



Earthquakes ★ Floods ★ Hurricanes ★ Landslides ★ Tsunamis ★ Volcanoes ★ Wildfires

International Disaster Reduction Day

David Applegate
October 14, 2009



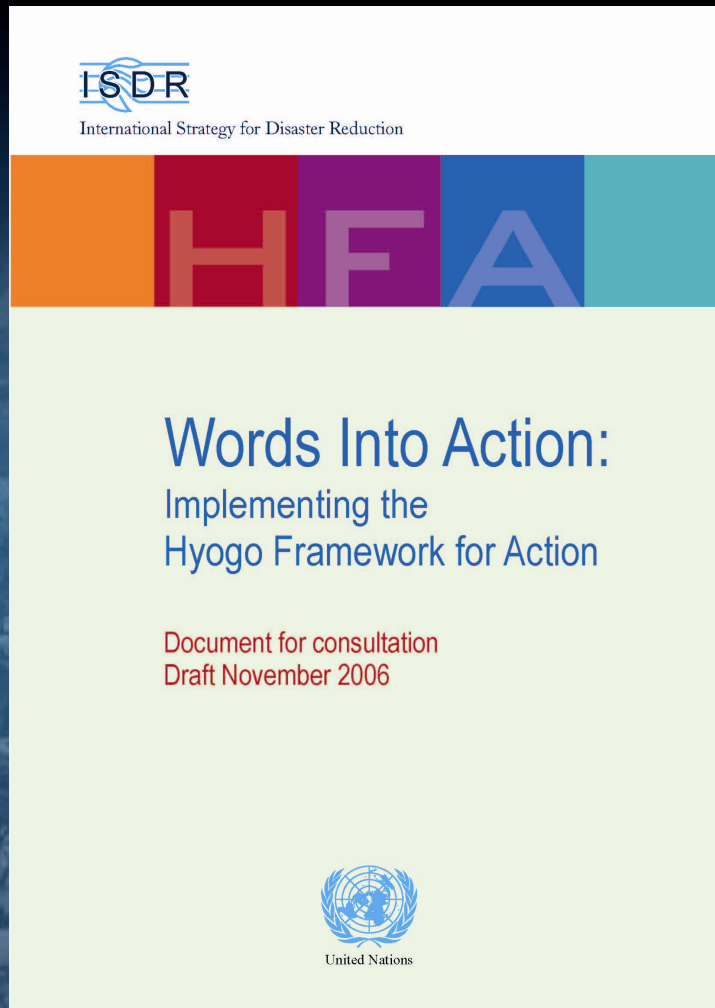
U.S. Department of the Interior
U.S. Geological Survey

U.S. National Science & Technology Council Subcommittee on Disaster Reduction

- SDR is an element of the President's National Science & Technology Council charged with establishing clear national goals for Federal science and technology investments in disaster reduction.
- Promotes interagency cooperation for natural and technological hazards and disaster planning.
- Facilitates interagency approaches to identification and assessment of risk, and to disaster reduction.
- Advises the Administration about relevant resources and the work of SDR member agencies.
- Serves as the US national platform for UN International Strategy for Disaster Reduction



The Hyogo Framework for Action

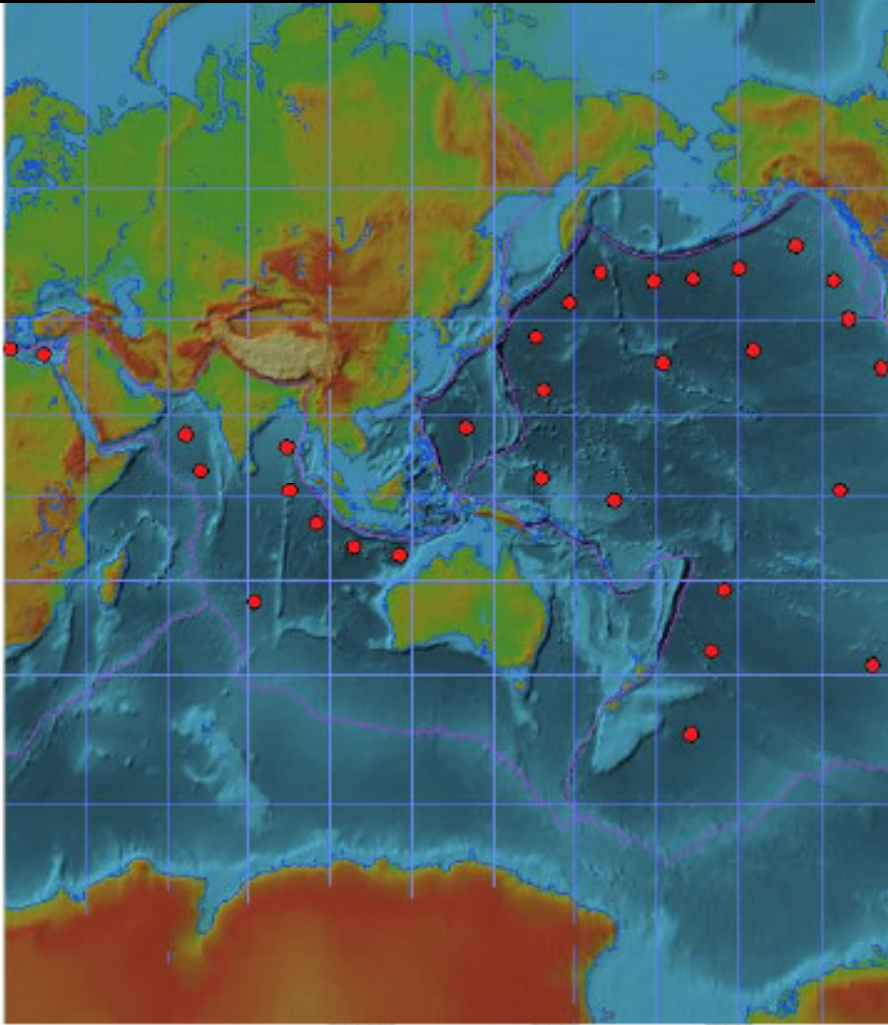


1. Ensure that disaster risk reduction is a national and local priority;
2. Identify, assess and monitor disaster risks and enhance early warning;
3. Use knowledge, innovation and education to build a culture of safety and resilience at all levels;
4. Reduce the underlying risk factors; and
5. Strengthen disaster preparedness for effective response at all levels.

For tsunamis, seismic is the start



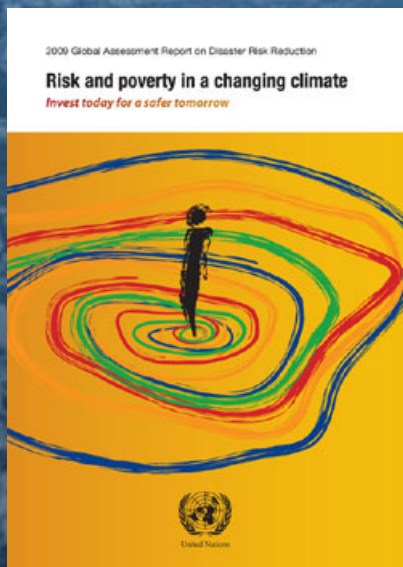
All Hazard Alert Broadcast system installed at Ocean Shores, Washington.



The beach is the finish

Credit: Washington Emergency Management

Global Assessment Report on Disaster Risk Reduction: Risk and Poverty in a Changing Climate



Floods, droughts, storms, earthquakes, fires and other events, when combined with 'risk drivers' such as increasing urbanization, poor urban governance, vulnerable rural livelihoods and the decline of ecosystems, can lead to massive human misery and crippling economic losses. The risks posed by global climate change and rising sea levels carry additional grave implications for how we will live in the near future.

While we cannot prevent natural phenomena such as earthquakes and cyclones, we can limit their impacts. The scale of any disaster is linked closely to past decisions taken by citizens and governments – or the absence of such decisions. **Pre-emptive risk reduction is the key. Sound response mechanisms after the event, however effective, are never enough.**

-- Ban Ki-moon

Chair's Summary of the Second Session of the Global Platform for Disaster Risk Reduction



Global Platform
for Disaster Risk Reduction

Second Session, Geneva, Switzerland

16 – 19 June 2009

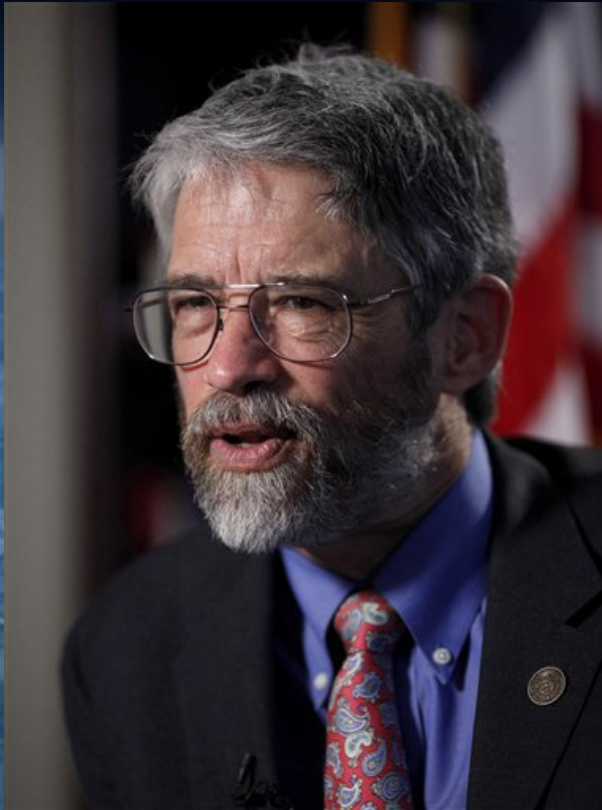
Urgent action is required to harmonise and link the frameworks and policies for disaster risk reduction and climate change adaptation, and to do so within the broader context of poverty reduction and sustainable development.

...disaster risk reduction must be a concrete part of the deal on climate change that is sealed at the United Nations Climate Conference in Copenhagen in December 2009.

...addressing the underlying drivers of disaster risk therefore offers the potential for a **triple win** – for adaptation, disaster risk reduction and poverty reduction.



Disaster risk reduction needs to inform climate adaptation strategies



Given the relationships between climate change and extreme events, the community of researchers, engineers and other experts who work on reducing risks from natural and human-caused disasters will have an important role to play in framing climate change adaptation strategies and in providing information to support decision-making during implementation.



-- Presidential science advisor
John Holdren

Framing the Grand Challenges for Disaster Reduction

- Objective: To enhance disaster resilience by composing a ten-year agenda for science and technology activities that will produce a dramatic reduction in the loss of life and property from natural and technological disasters.



Grand Challenges for Disaster Reduction

Grand Challenges for Disaster Reduction

National Science and Technology Council
Committee on Environment and Natural Resources



A Report of the
Subcommittee on Disaster Reduction

June 2005



1. Provide hazard and disaster information where and when it is needed.
2. Understand the natural processes that produce hazards.
3. Develop hazard mitigation strategies and technologies.
4. Recognize and reduce vulnerability of interdependent critical infrastructure.
5. Assess disaster resilience using standard methods.
6. Promote risk-wise behavior.

Implementation plans released March 2008

Grand Challenges for Disaster Reduction

National Science and Technology Council
Committee on Environment and Natural Resources

A Report of the
Subcommittee on Disaster Reduction

June 2005
Second Printing January 2008

 **sdr**
subcommittee on disaster reduction



 WILDLAND FIRE A report of the Subcommittee on Disaster Reduction www.sdr.gov	 HEAT WAVE A report of the Subcommittee on Disaster Reduction www.sdr.gov	 TECHNOLOGICAL DISASTERS A report of the Subcommittee on Disaster Reduction www.sdr.gov	 COASTAL INUNDATION A report of the Subcommittee on Disaster Reduction www.sdr.gov	 FLOOD A report of the Subcommittee on Disaster Reduction www.sdr.gov	 HUMAN AND ECOSYSTEM HEALTH A report of the Subcommittee on Disaster Reduction www.sdr.gov	 EARTHQUAKE A report of the Subcommittee on Disaster Reduction www.sdr.gov
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More information
available at
www.sdr.gov

In a more disaster-resilient world...

- Relevant hazards are recognized and understood.
- Communities at risk know when a hazard event is imminent.
- Property losses and lives at risk in future natural hazard events are minimized.
- Disaster-resilient communities experience minimum disruption to life and economy after a hazard event has passed.

More Information



The screenshot shows the homepage of the Subcommittee on Disaster Reduction (SDR). At the top, the SDR logo is displayed above the text "subcommittee on disaster reduction". Below this is a navigation menu with links for Home, About SDR, News, Links, For Researchers, and Contact Information. A large banner image depicts a disaster scene with firefighters. The main content area features a section titled "A DISASTER RESILIENT AMERICA" with a sub-header "In accordance with the legislation, a coordinated Federal effort, in cooperation with other levels of government, academia, and the private sector, will improve the understanding of vulnerabilities and their impact, and develop and encourage implementation of cost-effective mitigation measures to reduce those impacts while promoting community resilience. - Executive Summary, Whitehouse Impact Reduction Implementation Plan". Below this is a section titled "The Subcommittee on Disaster Reduction (SDR) is an element of the President's National Science and Technology Council and facilitates national strategies for reducing disaster risks and stresses that are based on effective use of science and technology." and another section titled "To develop a ten-year strategy for disaster reduction through science and technology, the members of the SDR collaborated with scientists and engineers worldwide to identify a suite of Grand Challenges for disaster reduction. This document presents six Grand Challenges for disaster reduction and provides a framework for prioritizing the related Federal investments in science and technology. Addressing these Grand Challenges will improve America's capacity to prevent and recover from disasters, thus fulfilling our Nation's commitment to reducing the impacts of hazards and enhancing the safety and economic well-being of every individual and community. - Dr. John H. Marburger, III, Director of the Office of Science and Technology Policy and Science Advisor to the President". The left sidebar contains a "SDR NEWS ITEMS" section with links to various news items and reports.

www.sdr.gov

www.preventionweb.net

