



Photo credit: Stuart Palley

Disaster Diversion, Part II

Zero Waste Lessons from the North Bay Wildfires



Tim Dewey-Mattia
Napa Recycling
& Waste Services

2017 North Bay Wildfires

- Started Oct 8th, burned over 245,000 acres
- 44 fatalities
- Thousands of structures destroyed (including 5000+ homes in Sonoma County, 600+ homes in Napa County)
- costliest fires on record (surpassed Oakland Hills, 1991)
- Over 1 million tons of debris so far
- 7000+ tons of organics received at Napa facility



Fire Debris Handling and Removal Information

Ash & Burn Debris

(considered as Hazardous Debris until tested)

Debris and ash from residential and commercial fires is likely hazardous and may contain toxic substances due to the presence of synthetic and hazardous materials (e.g. lead paint, asbestos). Napa County is working to secure assistance from State agencies that will ensure proper handling and disposal of household hazardous waste products as well as burn debris and ash from the fire. State agencies have begun the process in Napa already but please be patient as this process unfolds. In the meantime, in order to protect your health and the health of your neighbors, you should NOT begin any debris removal at this time without the involvement of County or State agencies. Please refer to the official advisories and requirements regarding safety precautions related to re-entry and debris/ash removal, and the process for removal by the government program or privately completed. Until all hazardous wastes have been removed and the property is cleared of debris and all contaminated soil has been removed, no building permits will be issued. A demolition permit is required for private cleanups.

Please visit www.countyofnapa.org for more information.

Green Waste and Compostable Material

Residents may bring green waste and yard trimmings to the Napa Recycling & Composting Facility but we want to remind you that there is a fee (\$18 minimum charge or \$44/ton). Alternatively, you can use your normal brown curbside compost cart (or carts) for a wide range of compostable materials (including yard trimmings, food scraps & soiled paper) at no additional charge. We encourage curbside collection of green waste as there are vehicle count & tonnage limits on self-haul loads at our recycling and composting facility.

Please visit www.naparecycling.com for more information on waste disposal

Customer outreach



- Learned from quake – proactive about customer outreach to avoid contamination issues
- Prolonged disaster several weeks long
- Service and operational interruptions – evacuated areas with no access, in town office w/o power, had to suspend MRF operations due to smoke
- When evacuees returned home - food waste
- Even though we couldn't haul burn debris, customers looked to us for info



Social Media

- This is when people pay attention to you on FB & Twitter (20x impressions as non-disaster posts)
- Boost!
- Coordinate with City/County's Nixle & social media
- Combine messaging w/ other outreach – local radio, newspapers, etc.

The screenshot shows the Facebook page for Napa Recycling. The page header includes the URL <https://www.facebook.com/NapaRecycling/> and the page name "Napa Recycling" with a search bar. The navigation bar includes links for Page, Inbox, Notifications, Insights, Publishing Tools, and Promotions. The page features a profile picture of a recycling symbol with a bunch of grapes in the center, and the website www.naparecycling.com below it. The left sidebar lists various page sections: Home, About, Photos, Events, Videos, Posts, Services, Shop, Groups, Notes, Offers, Jobs, Community, and a Promote button. The main content area displays a post from Napa Recycling, published by Tim Dewey-Mattia on October 13, 2017. The post text reads: "Friday 10/13 update: we continue to provide regular service to all non-evacuated areas. #Napa office is closed, main office and facility at 820 Levitin Way are not impacted and are open. For those who lost power and/or are just returning to previously evacuated areas, and need to dispose of spoiled food from their refrigerator/freezer, please note: You can put all spoiled food - without the packaging - in your brown compost/yardwaste carts. Please remove the packaging first and place the packaging in the trash (film plastic) or recycling (rigid plastic, cardboard and paper) - and the food scraps in the brown compost cart. Thanks and be safe!". Below the post, it shows that 2,447 people reached the post, with a "Boost Again" button. A "Recent Activity" section indicates the post was boosted on Oct 13, reaching an audience of United States: Napa California, 18 - 65+, by Tim Dewey-Mattia. The post has 30 shares and a list of users who liked it, including Cindy Mellon, Patricia Hawton, and 38 others.

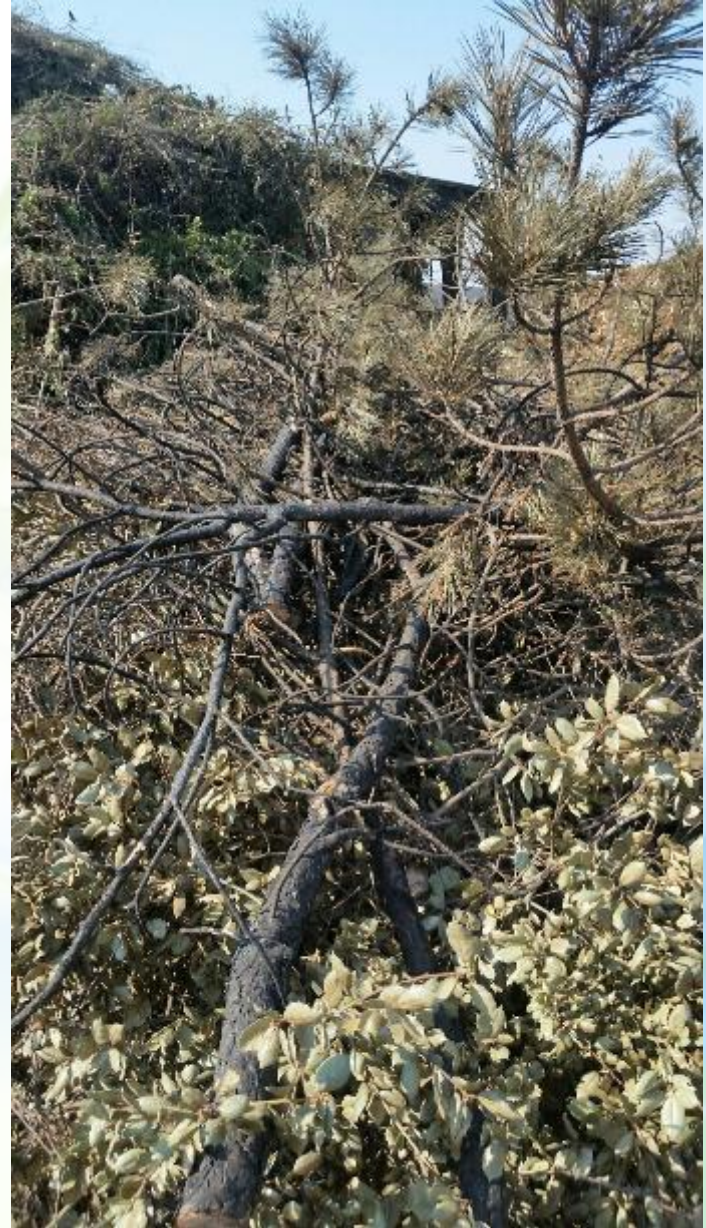
Fire Debris Management

- Hazardous waste crews first remove hazardous waste and certify site
- Debris then removed by federal/state contractor or by owner
- Our facilities can take fire debris only after certified clear of haz waste by County



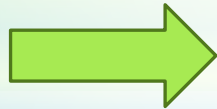
Massive influx of green waste

- Over 7000 tons to Napa Composting Facility
- Some burned, some not
- Record tonnage, received emergency waiver
- “*WoodAGeddon*” – biomass markets are still bad
- Used trees & stumps from fires for biofilter projects



The Donation Flood

- Flood of donated goods
- Lots of waste at shelters and response camps
- Gently urge people to give \$, not stuff
- Free Pop Up Shop Opened in Napa



Medium

Sign



Karen Merzenich [Follow](#)

Oct 11, 2017 · 7 min read

Stop Donating Goods to Disaster Victims. What They Need Is Money.

Giving food and sending used clothes feels good, but it's usually the last thing people or charities need in times of crisis

Related Outreach for an Attentive Audience

- General fire safety messaging
- Think about fire prevention in your organics programs – create defensible space AND divert this yard debris to composting
- Compost your spoiled food



COOLING YOUR COALS

Do not put hot coals or ashes in your carts

Hot ashes or coals can cause severe burns and fire damage to properties. Follow these safety measures when disposing of them.

- Use metal cans no more than 30 gallons in size with tight-fitting metal lids.
- Fill cans with hot ashes only halfway so they cool quickly and are light in weight.
- Secure metal lids on cans to prevent spread of sparks or embers.
- Check, stir, and water ash cans for several days until completely cool.
- Avoid adding hot coals on top of cool coals by using a set of cans that can be used sequentially.
- Check to be sure that ashes are completely cool before placing them in compost cart.



Grocery Stores = food waste in both earthquake and fires

- Need to provide service to them immediately
- Lost power during fires for several days
- Difficult to divert material, since everything is packaged



Next up: Food Waste Depackaging System



Packaging Examples

[Main](#)

[The System](#)

[Applications](#)

[Video Grid Gallery](#)

[Video Gallery](#)

[Images](#)

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Mixed Grocery Waste - Before



Organics- After



Waste Packaging - After



Service & revenue impacts

- 260 closed residential accounts in our Napa County service area
- Destroyed equipment – over 1000 melted carts
- Busiest time of year, shortage of debris boxes during Crush
- Anticipate increased C&D business over next 2-3 years





2006 Flood
2014 Earthquake
2017 Wildfires
What's Next...a Plague of Locusts?



Probably not, the Rocky Mountain Locust is extinct.

Questions?

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