



**Better Buildings Residential Network Program
Sustainability Peer Exchange Call Series: *Coordinating
Energy Efficiency with Disaster Resiliency and
Response***

Call Slides and Discussion Summary

January 9, 2014

Agenda

- Call Logistics and Introductions
- Poll
- Featured Participant
 - Jodi Slick, Ecolibrium3 (Duluth, MN)
- Discussion:
 - What are programs doing to help communities respond to natural disasters?
 - What kinds of plans or protocols need to be in place so that energy efficiency can be incorporated into disaster recovery?
 - Who are critical partners?
- Overview of DOE project on energy efficiency and resiliency
 - Subid Wagley, Department of Energy
- Future Call Topics

Participating Programs and Organizations

- Boulder County, CO
- Build It Green
- Chicago, IL
- Kansas City, MO
- Milwaukee, WI
- Philadelphia, PA
- Clinton Foundation--HEAL Program (Little Rock, AR)
- Economic Opportunity Studies
- Huntsville, AL
- Maine
- Oregon
- Vermont Energy Investment Corporation

Better Buildings Residential Network

- **Better Buildings Residential Network**: Connects energy efficiency programs and partners to share best practices to dramatically increase the number of American homes that are energy efficient.
 - Membership: Open to organizations committed to accelerating the pace of existing residential upgrades. Commit to providing DOE with annual number of residential upgrades, and information about benefits associated with them.
 - Benefits:
 - Peer Exchange Calls
 - Tools, templates, & resources
 - Newsletter updates on trends
 - Recognition: Media, materials
 - Optional benchmarking
 - Residential Solutions Center

For more information & to join, email bbresidentialnetwork@ee.doe.gov.

- **Better Buildings Residential Network Group on Home Energy Pros**

Join to access:

- Peer exchange call summaries and calendar
- Discussion threads with energy efficiency programs and partners
- Resources and documents for energy efficiency programs and partners

<http://homeenergypros.lbl.gov/group/better-buildings-residential-network>

Peer Exchange Call Series

- There are currently 6 Peer Exchange call series:
 - Data & Evaluation
 - Financing & Revenue
 - Marketing & Outreach
 - Multi-Family/ Low Income Housing
 - Program Sustainability
 - Workforce/ Business Partners
- Calls are held the 2nd and 4th Thursday of every month at 12:30 and 3:00 ET
- Upcoming Program Sustainability Calls
 - Local Government Energy Efficiency Program Business Models—February 13
 - Mastermind Session (looking for volunteers!)—March 13
 - Stakeholder Mapping—April 10
 - Complementary Energy and Health Strategies—May 8

Send call topic ideas or requests to be added to additional call series distribution lists to peerexchange@rossstrategic.com.

Poll Results

- What would be the biggest barrier for coordinating energy efficiency and disaster recovery in your community?
 - Lack of a clear response plan or protocol (46%)
 - Lack of awareness about energy efficiency (23%)
 - Lack of inter-agency coordination (15%)
 - Lack of adequate funding/resources (15%)
 - Other (0%)

Featured Participant:
**Jodi Slick, Ecolibrium3,
Duluth, MN**



In the Path of the Storm

Global Warming, Extreme Weather and the Impacts of Weather-Related Disasters in the United States from 2007 to 2012

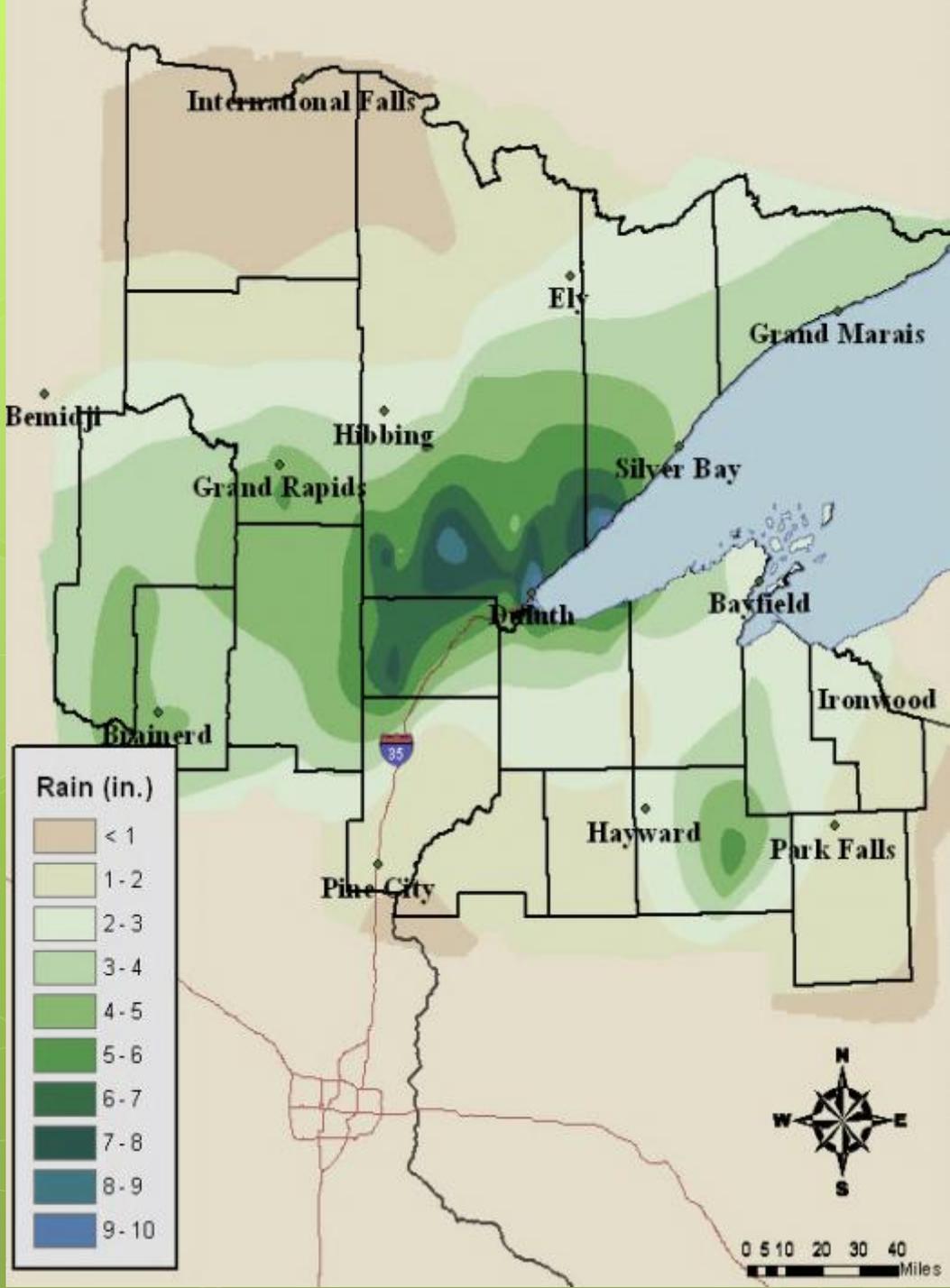


4 out of **5** Americans live in a county that had a declared disaster in the past 5 years.

Nearly **half** of Americans live in a county that has had a flood.



June 19-20,
2012



June 2012 - By the Numbers

- 10+ inches of rain in 24 hours on already saturated soils
- 3,145 homes with reportable damage
- 1,961 homes with >10% damage
- 72 homes completely destroyed
- 2 states, 7 counties, 1 tribal band
- \$29 million in household grants & loans
- 0 FEMA Individual Assistance

Phase of Disaster

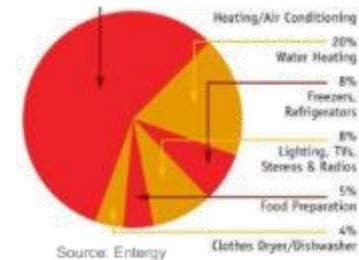
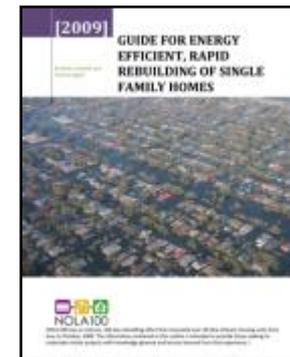
- Response (immediate safety)
 - days to weeks
- Relief (temporary housing/food/sanitation)
 - # of days response x 10
- Recovery (rebuilding)
 - 2+ years



6 weeks – 158 projects



- Single and multi-family rebate program
- 25% on qualified improvements up to \$1,500
- Additional \$1,000 available to CDBG eligible families
- Funds could not be used in FEMA Flood Zone A, needed environmental review
- 24 households, 1 nonprofit
 - 6 furnaces, 1 boiler, 9 water heaters, 6 refrigerators, 1 freezer and 17 washing machines
 - 15 not eligible due to flood plain, 3 couldn't afford upfront cost



Stay Safe and Healthy

- Recognize potential hazards including:
 - Stress
 - Structural Damage
 - Mold
 - Asbestos
 - Electrical hazards
- Gas leaks
- Carbon monoxide
- Contaminated water, food, surfaces, wells
- Septic system failure
- Fuel oil contamination
- Escaped zoo animals

Disaster Assistance

Insurance

Federal

- FEMA Individual Assistance Grants
- SBA Loans

State/Local

- MN Housing QuickStart Loans
- Unmet Needs

Recovery Challenges

- Emergency Needs
 - Electricity
 - Heat
 - Hot Water
- Compromised equipment
- Short-term decisions with long-term impact



Emergency Needs



- Ordean Foundation
 - \$500,000 investment
 - First case management in region (August)
 - Bridge loans and grants
 - Energy efficient recovery
 - Conversion from fuel oil to natural gas
 - Energy audits for all participants
 - Duluth Energy Efficiency Standards
 - 112 low-income households in St. Louis County
- Change to MN QuickStart program
- Lead to “Fuel Conversion Program”

Leveraging Resources

- Disaster Assistance
 - Working with a case manager
- Utility rebates
- Tax credits
- Stabilizing post-disaster finances with lower energy costs
 - \$608
 - \$1,062 (some up to \$3,000)



Questions?



Jodi Slick

CEO, Ecolibrium3

Discussion – Ways energy efficiency programs can help with disaster resiliency and response

1. Incorporate disaster resiliency measures into energy efficiency upgrades (e.g. seismic retrofits)
 - Build the capacity of the contractor base with skills to complete these type of upgrades
2. Advocate for the importance of energy efficiency in rebuilding efforts (e.g. upgrades to damaged furnaces and air sealing and insulation)
3. Use energy efficiency program designs, capacity, and relationships to assist with disaster response
 - Leverage experience with home assessments and developing scopes of work
 - Help coordinate resources and benefits like rebates and financing
 - Assure the quality of work being done
4. Tap the partner networks of energy efficiency programs, such as the network of trained and reliable contractors

Discussion – Ways energy efficiency programs can help with disaster resiliency and response

5. Work with agencies and sources of funding in advance of disasters to incorporate energy efficiency into response and rebuilding
6. Play a role in assuring health and safety in rebuilding such as testing for moisture, mold, carbon monoxide etc.

Discussion – Lessons Learned

- Immediately following a disaster residents and responders are making rapid decisions related to rebuilding and replacing homes and home systems
 - Having the infrastructure and relationships ahead of time allows residents to immediately tap into energy efficiency resources and services
 - Immediately following a disaster, energy efficient equipment (e.g., heating systems, etc.) will often be competing with lower-cost, less efficient products. Determine how you will “make the case” for investments in energy efficiency when residents are making rapid decisions.
 - Important to work with emergency services case managers

Discussion – Lessons Learned

- Having plans, protocols and relationships ahead of a disaster is critical - once a community has shifted into rebuilding you need to have already made the case for energy efficiency
 - Make sure plans and protocols are integrated and coordinated; several plans may already exist
- Energy efficiency can be a vehicle for raising the issue of disaster/resiliency if not already on the agenda, including in areas not prone to disaster

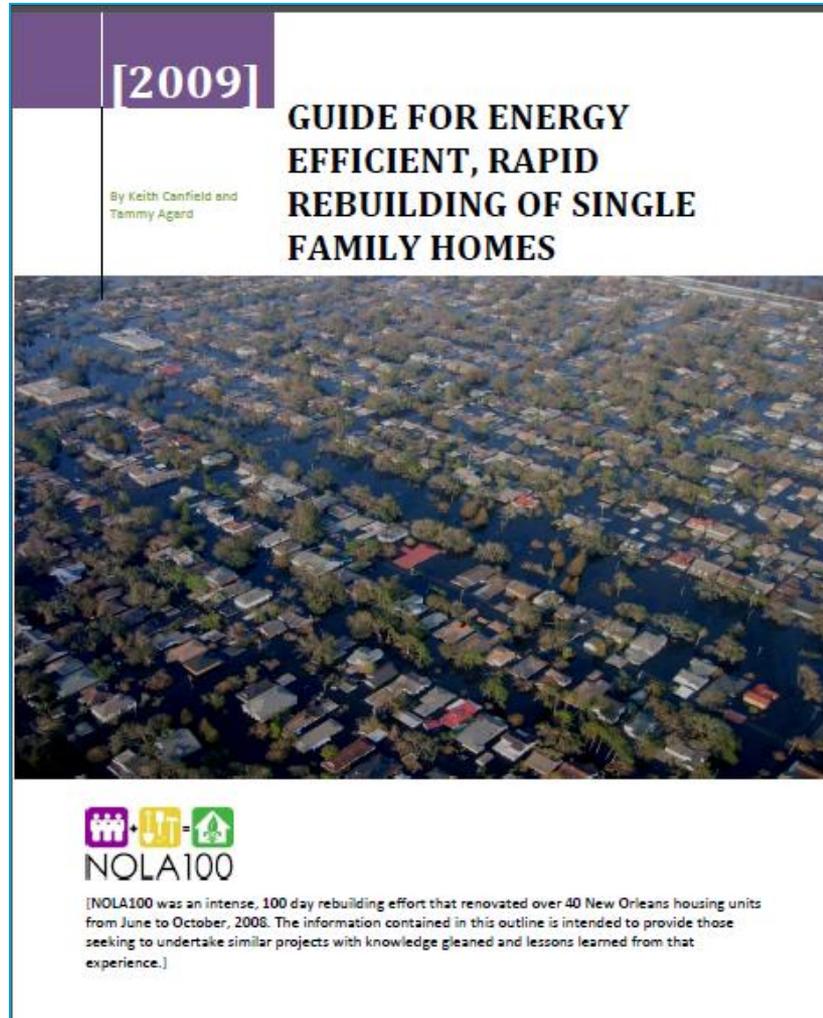
DOE Project on Energy Efficiency and Disaster Resiliency and Recovery

- DOE is working on a protocol for rebuilding communities in more resilient and sustainable ways post-disaster. The protocol is designed for integration into state and local disaster recovery planning efforts. Elements may include:
 - Processes to bring together policy makers and local leaders to identify priorities
 - Standards for replacing damaged building stock
 - A framework for making decisions or spending limited resources
 - Steps that can be taken prior to disasters.
- Project activities may include conducting literature reviews, engaging experts in the area of disaster response, and stakeholder engagement

Resources

- NYSERDA rebate information (Hurricane Irene)
<http://www.nyserda.ny.gov/About/Newsroom/2011-Announcements/2011-09-26-Storm-Relief-Appliance-Rebate-Program-Update.aspx?p=1>
- EmPower New York Program low income assistance (Hurricane Sandy)
<http://sisandyhelp.org/wp-content/uploads/2013/04/EmPower-Energy-Efficiency-Assistance-Guidelines.pdf>
- New Jersey Clean Energy – enhanced incentives (Hurricane Sandy)
<http://www.fema.gov/disaster/4086/updates/new-jerseys-clean-energy-programtm> and <http://www.njcleanenergy.com/SANDY>

Resources



<http://www.extremeweatherheroes.org/media/76153/guideforenergyefficientrapidrebuildingofsinglefamilyhomes.pdf>