ten days over 90^0F since June 1st. It has been six months of April showers with added humidity. Last year's drought has turned into this year's fungus. I have mushrooms growing on the side of my wooden fence.

So why the big change? . . . Well, it turns out that Mother Nature is a centrist. She likes the middle of the road. Mother Nature tends to follow the law of averages. If last year was dry in your state, chances are that this year will be wet. If last year was hot, chances are that this year will be cooler.

Just the facts . . . As of August 25, 2003, temperatures in Connecticut have averaged 45.5^0F, making this year the 17th coldest on record during the past 118 years, according to the National Oceanic and Atmospheric Administration's (NOAA) National Climate Data Center (NCDC), the world's largest active archive of weather data (www.ncdc.noaa.gov). Last year, our average temperature was 50.6^0F and was the 12th hottest year. This year's total precipitation was 29.80 inches and ranks the 27th wettest year on record. Last year, our total rainfall equaled 24.20 inches and was the 46th driest year on record.

So what is going on in Europe this summer? . . . Another way to look at the weather is to use the seesaw analogy. When North America is cool, Europe tends to be hot. This year has been very, very bad for Europe due to a complete blockage in the Jet Stream that prevented weather systems from moving across the Atlantic Ocean. Without the normal "sea breeze" that keeps Europe cool during the summer, the stagnant air quickly became super-heated. For reasons that are not fully understood yet, Europe seems to receive extreme swings in their seasonal weather.

How about our future . . . Please pardon the pun, but that is still up in the air. The weather in the northeastern United States is actually compensating for last year's extreme conditions. In this situation, we cannot use the law of averages to predict the future because we are coming back to average now. So keep the umbrellas handy, you will probably need them.

Climate Change on the Metropolitan East Coast

The U.S. Global Change Research Program (USGCRP) supports research on the interactions of natural and human-induced change in the global environment and their implications for society.

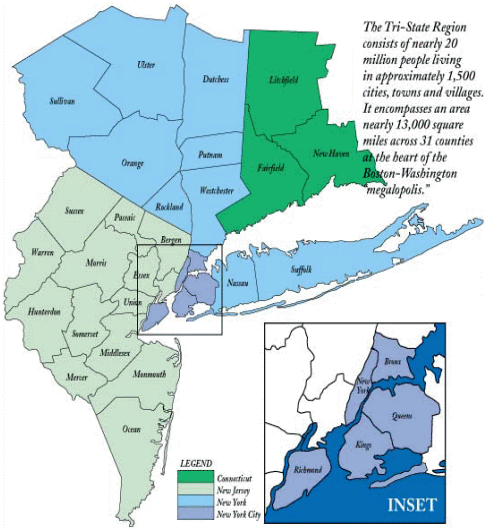
The USGCRP has completed a new study entitled "**Climate Change and a Global City: An Assessment of the Metropolitan East Coast Region**". This study of the Metropolitan East Coast (MEC) area is one of eighteen regional components of **The U.S. National Assessment: The Potential Consequences of Climate Change and Variability**. The goal of each regional assessment is to understand the impacts of climate change and variability on the physical systems and human activities of a specific area of the United States.

The MEC Regional Assessment focuses on the issues of climate change in a major urban center. Understanding climate impacts in urban areas is becoming increasingly important, since human populations are more concentrated in cities, and the number and size of cities are growing. It is estimated that over half of the world's population lives in cities or on coasts.

The study area for the MEC Assessment covers the 31 counties of the New York City metropolitan region. The area consists of 13,000 square miles, with jurisdictions involving 1,600 cities, towns and villages in the three states of New York, New Jersey and Connecticut. The total regional population is 19.6 million, of which 7.3 live in New York City. The Connecticut counties of Fairfield, Litchfield, and New Haven are included in the study.

This region is defined as a global city, a mega-city that also constitutes a key site for international business and enterprise, and along with its cultural and political dominance is positioned atop the global urban hierarchy. Other global cities include London and Tokyo.

The MEC Regional Assessment examines how three interacting elements of global cities react and respond to climate variability and change. The three elements are: ***people*** (i.e., socio-demographic conditions), ***place*** (i.e., physical and ecological systems), and ***pulse*** (i.e., decision-making and economic activities).



Key to the assessment process is the identification of sectors that are vulnerable to the additional stresses that climate change and increased climate variability will introduce and the potential for adaptation strategies to cope with them. The MEC project focuses on seven sectors: Wetlands, Coastal Resources, Public Health, Transportation Infrastructure, Water Supply Management, Energy Demand, and Institutional Land-Use and Infrastructure Decision-Making.

Each sector study assesses historical and potential climate impacts through analysis of the current conditions, lessons and evidence derived from past climate variability, scenario predictions, coping strategies, policy recommendations, and knowledge gaps.

Climate is changing in the MEC region. Over the past 100 years, temperature in the region has risen nearly 2^0F. However, it is very difficult to determine the causes of the observed climate trends. The rate and amount of temperature rise is projected to increase over the 21st century due to anthropogenic greenhouse warming. Substantial uncertainties about climate change remain, including the rate and magnitude of projected regional changes.

Climate change will affect people in cities multi-dimensionally. Heightened frequencies of storm-surges will damage major infrastructure juxtaposed to already threatened coastal wetlands. Health impacts cannot be separated from the impacts of increased heat waves on energy demand.

Finally, since global cities are major sites of international capital and labor flows, climate change impacts may not be limited by a city's boundaries. For example, a major climate-related disruption of the New York Stock Exchange would have reverberating impacts on global financial markets.

The entire MEC Assessment and other information on climate change in the United States can be downloaded at**:**
http://metroeast_climate.ciesin.columbia.edu/

News Briefs

NESEC Launches New Hazard Map Website

The Northeast States Emergency Consortium (NESEC), a not for profit natural hazard mitigation and emergency management organization, has developed a web-based, interactive map of natural hazards affecting the Northeast. Hazards include historic earthquake locations, peak ground acceleration, hurricane tracks and zones, tornado touchdowns and density, wind exposure, landslide susceptibility and annual snowfall. These hazards are easily identifiable at the regional, state and local levels.

This website is different from others in that it gives local cites and towns in the Northeast the ability to access their risk to hazards occurring within their community. Just click on your state, county and community. NESEC hopes that state and local officials, as well as individuals, will use this tool to better understand the natural dangers inherent to the Northeast and to assist in the development of hazard mitigation plans. The map is located on the NESEC website at **www.nesec.org** under "Hazard Maps".

NESEC is the only multi-hazard consortium of its kind in the country and includes the New England states, New York and New Jersey.

NESEC develops, promotes and coordinates natural disaster and emergency management activities throughout the Northeast. This includes natural hazard risk assessment, public awareness, and education programs, hazard mitigation, and information technology transfer.

FEMA For Kids

Autumn is here and school is back in session. The Federal Emergency Management Agency (FEMA) has a section of its website devoted just for kids.

Under President Clinton, FEMA launched the **FEMA For Kids** website in October 1997 as a safe and fun place where children could learn about natural hazards and disasters. The website provides excellent educational information, and some fun, to youngsters, parents and teachers.

The site contains information on what to have in a disaster supply kit, how to develop a family disaster plan, how to care for pets during a disaster, and how to protect your home before and after a disaster. There is an interactive map of the U.S. that kids can click on to find out about the disasters in particular areas of the country. The "Homework Help" section provides answers to the most frequently asked disaster-related questions. Photographs, publications, news, maps and links to other websites are available. The site also contains games, puzzles and word searches.

Repetitive Flood Loss Legislation Proposed

September will be a brisk period for legislative activity affecting floodplain management. The Repetitive Flood Loss Bill (H.R. 253), also known as the "Two Floods and You Are Out of the Taxpayers' Pocket Act", has finally been approved by the full House Financial Services Committee. This bill will help alleviate the financial burden of the flood insurance claims on the National Flood Insurance Program (NFIP) and on taxpayers.

Under H.R. 253, repetitively flooded properties are those that receive two or more NFIP payments for $1,000 in ten years. Owners of such properties must flood-proof, elevate, or move their homes, all with the help of government assistance. Property owners who fail to take these actions will no longer receive government subsidies for their flood insurance, forcing them to bear the property's full actuarial, risk-based cost of the insurance.

Indications are that the Senate Banking Committee will take up the bill in September soon after it comes over to the Senate from the House.

FEMA Homeowner's Guide to Retrofitting

Local officials often receive inquiries from residents on how to protect their home from flood damage. The Federal Emergency Management Agency (FEMA) has prepared a publication entitled **"Homeowner's Guide to Retrofitting, Six Ways to Protect Your House From Flooding"** to aid residents who want to protect their properties from recurring flood damage. In layman's terms, the publication describes six flood protection methods: elevation, wet floodproofing, dry floodproofing, relocation, levees and floodwalls, and demolition. This publication can be ordered free from FEMA and can also be accessed on the internet at: **http://www.fema.gov/hazards/floods/lib312.shtm**

Floodplain Focus: NFIP Probation & Suspension

The National Flood Insurance Program (NFIP) is based on a cooperative agreement between the local community and the Federal Emergency Management Agency (FEMA). FEMA can only make flood insurance available in those communities that agree to regulate development in the floodplain. To join the NFIP, a community must adopt a floodplain management ordinance or regulation that meets or exceeds the minimum NFIP criteria and enforce these requirements for new or substantially improved structures and other development within the floodplain. The community's overall floodplain management program is reviewed periodically by the FEMA Regional Office or the State NFIP Coordinating Agency (Connecticut Department of Environmental Protection). Either agency may inspect records as part of a community assistance visit (CAV). If a community does not uphold its part of the agreement and fails to adequately enforce its floodplain management requirements, FEMA has three methods of recourse: 1) reclassification under the Community Rating System (CRS), 2) probation, or 3) suspension from the NFIP.

CRS RECLASSIFICATION

The Community Rating System (CRS) provides a discount in flood insurance premiums for properties in communities that participate in the CRS program. CRS Communities in Connecticut are: Cheshire, East Lyme, Hamden, Newtown, Stamford, West Hartford, and Westport. CRS communities that are deemed to no longer be in full compliance with the NFIP requirements can be reclassified to Class 10 and residents would not receive a discount on flood insurance.

PROBATION

Probation represents formal notification to the community that FEMA regards the community's floodplain management program as non-compliant with the NFIP criteria. Prior to imposing probation, FEMA provides the community a 90-day written notice and lists specific deficiencies and violations. It also notifies all policyholders of the impending probation, telling them that an additional $50 premium will be charged on policies sold or renewed during the probation period. The objective of this surcharge is to bring the policyholders' attention to the fact that their community is not compliant and failure to correct the problems may lead to suspension.

The community has 90 days to avoid this sanction by correcting deficiencies and remedying identified violations. Probation may be continued for up to one year after the community corrects all program deficiencies. This ensures that the community has truly changed its ways and become compliant and that all policyholders are advised of the situation when their policies are renewed.

SUSPENSION

If, after a period of probation, a community fails to remedy its program deficiencies, it will be suspended from the NFIP. Suspension means the community no longer participates in the NFIP. It is subject to the sanctions for non-participation, including: no resident will be able to purchase a flood insurance policy (or receive a mortgage since the purchase of flood insurance is a requirement of a mortgage for homes located in the flood zone), existing flood insurance policies will not be renewed, no Federal grants or loans for development may be made in identified flood zones under programs administered by Federal agencies (such as HUD, EPA, or SBA), no Federal disaster assistance may be provided to repair insurable buildings located in identified flood zones for damage caused by flood, no Federal mortgage insurance or loan guarantees may be provided in identified flood zones, federally insured or regulated lending institutions such as banks and credit unions must notify applicants seeking loans for insurable buildings in flood hazard areas that the property is not eligible for Federal disaster relief and is located in a flood hazard area. These sanctions can be severe on any community with a substantial number of buildings in the floodplain, such as a coastal community.

FEMA grants a community 30 days to show why it should not be suspended and then issues the community a 30-day suspension letter. FEMA may also conduct a written or oral hearing before suspension takes effect. A community can automatically be suspended if, following due notice, it failed to adopt revisions to its floodplain ordinance or regulation in response to flood map revisions or amended minimum NFIP criteria. A community suspended from the NFIP may apply to the FEMA Regional Office for reinstatement by submitting the following: a local legislative or executive measure reaffirming the community's intent to comply with the NFIP criteria, evidence that all program deficiencies have been corrected, and evidence that any violations have been remedied to the maximum extent possible. FEMA may reinstate the community to full program statues, bring it to a probationary status, or withhold reinstatement for up to one year after a satisfactory submission from the community.

More information, go to the FEMA website: www.fema.gov/nfip/intnfip.shtm

UPCOMING CONFERENCES & WORKSHOPS

October 20-24, 2003: Wetlands 2003 – Landscape Scale Wetland Assessment and Management, Nashua, New Hampshire. Sponsor: Association of State Wetlands Managers, Inc. (ASWM). Contact: ASWM, P.O. Box 269, Berne, NY 12023-9746. Phone: (518) 872-1804, Fax: (518) 872-2171, email: aswm@aswm.org, internet: www.aswm.org.

October 21-24, 2003: Flood Warning Systems, Technologies and Preparedness, Fifth National Conference of the National Hydrologic Warning Council, Dallas, Texas. Contact: Dan Miller at (913) 895-6032, dmiller@opkansas.org or Steven Waters at (602) 506-1501, sdw@mail.maricopa.gov or see www.alertsystems.org.

November 4-7, 2003: GDIN2003, Washington, D.C. Sponsor: Global Disaster Information Network (GDIN). Contact: GDIN, 261289 Talamore Drive, South Riding, VA 20152. Phone: (202) 647-5070, email: gdin2003@hotmail.com, internet: www.gdin.org.

November 12-13, 2003: Taking the Lead in Property Loss Reduction, IBHS Annual Congress, Orlando, Florida. Sponsor: Institute for Business and Home Safety (IBHS). Contact: IBHS, 4775 E. Fowler Ave., Tampa, FL 33617. Phone: (813) 286-3400, internet: www.ibhs.org/congress/.

November 15-19, 2003: Annual Meeting of the International Association of Emergency Managers (IAEM), Orlando, FL. Contact: IAEM, 111 Park Place, Falls Church, VA 22046. Phone: (703) 538-1795, Fax: (703) 241-5603, email: info@iaem.com, internet: http://www.iaem.com.

UPCOMING EMERGENCY MANAGEMENT INSTITUTE COURSES

The Emergency Management Institute (EMI) is located at the Federal Emergency Management Agency (FEMA) National Emergency Training Center (NETC) in Emmitsburg, Maryland. EMI serves as the national center for emergency management training of federal, state, and local government officials. Tuition, housing, and all books and materials are provided at no cost. Participants are responsible for the cost of a meal pass ($82.50). The following is a list of upcoming EMI courses through September 2004. To apply, call Diane Ifkovic, CT DEP, (860) 424-3537. For more information on the courses listed, visit the EMI website: *http://training.fema.gov/EMIWeb/*

E170 **Advanced HAZUS MH for Hurricane** – November 17-20, 2003, May 3-6, 2004.
E172 **Advanced HAZUS MH for Flood** – December 8-11, 2003, August 12-15, 2004.
E174 **Advanced HAZUS MH for Earthquake** – January 26-29, June 28 - July 1, 2004.
E190 **Introduction to ArcGIS for HAZUS MH** – October 27-29, 2003.
E204 Mitigation Emergency Response Team – September 8-9, 2004.
E234 **Digital Hazards Data –** October 20-24, 2003, March 8-11, 2004, September 27-30, 2004.
E238 **Cooperating Technical Partners (CTP)** – February 9-12, May 17-20, August 16-19, 2004.
E260 **Hazard Mitigation Grant Program (HMGP)** – February 9-12, August 9-13, 2004.
E263 **Managing Hazard Mitigation Grant Program (HMGP)** – November 3-6, 2003, April 19-22, 2004.
E271 **HEC Software Course** – January 27-29, May 25-28, 2004.
E273 **Managing Floodplain Development Through the NFIP** – November 17-20, 2003, March 22-25, June 14-17, August 16-19, 2004.
E274 **National Dam Safety Technical Workshop** – February 18-19, 2004.
E276 **Benefit-Cost Analysis: Entry Level Training** – December 3-5, 2003, July 28-30, 2004.
E278 **NFIP/Community Rating System (CRS)** – March 15-19, July 26-29, September 20-23, 2004.
E279 **Retrofitting Flood-prone Residential Buildings** – April 26-30, 2004.
E313 **Basic HAZUS Multi-Hazards (MH)** – Oct. 6-9, 2003, January 5-8, February 2-5, Sept. 13-16, 2004.
E317 **Data Management for HAZUS MH** – December 15-18, 2003, June 1-3, 2004.
E329 **Multi-Hazard Building Design (MBDSI): Flood Protective Design** – July 19-23, 2004.
E331 **Multi-Hazard Building Design (MBDSI): Wind Protective Design** – July 19-22, 2004.
E362 **Multi-Hazard Emergency Planning for Schools** – October 20-23, 2003, April 19-22, May 10-13, June 21-24, July 26-29, 2004.
E386 **Residential Coastal Construction** – June 14-18, 2004.