California Earthquake Clearinghouse
response to
South Napa Earthquake

Summary for USGS Debrief on September 4, 2014
Heidi Tremayne, EERI & Anne Rosinski, CGS
**DEFINITION:**

*Clearinghouse* = physical (or virtual) location where timely information and data is shared by researchers, engineers and scientists who are conducting (field or remote) reconnaissance after an earthquake.

**PURPOSE:**

- Clearinghouses allow all agencies in the field to coordinate efforts, administer access to restricted areas, share findings, and make plans for teams in the field each day.

- Clearinghouses link the scientific research community with agencies and organizations responsible for emergency response and recovery.
CA Clearinghouse Management

- California Geological Survey (CGS) is chair
- EERI is vice chair
South Napa Activation

- Activated during 7:00am call on Sunday Aug 24, 2014 (within 4 hours of eqk)
- Physical Clearinghouse location created near central Napa with support of Caltrans facility & their satellite communications truck (Sun afternoon)
- Virtual Clearinghouse site launched by EERI (Sun afternoon)
- Active from Sunday Aug 24--Tues Aug 26
- Nightly briefings while active
Participants & Teams

- Over 100 visitors visited physical clearinghouse and attended its briefings from Sunday Aug 24 - Tues Aug 26
- Represented organizations included:

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Clearinghouse Success

- **Overflight Coordination**
  - With support of CHP flew multiple flights to acquire imagery on Sunday and Monday

- **LiDAR**
  - Coordinated a coalition to acquire high accuracy imagery in the most critical areas
    - USGS, CGS, DWR, PEER/GEER

- **Nightly briefings to share findings research community, SOC, REOC, & FEMA Region 9**

- **Multidisciplinary Data Sharing & Integration**
  - Technology interoperability with XchangeCore in support of data sharing
Data Collection Methods

▪ Clearinghouse Fieldnotes (field-based web app developed by Scott Haefner & Luke Blair of USGS)
▪ EERI Photo Upload Tool (post-recon desktop upload)
▪ USGS Synthesis Layers (via Luke Blair)
▪ Shared KML or KMZ Data Layers from teams and individuals
Data Source: Clearinghouse Fieldnotes
ArcGIS Online Map Viewer
View & Share Clearinghouse Data

South Napa Clearinghouse website:
http://www.eqclearinghouse.org/2014-08-24-south-napa/

ArcGIS Online Map:  bit.ly/1smi6so

Google Earth:
https://drive.google.com/folderview?id=0B_skoYqbxBVHdlBiSm9IYkNpUDg&usp=sharing

Add data using Clearinghouse tools at:
http://www.eqclearinghouse.org/2014-08-24-south-napa/how-to-contribute/

Information about the California Earthquake Clearinghouse:
http://www.californiaeqclearinghouse.org/
Preliminary Damage Findings for the Built Environment

- URM damage in downtown Napa from light damage to partial collapse.
  - Efforts are underway to collect detailed performance data to understand the effectiveness of implemented retrofits.

- Mobile Home damage observed

- Wood-frame houses damage to masonry chimneys, and cripple walls.
  - Some success stories of buildings that implemented cripple wall retrofits were documented.
Preliminary Damage Findings for Built Environment

- Limited damage to roadways and bridges
  - being repaired quickly
- Tagging & cordonning of damaged structures have presented challenges
  - may warrant further investigation
- Structural & nonstructural damage will have impacts on business recovery.
- Damage to wineries and storage facilities
  - will have major impacts on the industry in light of the upcoming harvest.
Let’s Be Ready for Next Time…

- **Check-in**
  - learn what others are doing in the field
  - get access to restricted areas

- **Use Clearinghouse Tools**
  - provide live data upload from the field
  - allow clearinghouse disciplinary leads to synthesize field data findings for briefings
  - gives emergency response and recovery agencies access to live data layers

- **Add recommendations to your data entries**
  - for response and recovery agencies

- **Participate and attend at briefings**