

Earth, Wind, and Fire: Identifying External Hazards to Your Collections

Thursday, February 7, 2013

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Webinar Goals

- Identify natural and man-made hazards
- Identify natural hazard resources
- Building relationships with first responders



Plimoth Plantations fire, Thanksgiving Day 2011



Phoenix, AZ, haboob 2012

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Man-Made Hazards

MAN-MADE

- Utility outages
- Fires
- Highway disruptions
- Dam failures
- Power plant failures
- Chemical spills
- Civil/Political disruptions



Deepwater Horizon oil rig spill 2010

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Man-Made Hazards



- Civil/Political disruptions
- Life safety
 - Site security
 - Collections preservation

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Man-Made Hazards

Arson



1826 storefront in historic district

Renovation project welding sparks



Chatham County, NC, landmark courthouse

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Man-Made Hazards



Train derailment



Dump fires

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Man-Made Hazards

DAM FAILURES



UTILITY OUTAGES



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Natural Hazards

Winter storms
Floods
Hurricanes
Extreme heat
Wildfires
Earthquakes



Santa Clara Pueblo
wildfire and flood damage 2011

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Severe Weather



Roof collapse
B&O Railroad Museum



Dale Chihuly glass exhibit
Dallas Botanical Gardens

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Tornadoes and Hail



Branson Auto Museum
Branson, MO



Barnum Museum
Bridgeport, CT

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

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Lightning Damage



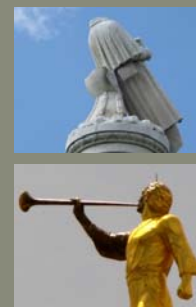
Solid Rock Church, Cincinnati, OH

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Lightning Damage



Christ Church, Brooklyn, NY



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Thunderstorms



Thunderstorm, Glasgow, MT 2010

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Flood Types

Flash floods



Virginia Living Museum
Norfolk News, VA

River floods



Yazoo & Mississippi RR Station

<http://www.floodsmart.gov/floodsmart/>

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Flood Types

COASTAL SURGE



9/11 Memorial and Museum, New York City
Superstorm Sandy 2012

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Cyclonic Tropical Systems



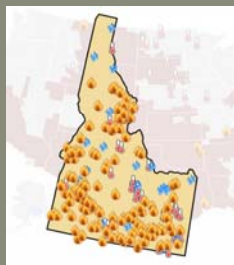
<http://www.nws.noaa.gov/om/hurricane/resources/TropicalCyclones11.pdf>

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Wildfires



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



2012 Wildfires in Idaho

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Wildfires



April 3, 2011 around 5:00pm
White Fire near Rudolph
(Photo Courtesy of Travis Reed)

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Volcano

Active Volcanoes in the Continental United States

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Earthquake

National Museum of Natural History
Smithsonian Institution

5.8 Richter scale quake

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Geologic Hazards

- Earthquakes
- Landslides
- Collapsible soils
- Sink holes

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Risk Management

Probability and effect

	High Probability	Low Probability
High Effect	Flood Earthquake Nuclear fallout Civil unrest	Earthquake Nuclear fallout Civil unrest
Low Effect	Tsunami	Tsunami

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Online Resources

NATIONAL RESOURCES	STATE & LOCAL RESOURCES
<ul style="list-style-type: none"> US Geological Survey (USGS) National Oceanic and Atmospheric Administration (NOAA) FEMA Disasters and Maps 	<ul style="list-style-type: none"> Local State Hazards Mitigation Offices Local Fire, Police & Health Departments Colleges & Universities

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NOAA NATIONAL CLIMATIC DATA CENTER
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

<http://www.ncdc.noaa.gov/>

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Montana Extreme Weather Events



U.S. Geological Survey



<http://www.srh.noaa.gov/abq/?n=prephazards>

State Emergency Management Agencies



Building Local Relationships



City Planner, Fire Chief, Police Chief, and Director of the Visitor Center

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Invite them to an event.



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Invite them to participate in a training drill with you.



<http://www.heritagepreservation.org/programs/tflessons/MayDay.html>



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

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Ask for help with a walk-through.



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Ask how they work in response to an alarm.



Collections Manager, town Fire Chief, and university Fire Marshal/Safety Officer sharing information on what happens and who is in charge during a response.



First responders are in charge until the site is safe to return to.


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Ask what they need to know from you.



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Tips for Working with First Responders



http://www.heritagepreservation.org/lessons/HPR_Emergency_Posters8.5x11.pdf

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Questions & Answers

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Risk Evaluation: First Step in Disaster Planning

February 12 th , 2013 Tuesday 2:00-3:30 PM EST	February 14 th , 2013 Thursday 2:00-3:30 PM EST
What Lurks Within: Identifying Hazards within Your Collections	As Simple as 1-2-3: Ranking the Risks to Your Collections

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