



2014 Napa Earthquake – Debris Clearance Debrief & Lessons Learned

To: HHW/Used State Conference, April 10, 2015
By: Kevin Miller, Materials Diversion Administrator
p. (707) 257-9291
kmiller@cityofnapa.org



CITY of NAPA

2014 Napa Earthquake Debris-Related Totals

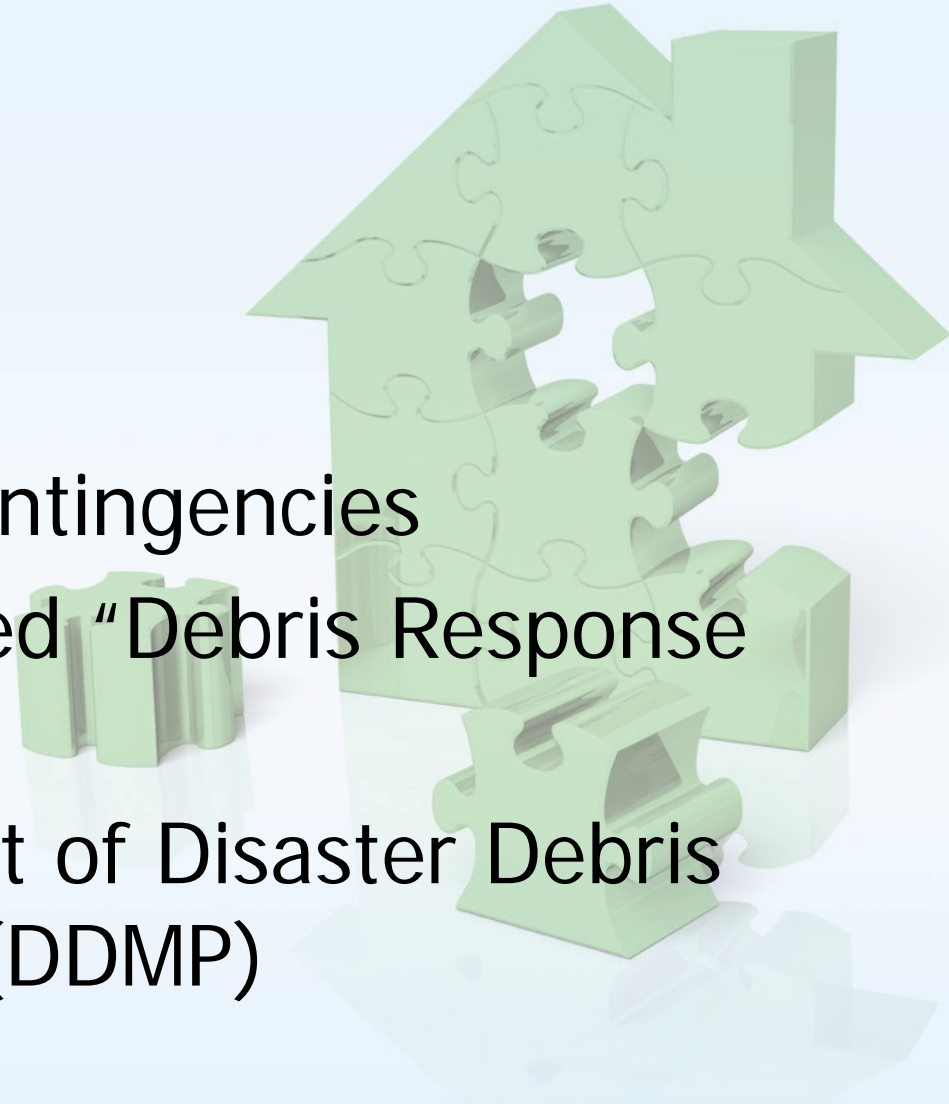
- Approximately 7,400 tons of EQ debris
 - 7,400 tons translated into 1,500+ loads hauled
- 187 tons of ewaste collected & recycled
- \$1.64M in EQ debris removal costs:
 - \$1.11M hauling/temporary debris sites
 - \$482K in disposal costs (from Aug 14 to Feb 15)
 - \$46K monitoring costs
 - Estimated 600 lbs of illegal HHW drop-off (mostly paint/used motor oil)

Top 6 “Things that Worked”

1. Rapid & Timely Response
 2. Pre-existing Contractual Relationships
 3. Temporary Debris Site Management
 4. Separation of Earthquake vs. Non-Earthquake Debris
 5. Debris Coupon Mailing
 6. Social Media & Nixle Info Dissemination
- 

Top 6 “Lessons Learned”

1. Magnitude of Event
2. Site Selection
3. Monitoring of Sites
4. Timing of Event/Contingencies
5. Need for Pre-stocked “Debris Response Trailer”
6. Future development of Disaster Debris Management Plan (DDMP)





CITY of NAPA

THINGS THAT WORKED





CITY of NAPA

1. Rapid & Timely Response

- Event @ 3:20 am on Sunday, August 24th
- City staff @ Emergency Operations Center @ 4:30 am
- City staff contacting NVUSD @ 4:35 am
- City staff contacting hauler @ 4:40 am
- First debris boxes on the ground by 7 am
- 12 boxes delivered to grocery stores on August 24th, temp sites soon thereafter



CITY of NAPA

2. Pre-existing Contractual Relationships

- Hauler – Napa Recycling & Waste Services (NRWS)
- Disposal Facility – Devlin Road Transfer Station (Napa-Vallejo Waste Management Authority)
- Internal City Resources – Signs, street sweepers, etc.





CITY of NAPA

3. Temporary Debris Site Management

- Identification & Flexibility of Debris Sites
- Use of subcontractors to hauler for management of Temporary Debris Sites
- Good Signage
- Ability to deal with electronic waste
- Over time - site monitoring, user logs, debris separation, minimize impacts, etc.



Temp Debris Site Images





CITY of NAPA

Temp Debris Site Images (continued)



Temp Debris Site Images (continued)





CITY of NAPA

Temp Debris Site Images (continued)



Temp Debris Site Images (continued)



Temp Debris Site Images (continued)





CITY of NAPA

Temp Debris Site Images (continued)

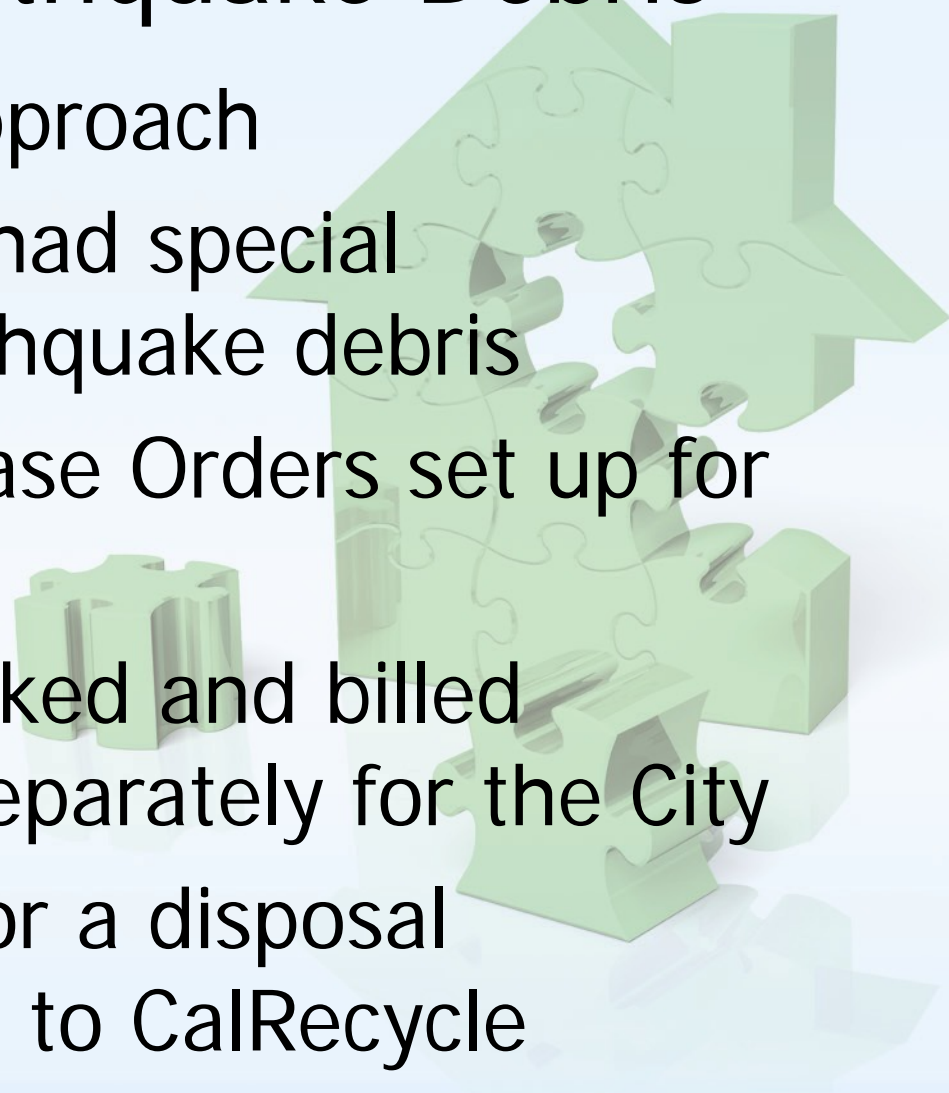




CITY of NAPA

4. Earthquake vs. Non-Earthquake Debris

- “Cradle to Grave” approach
- Hauler work orders had special identification of earthquake debris
- Separate City Purchase Orders set up for earthquake debris
- Transfer Station tracked and billed earthquake debris separately for the City
- City well-prepared for a disposal modification request to CalRecycle



5. Debris Coupon Mailing

Earthquake Debris?

ONE LOAD SPECIAL COUPON



This one load special coupon will allow you to drop off earthquake-only debris such as bricks, asphalt, broken furniture, cracked lumber or broken dishware & glass at the Devlin Road Recycling & Transfer Station. **FREE!**

889 Devlin Rd, American Cyn • 707-258-9005; Daily 8am-4pm

See reverse for further details.



This coupon cannot be used for: (see map reverse side for proper disposal of these items)

- ✗ Hazardous household wastes such as latex & oil-based paints, paint thinners, polishes & cleaners, oven cleaners, etc.
- ✗ Electronic wastes...proper disposal locations on reverse side.

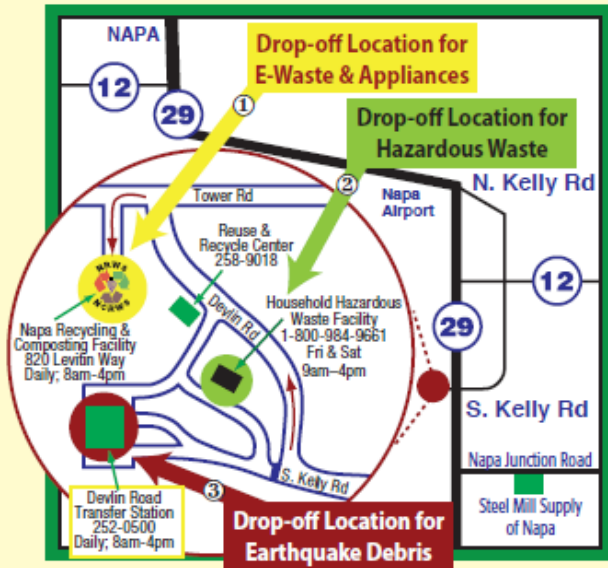
Too much? No truck? Consider a debris bin or other options provided by Napa Recycling & Waste Services. Call for service and rates at 255-5200.

This coupon expires February 28, 2015



CITY of NAPA

5. Debris Coupon Mailing (B-side)



All appliances, e-waste and hazardous wastes must be dropped off at nearby locations* **BEFORE** using this free coupon for earthquake-only debris disposal at Devlin Road Recycling and Transfer Station.

- I agree and understand that this special coupon is intended solely for earthquake-related debris.
- Yo entiendo que este cupón especial es exclusivamente para escombros relacionados con el terremoto.

Name (PLEASE PRINT)

Address/City

Signature

**accepted at no charge for households
—businesses call for services and rates*



CITY of NAPA

6. Use of Social Media - Nixle

- Local hauler (NRWS) used various forms of social media for extended outreach
 - Facebook – Usually 90 views/post, average 900 views after EQ, one post had 2,486 views
 - Twitter – 10x normal usage
- City and County used “Nixle” system and websites effectively for dissemination of disaster-related information



CITY of NAPA

LESSONS LEARNED

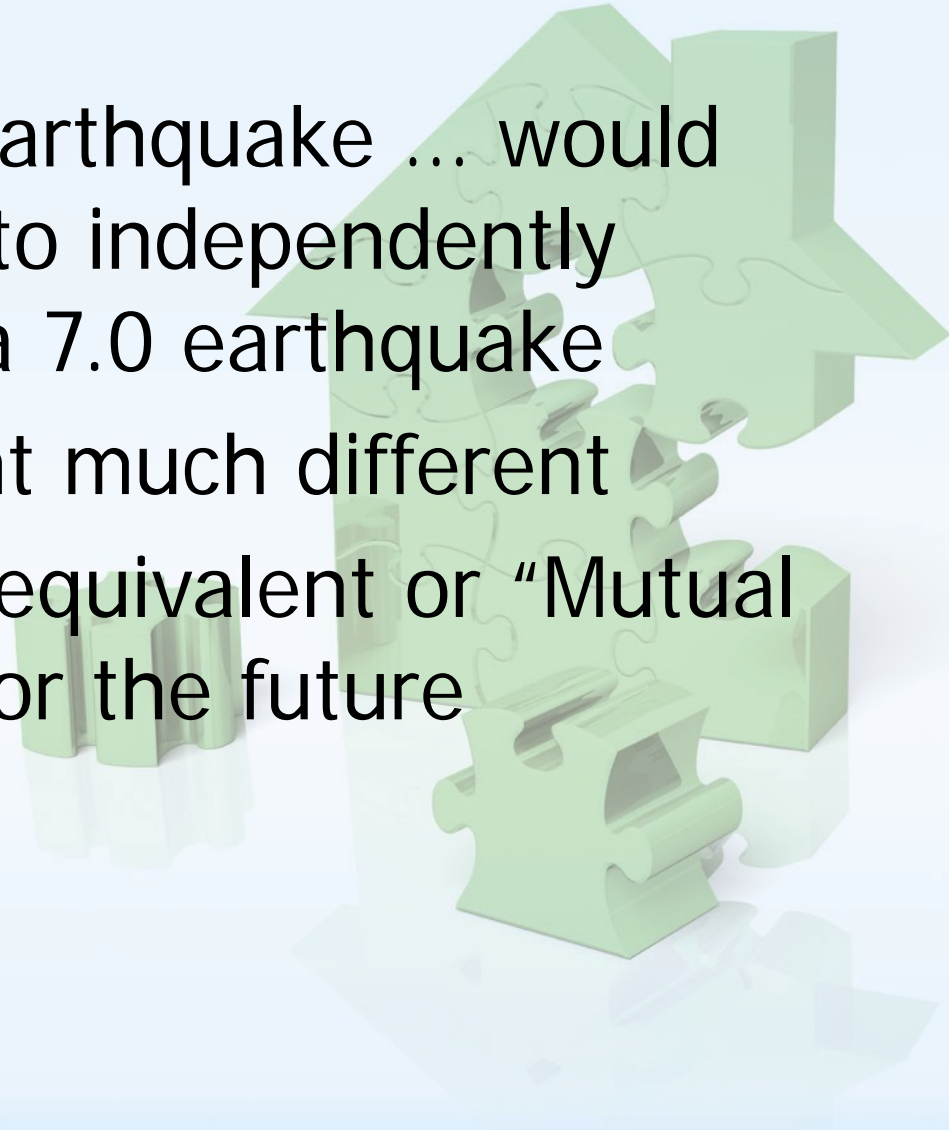




CITY of NAPA

1. Magnitude of Event

- Able to handle 6.0 earthquake ... would not have been able to independently handle debris from a 7.0 earthquake
- Regional major event much different
- Possibility of Debris equivalent or “Mutual Aid” arrangements for the future

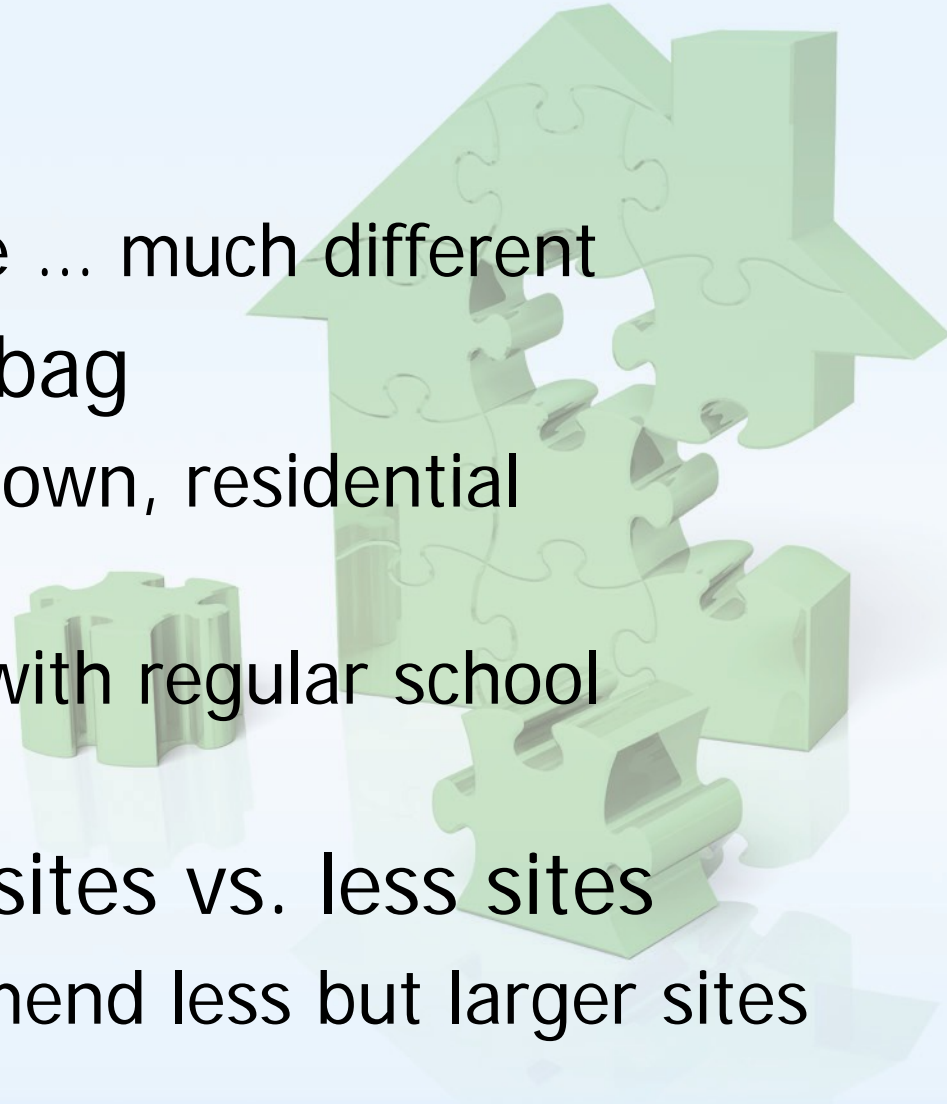




CITY of NAPA

2. Site Selection

- Type of Event
 - Flood vs. Earthquake ... much different
- School Sites: Mixed bag
 - Pro = Paved, well known, residential neighborhoods
 - Con = Interference with regular school operations
- Trade-offs for more sites vs. less sites
 - Ultimately recommend less but larger sites

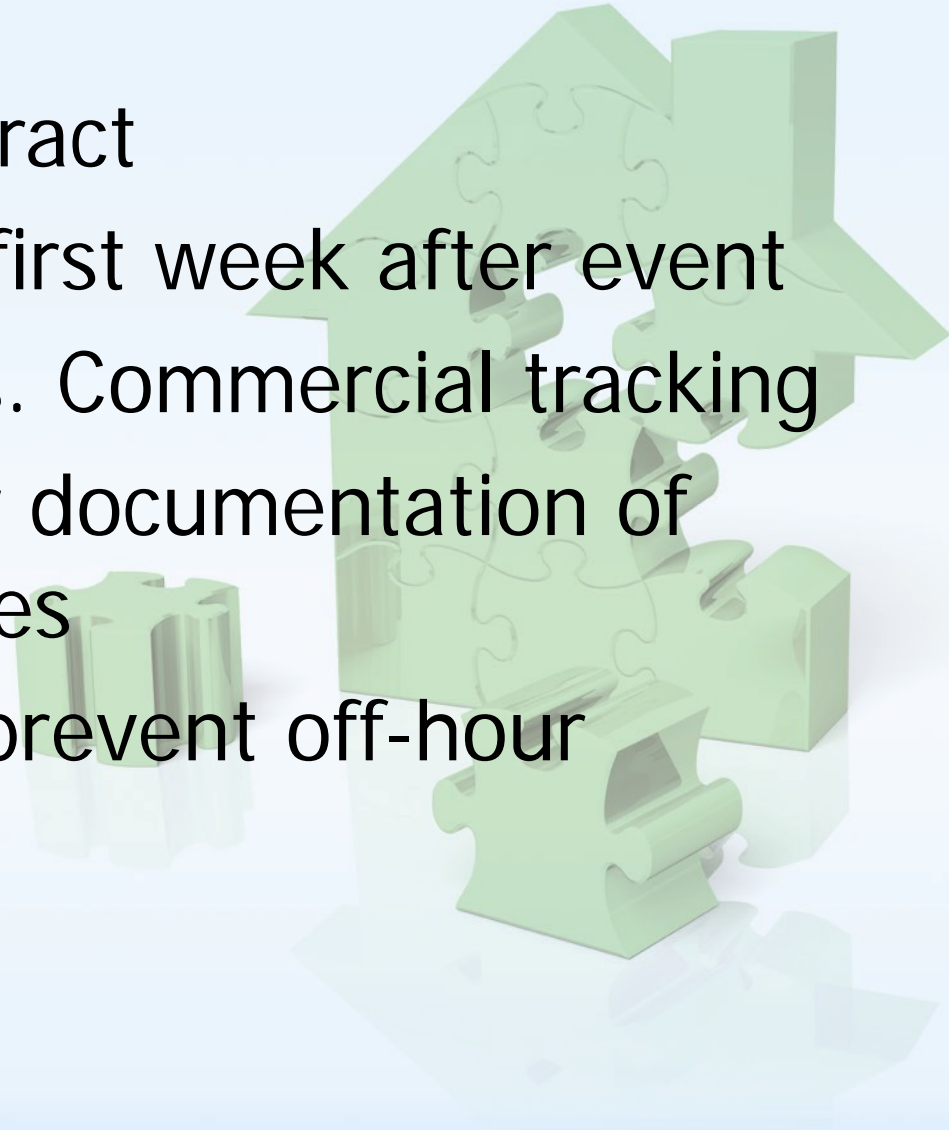




CITY of NAPA

3. Monitoring of Debris Sites

- No pre-existing contract
- Minimal monitoring first week after event
- Better Residential vs. Commercial tracking
- More pictures/better documentation of temporary debris sites
- Improved ability to prevent off-hour dumping

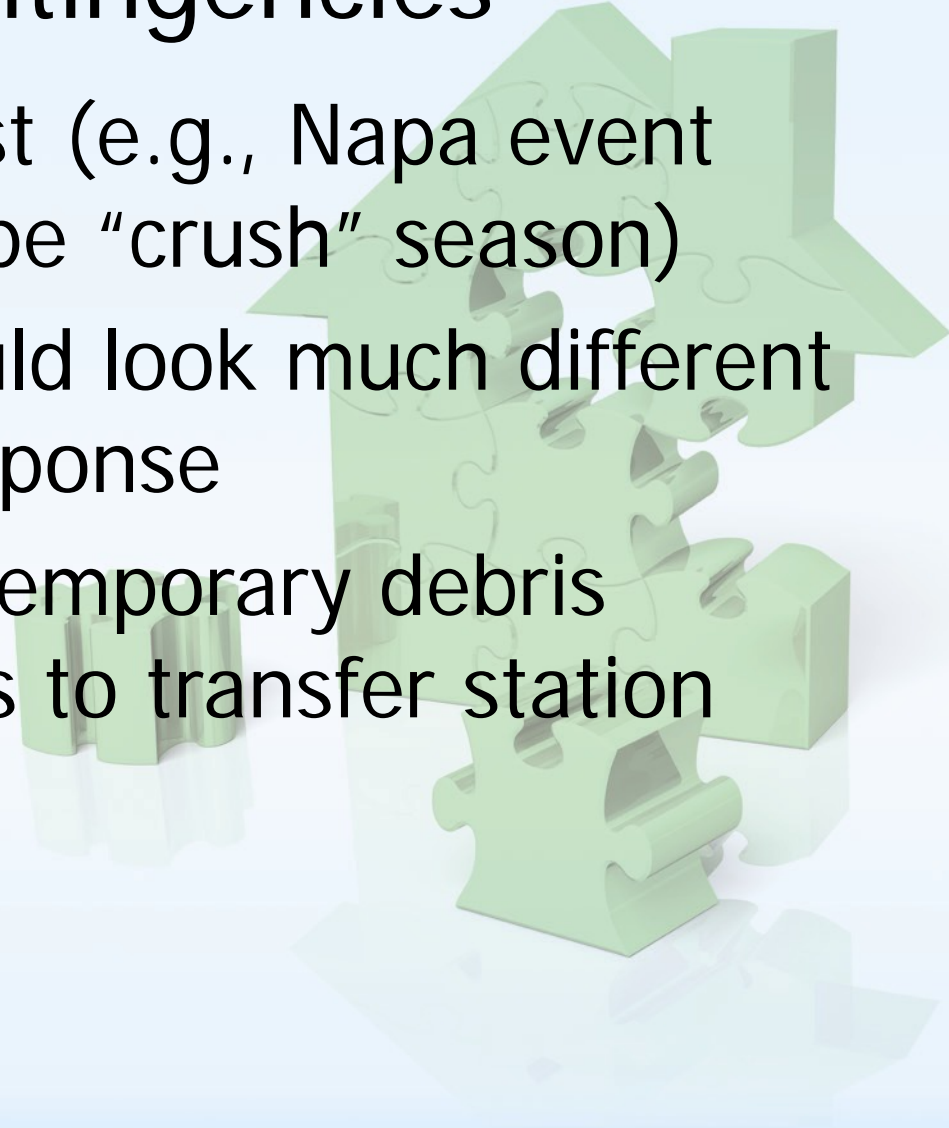




CITY of NAPA

4. Event Timing & Contingencies

- Prepare for the worst (e.g., Napa event occurred during grape “crush” season)
- Flood Response would look much different than Earthquake response
- Need for “in-town” temporary debris storage site if access to transfer station had been cut-off



5. Pre-stocked Trailer

- NRWS would like to have a pre-stocked “debris response” trailer with items such as:
 - Caution tape
 - Waddells/stormwater mitigation
 - A-frames and preset signage
 - Spill Kits





CITY of NAPA

6. Disaster Debris Management Plan (DDMP)

- Extra 2% offered by FEMA for impacted communities with approved plans
- Forces solution in a calm & thoughtful environment vs. the heat of disaster response
- Avoid duplication of resources (e.g., debris removal and public safety using same site)



Questions?

