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Social Media Strategies During Disasters

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Social Media Strategies during Disasters

Presented by Laurie J. Van Leuven January 25, 2012

1



Laurie J. Van Leuven Background

- 12 years in Emergency Management
- 12 years in local government
- > 6 years in Critical Infrastructure Protection
- 4 years public information
- Level III IMT Planning Section Chief
- Naval Postgraduate School Center for Homeland Defense and Security
- Appointed to FEMA as Fellow in Washington DC
- Situational Awareness Section FEMA's NRCC
- Social Media Disaster Forum project for FEMA











INTERAGENCY BIOLOGICAL RESTORATION DEMONSTRATION



FEMA

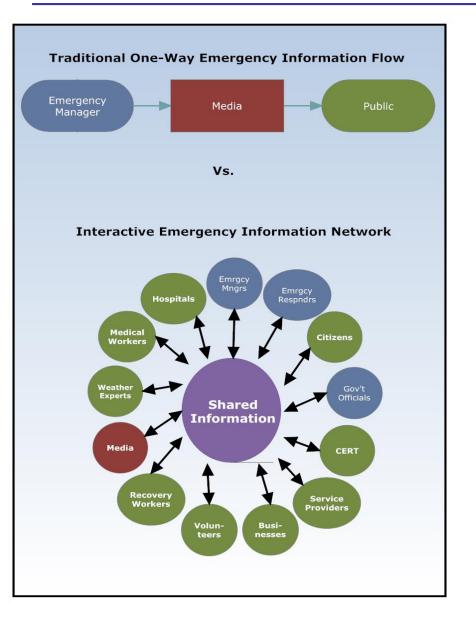


Today's Agenda

9 a.m. – 9:15 a.m. Welcome Introductions		Jeff Friedland Matt Snyder		
9:15 a.m. – 10:45	Social Media during Emergencies Current Industry Practices Value Proposition Strategies and Tactics	Laurie Van Leuven		
10:45 – 11 a.m.	Break			
11 a.m. – 11:30 a.m.	Group Exercise Scenario Development	All participants		
11:30 a.m. – 12 p.m.	Lunch	All participants		
12 p.m. – 12:30 p.m.	Incident Objectives What are your incident objectives? What information does the public need? What information does the public have to share?	All participants		
12:30 p.m. – 1:45 p.m.	Needs Assessment Current Capabilities and Tactics Lessons Learned Goals, Objectives, & Strategic Needs	All participants		
1:45 p.m. – 2 p.m.	Break			
2 p.m. – 2:45 p.m.	Next Steps Strategic Needs Prioritization	All participants		
2:45 p.m. – 3 p.m.	Wrap up	Jeff Friedland Matt Snyder		



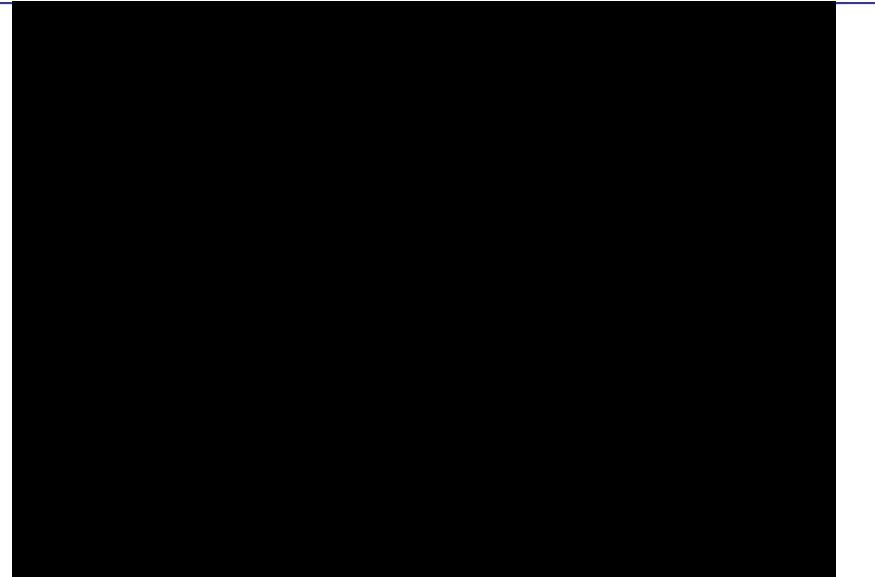
Whole Community = Resiliency



- Traditional emergency info travels from one to many; P2P info travels rapidly from many to many
- Citizens are the true first responders - we need to leverage their capabilities
- The Whole Community wants to access and share emergency information
- Digital mediums and smartphones for information sharing and can empower citizens as sensors in the field

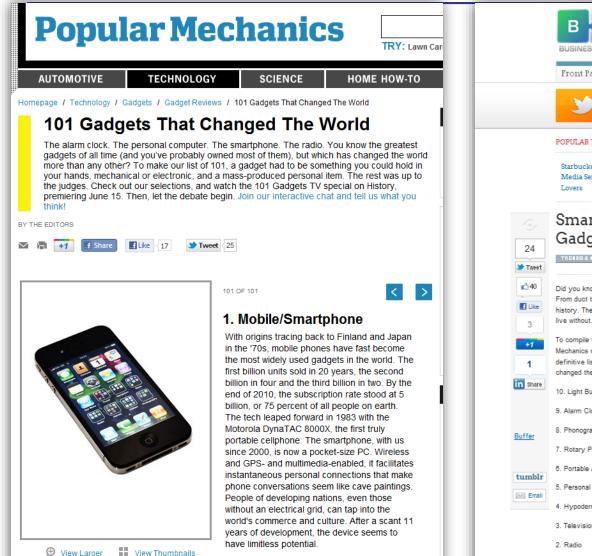


Future Technology





Smartphones Changed the World





What do you think? Which gadgets would make your top 10 list?

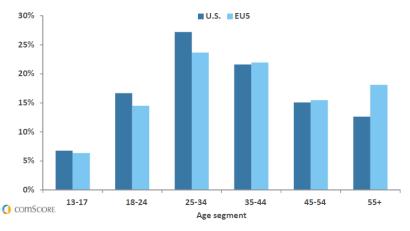
Coveo Insight Solutions Increase innovation and cut time to marke

🕀 View Larger

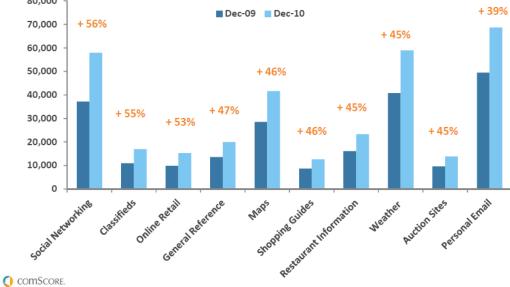
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- Steady increase in smartphone usage (not just phone calls anymore)
- 109 million U.S. users (46.7 percent) used mobile media in 2010 (+7.6%)
- 4 of the top 5 acquired devices in 2010 were smartphones
- · Likely that future telecommunication vendors will only sell smartphones
- People using smartphones for social networking (+56%)



% Composition of Smartphone Users by Age Segment Source: comScore, MobiLens, 3 mo. avg. ending Dec-2010
U.S. EU5
Fastest Growing Mobile Categories in the U.S. by Total Audience (000) Source: comScore MobiLens, 3 mo. avg. ending Dec-2010 vs. Dec-2009
80,000
70,000 - + 56%
445%



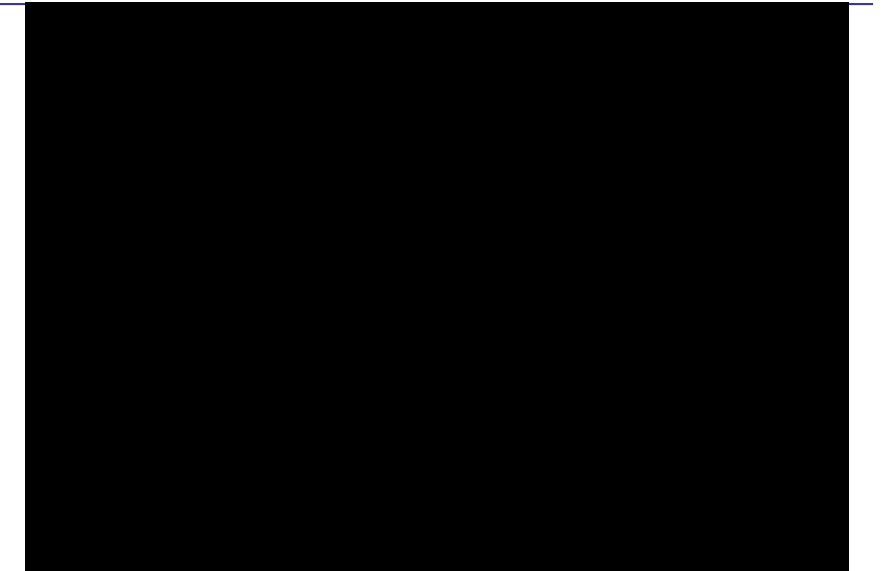


Incidents, Public & Social Media

- Mississippi River Valley Flooding (May 2011) Consolidated social media content
- Southeast Severe Storms /Tornadoes (April 2011) Facebook
- Japan Earthquake (March 2011) YouTube videos
- New Zealand Earthquake (Feb 2011) eqviewer crisis mapping, mashups
- Political and Civil Unrest in the East (Iran Elections, Egypt) Twitter and YouTube
- Haiti Earthquake (Jan 2010) Twitter, Mashups, crisis mapping
- Times Square Bomb (May 2010) Wikipedia
- Tennessee Flooding (May 2010) YouTube, Flickr, Blogs, FB
- Gulf Oil Spill (May July 2010) Facebook, Flickr
- Iran Election Riots (June 2009) State Dept Request Twitter Defer Maintenance
- Plane crash on the Hudson (Jan 2009) Twitter and Flickr
- Australian County Fire Agency (Feb 2009) Twitter, FB, Flickr, Google maps
- FDA recall of salmonella tainted pistachios (March 2009) Twitter
- H1N1 Outbreak (May Oct 2009) Twitter, Flickr, widgets, apps, YouTube, RSS feeds
- Lakewood, WA Police Shooting and Ft. Hood Shootings (Nov 2009) Twitter
- Mumbai terrorist attacks (Nov 2008) Twitter and blogs

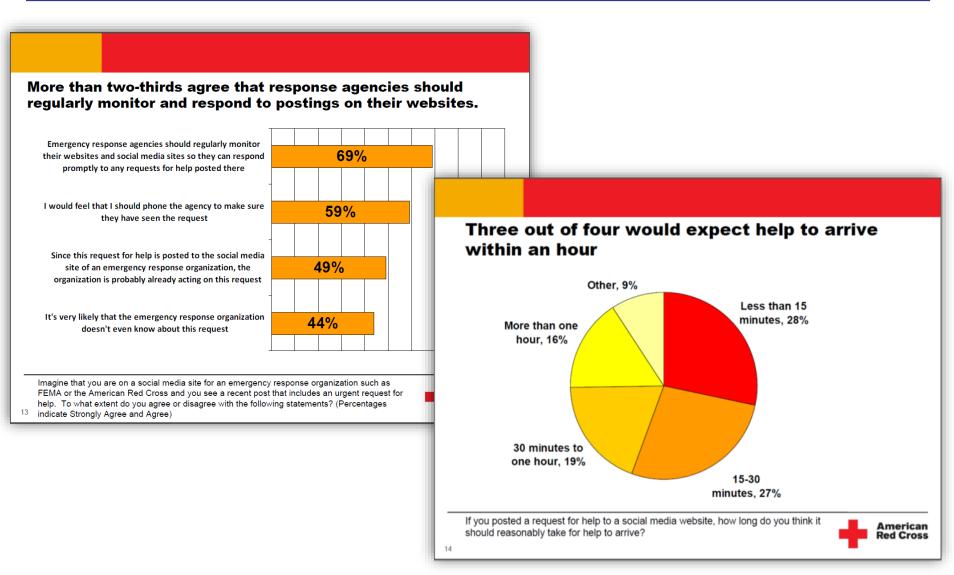


Japan Earthquake / Tsunami





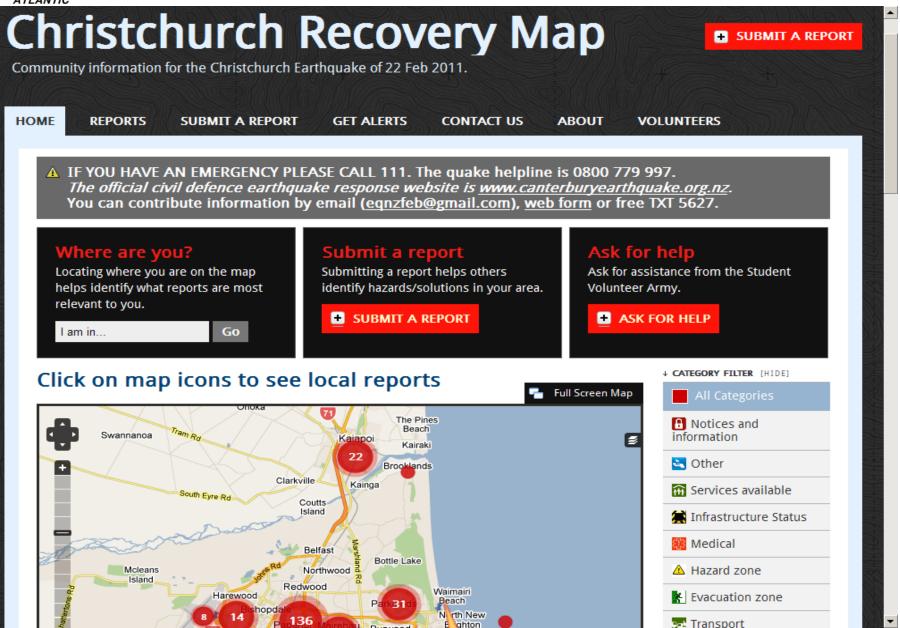
Driver: Expectations are Rising



http://www.redcross.org/www-files/Documents/pdf/other/SocialMediaSlideDeck.pdf ¹⁰



Humanitarian Efforts: Digital Volunteers





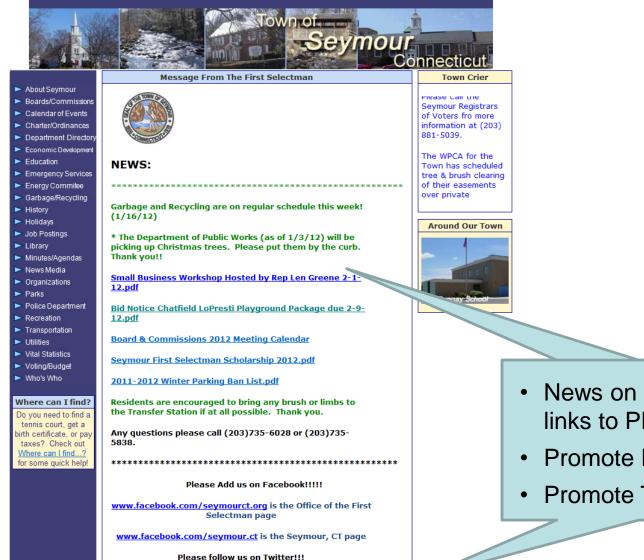
- Severe storms including dangerous winds and torrential rain has slammed many states in the northeast. Widespread damage has disrupted infrastructure and critical services to communities including power and utility outages.
- Emergency responders are overwhelmed with calls for assistance.
- The extent of damage to roadways is unclear, but many were damaged by floodwaters or are impassable due to flooding or debris.
- Roads and bridges that connect various communities have sustained significant damage and some communities are isolated.
- Railroad operations and other transportation and shipping systems are not able to operate.
- What are the best ways to alert and notify the public?
- How might smartphones and social media be leveraged to facilitate flood evacuation and long-term needs in the aftermath?



Case Study: Seymour, CT July 8, 2011



Seymour Official Web Site



- News on Homepage links to PDF files
- Promote Facebook Page
- Promote Twitter Page



Seymour FB Page Underutilized



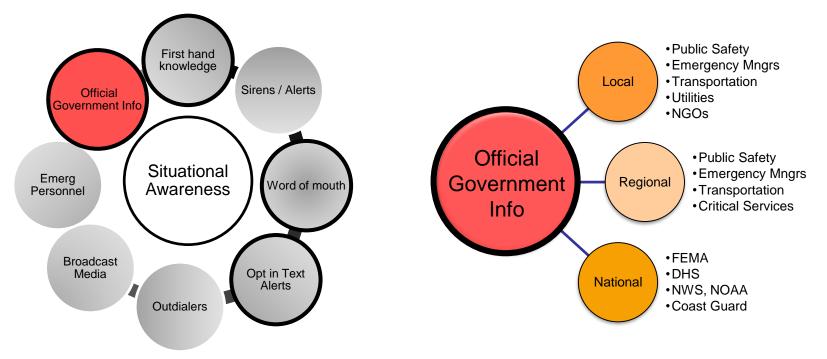
- Not one mention of the storms or flooding on July 8, 2011.
- Not one mention of road closures, power outages, or response efforts.
- Not one mention of how to report damages.

Smart Practice includes multiple strategies to amplify your messages.



Life Safety via Access to Information

- Situational Awareness is critical for decision-making
- Many sources of information converging at same time
- Emergency managers cannot "control" all information exchanges
- No existing National Strategy





Emergency Communication Tools

- Not an all or nothing approach
- Existing tools still valid
- Social media adds new options with different strengths to the mix
- Best for providing interactive exchanges, supporting dialogue, sharing of multimedia information
- This is not an exhaustive list – more tools come online all the time

Emergency Communication Tool	Description	Ince	Sq 6	S4 6.	Line Contract	Uisi Uisi	Dist
Ning Community	An online platform for people and organizations to create custom social networks	x	x	x	x	x	
Crisis Maps (Mashups)	An interactive display of dynamically geocoded data sets	х	x	x	х		
Flickr	View, upload and share digital photos	Х	X	Х	Х		
Wikis	Web site that allowsusers to add, delete, or revise co ntent	х	x	x		х	
Twitter	Send and receive alerts, warnings, and situational info in real time	х	x	x			x
Discussion Threads	Effort to increase public access to ongoing dialogue	х	x			x	
Community Meetings	Face-to-face forum for less immediate concerns facing a neighborhood or community	x		x		x	
Facebook	Quick exchange of info among users who are connected to each other's networks	х		x		x	
Google+	Social networking competitor to Facebook leveraging existing Google aps	x		x		х	
Face-to-Face	Door knocking, bullhorns or traffic guides with real time instructions to impacted public	x		x			x
9 1 1 Calls	Emergency telephone number used by public to report and request an emergency response	х	x				
LinkedIn	Business related social networking site	х					
YouTube	Watch videos of incident, damages, and response and recovery efforts		x	x	x		
Web Site Updates	Digital information posted on an angency's web page			x	х		
Blogs	A web log of author's observations and opinions and viewer comments		x	x		x	
Emergency Alert System	Alert disseminated over broadcast media for public notification of an emergency situation			x			x
News Releases	An official statement prepared and issued to the media			x			x
Opt in Text Alerts / Emails	Allows for distribution of information via email or cell phone to receipients who have opted in			x			x
Outdialing Phone Messages	Prerecorded info via telephone in a defined geographic area			x			x
Press Conference	Prearranged interview with news reporters			х			х
Community Bulliten Boards	Physical signage system used to post updates and information for community members			x			
Sirens	Loud, audible alert system to signal an emergency within a physical proximity						x

*SA = Situational Awareness

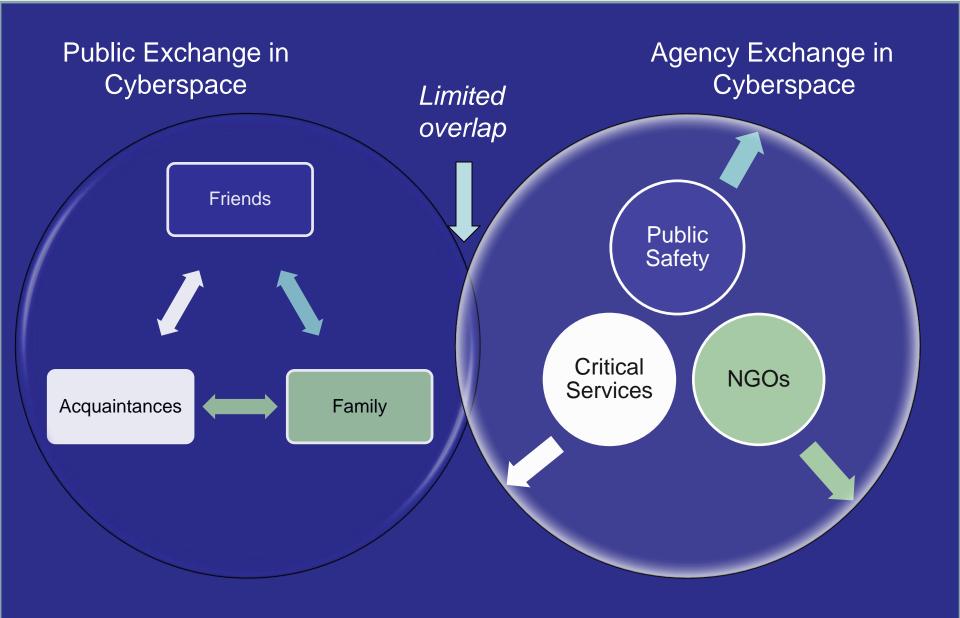


Current Tactics: Too Much Clutter





Information Exchange Limitations





Observations: Successful Results

Los Angeles Times | LOCAL

Sign In or Sig 🚺 💷 170k





Police tweet on the beat during flood crisis

Kellie Riordan

Updated January 20, 2011 13:43:00

Just after 5pm on the day of the Lockyer Valley floods, Kym Charlton sent an urgent message from the Queensland Police Service Twitter and Facebook accounts:

"All residents living near the Lockver Creek near Gatton and towns downstream are asked to evacuate their homes until further notice. A significant rise in the creek could inundate houses. All in low lying areas or near the creek are urged to move as soon as possible to higher ground."

Less than an hour later the message sent out via their Twitter stream (@QPSMedia) was even more urgent:

"Anyone living near Lockyer creek should IMMEDIATELY evacuate to higher ground. #thebigwet #gldfloods" (18.11pm).

The Queensland Police Service (QPS) is a traditional and conservative organisation, not known for its savvy. But as the Queensland floods crisis worsened, the Queensland Police Service used social media tools Facebook, Twitter and YouTube to get its message to the public directly.

MAP: QLD

to connect with residents.

The QPS started its Facebook and Twitter accounts in May last year, making it a relative latecomer to social media. But a push by Ms Charlton, the QPS director of police media and public affairs, has paid off enormously in the past month.

"We did it in the absence of policy. There is no policy around social media at the moment but on the balance we thought it was more risky for us to not be involved in social media than to be involved, for the reasons as shown in the last couple of weeks," she said.

Direct communication

Where police have usually relied on calling media conferences to get messages out, they could now speak directly with those in the crisis.

"The benefits in being able to talk directly to the people of Queensland when we need to contact them has been so valuable," she said.

"We're not relying on news bulletins. We're not relying on journalists making decisions about newsworthiness. We've just been able to go directly to the people when we need to."

Ms Charlton sat in on top-level meetings as the QPS took on the role of lead agency while the crisis moved from central Oueensland to the south-east of the state.

"I was doing a lot of the posting. I think the key to being able to post any information quickly is being able to clear it quickly and in a hierarchical organisation that's difficult to ask junior officers to do. So I was literally sitting in the meetings and tweeting from the meetings. As soon as I'm getting verified information, I'm getting it up there," she said.

The relatively small OPS Media Unit worked around the clock to keep the flow of information coming, hother it was tweating road closure information or streaming proce conferences by Dolice Commission



Faced with a quickly changing, highly unusual investigation, L.A. law enforcement agencies embraced Twitter and other forms of social media as never before. Law enforcement and fire agencies essentially joined the conversation, using Twitter and Facebook not only to disseminate information but to get tips and track reports of new fires.

PHOTOS: Southland arson fires



How to reach

How to build muscle

Advertision by Statestyle

DOW

over 8 million voters now. Los Angeles Cimes MIDIA GROUP

Search

WEEKLY AD



Photos: Rose Parade trophy winners



moments of 2011



light on fallen Marines



Plaschke: Local kid makes heads shake



Interactive map: Southland arson









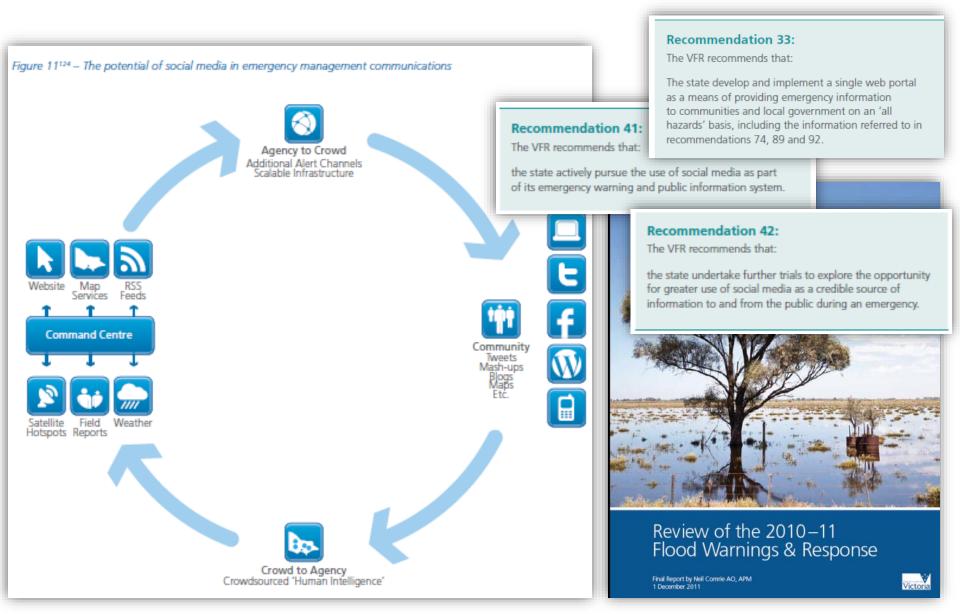


Subscribe/Manage Account Place Ad LAT Store Jobs Cars Real Estate Rentals Classifieds Custom Publishing



Assessments: Comparative Gov't

Case Study: Queensland, Victoria (Australia) Flooding 2010-11





Hedging: Need to Address Gaps

Emergency Warnings and Alerts

Although there has been much discussion of using social media to issue emergency warnings that advise citizens to seek shelter, evacuate the area, or take other protective measures, it is unclear whether social media have been used to officially issue emergency warnings.



Social Media and Disasters: Current Uses, Future Options, and Policy Considerations

Bruce R. Lindsay Analyst in American National Goverment

September 6, 2011

Congressional Research Service 7-5700 www.crs.gov R41987

Drawbacks Cited in CRS Report

- 1. Accuracy of Information
- 2. Malicious Use
- 3. Technological Limitations
- 4. Administrative Cost Considerations
- 5. Privacy Issues

Additional Considerations and Potential Policy Implications

While there may be some potential advantages to using social media for emergencies and disasters, there may also be some potential policy issues and drawbacks associated with its use.

Concluding Observations

Social media appear to be making inroads into emergency management for a variety of reasons. For one, accurate, reliable, and timely information is vital for public safety before, during, and after an incident. As people continue to embrace new technologies, use of social media will likely increase. Moreover, as its popularity grows, a significant number of people will likely choose social media as their main source of information. They may also increasingly expect that agencies will also use social media to meet their informational needs. Many emergency managers and agencies have already adopted the use of social media to meet this expectation. However, they also started using social media because they believe it provides another tool to disseminate important public safety information.



- Steady increase in social media use
- Smartphone adoption skyrocketing
- Public as producers of information, not just consumers desire to share
- Expectations are rising Public not likely to give up the convenience of instantaneous information
- How will emergency management adapt & influence better solutions?



More Justification





So, you've decided to enter the world of Social Media.

- Which strategies will fit your goals?
- Which Technologies will work for you?
- How should you begin?
- Should you start small or go big?







"Once you can understand where the conversation is, who leads, the type of voices and the best place for you to add your voice, you can then start becoming a more active participant."

- Mitch Joel



- 1. What do you want to accomplish?
- 2. Who is your target audience?
- 3. How much time and resources can you invest?
- 4. What other organizations can you bring into the fold?



- To learn more about social media and incorporate it into your communications strategy.
- To distribute information to citizens quickly through popular social media vehicles.
- To engage interactively with citizens and gather emergency situational information.
- To create a community of participants, provide an interactive forum, and build knowledge to inform decision-making.



- Local residents and business owners
- Visitors from outside the area
- Media and news agencies
- Emergency responders
- Service providers
- Non-governmental organizations
- Volunteers
- Health care providers
- Friends and relatives of impacted residents



How Much Time and Resources Can you Invest?

- Do you have staff members who are familiar and savvy with the technology?
- Do you have dedicated PIO staff available to monitor and post?
- Does your IT department support the strategy and will they develop the tools?
- Can you invest in infrastructure (servers) to manage surge capacity?



Which Organizations Can You Bring into the Fold?

- Technology developers, manufacturers, service providers (Microsoft, SunMicrosystems, Twitter)
- Various responder agencies and organizations (Fire, Police, Utilities, Health, Red Cross)
- Media organizations (most have new media divisions)
- Academia (students, interns, research, universities, etc.)
- Volunteers establish a "Twitter Posse"



- 1. The Foot in the Water Approach
- 2. The Big 2 Approach (Facebook & Twitter)
- 3. The Neighborhood Approach
- 4. Disaster Forum Multidirectional





Foot in the Water

Set up accounts on popular Web 2.0 sites.

- Facebook
- Twitter
- Linked In
- Flickr
- YouTube



- Practice posting updates, uploading photos / videos, asking questions, and getting familiar with the culture and norms.
- Experiment with hashtags and events.



The Big 2 Approach

Facebook

- 750 Million Active Users (250M via mobile)
- 50% log on daily
- 30 Billion pieces of content (links) shared monthly
- Average user spends 55+ minutes / day
- > Twitter
 - 200 Million Registered Users
 - 350 Billion Tweets / day
 - 8th largest web site in the world
 - 75 % from outside web site (i.e. via direct texting)







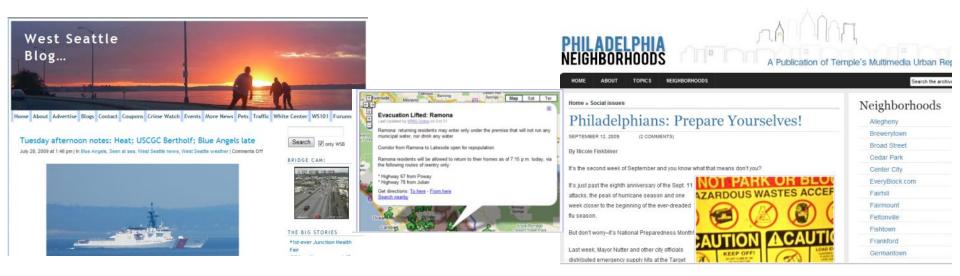
Twitter Tips

Hashtags ("#" Symbols)

- The # marks keywords or topics in a Tweet
- A way to categorize messages regardless of Followers
- Clicking on a hashtagged word shows all other Tweets in that category
- Don't exceed 3 Hashtags per message
- Hashtagged words that become very popular are often Trending Topics
- Many services/aps to help manage Twitter



- Find out how tech savvy neighborhoods are using social media
- Engage with local blogs and community event calendars
- Provide information in searchable format
- Provide maps, photos and diagrams for context



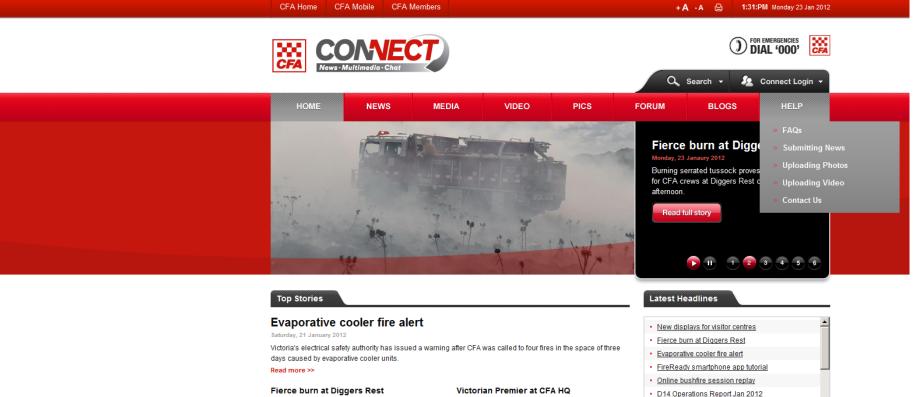


- Seek interactive dialogue
- Provide a forum for relevant conversations
- Build a wide community of contributors, but save the front row seat for official information (local government / emergency management)
- Develop sharing platform supporting multimedia inputs from official sources via RSS feeds and ireports from unofficial sources
- Build the site to handle increased traffic during an emergency
- Play ball with the private technology sector



Interactive Emergency Portal

← → C 🔺 🕓 www.cfaconnect.net.au



Sunday, 22 January 2012

Just after 1pm today (Sunday 22 Jan), Sunbury Fire Brigade were paged to a reported column of smoke in the area of Lennox Court in Sunbury.

Read more >>

FireReady smartphone app tutorial

Friday, 20 January 2012

View all ton stories >>

A video tutorial is now available for CFA's FireReady smartphone app, guiding users through the new features and functionality of the revised application. Read more >>

Victorian Premier at CFA HQ

Thursday, 19 January 2012 Premier Ted Baillieu met with CFA Chief Officer Euan Ferguson, CEO Mick Bourke and Chairman Kerry

Murphy during a visit to CFA headquarters at Burwood East on Thursday January 19.

Read more >>

Glider goes to ground at Benalla

Tuesday, 17 January 2012

Two tankers and the Benalla Group command vehicle attended an incident after a glider crash landed in a paddock outside Benalla.

Read more >>

<< Prev 1 - 50 Next >>

Latest Photos

Wonthaggi Garage Blaze

FSC presents Fire Ready Update

Bendigo Group hits Weekly Times

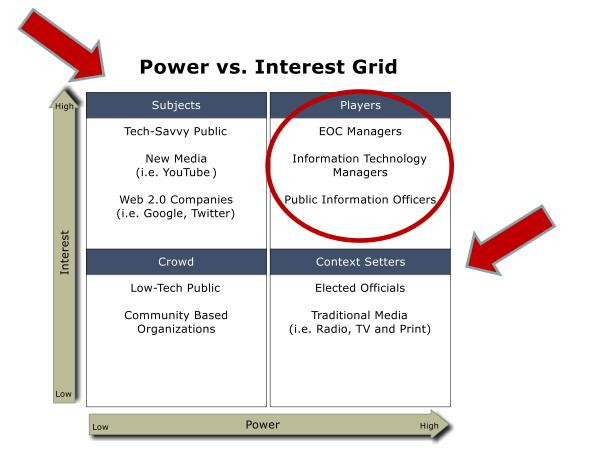
 Truganina FB recognises service Fire Danger Period declared

Hume offers FireReady for employers

Victorian Premier at CFA HQ

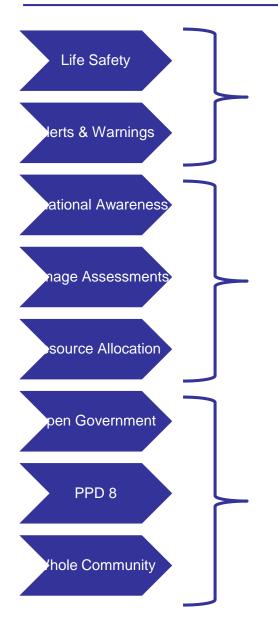


A more comprehensive approach requires strategy development & stakeholders





Emergency Management Drivers



Emergency management and public safety agencies must meet a wide range of expectations and mandates

Decision-making at all layers of society must be accomplished efficiently to save lives

Meta-disasters require information sharing, engagement, and actions from all members of the community (local to global)

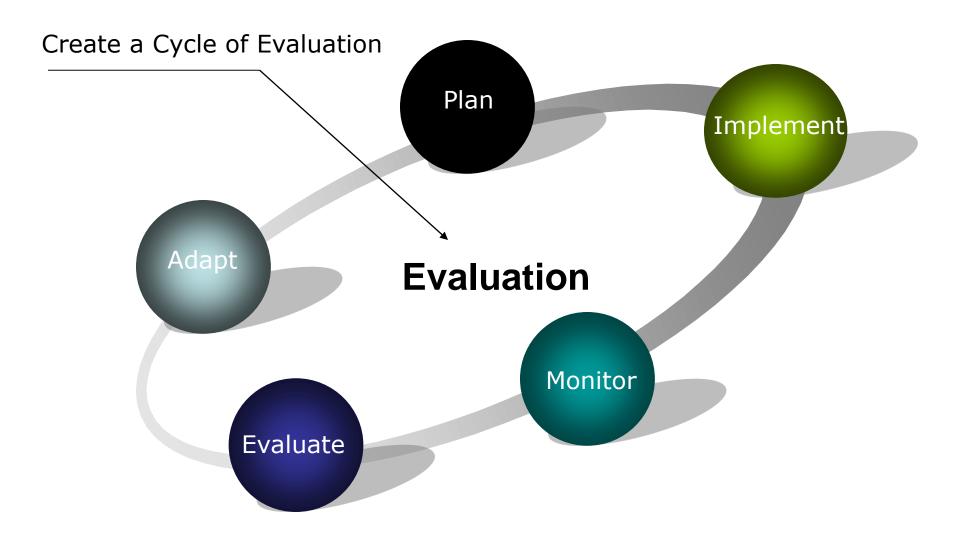


- Cyberspace is cluttered with data (generated by the public and by emergency agencies) during disasters
- Emergency Managers need to verify and organize the noise on social media sites and so do citizens
- Crowdsourcing, verification and credibility guidance will help ameliorate the negative aspects
- An interactive disaster forum that serves as an interface will yield improved situational awareness and actionable information for the Whole Community





Evaluate, Monitor and Adapt





- People want visualization tools not just narratives (maps, photos, videos, GIS data, graphs) Turning to social media to fill in gaps
- Emergency management and public safety agencies are increasingly using social media to distribute information
- Current social media atmosphere is cluttered and chaotic
- The impacted public may be new to the area (relocated, vacationing, business travel) They might not know where to turn for information
- Other interested publics seeking information & situational awareness:
 - Family members in other regions checking on loved ones
 - People who escaped without damages and who have resources or assistance to offer
 - Emergency management agencies at all layers of government (Neighboring states, FEMA, IMTs, EMACs etc.)
- Visit <u>https://communities.firstresponder.gov</u> Making Communities Safer Through Social Media



Questions & Answers



Laurie J. Van Leuven Former DHS / FEMA / Naval Postgraduate School Fellow 206-387-5651 Lvanleuven@scires.com @laurievanleuven

Check out FEMA's Online Think Tank Vote for Social Media & Smartphones for Situational Awareness <u>http://fema.ideascale.com/</u>



Group Exercise

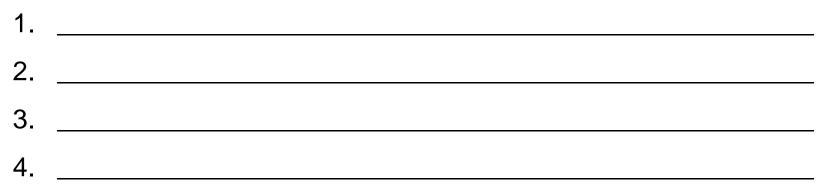
Scenario Development – Size Up Report

- ➤ Hazard:
- Incident Name:
- Deaths / Injuries:
- Staffing Limitations:
- Infrastructure Status:
- Utility Outages:
- Future Projections:
- Evacuations:
- Shelter / Population:



Incident Objectives

Initial Operational Period Incident Objectives:



Ongoing Objectives:





- Describe the type of information the public needs.
- Could any information from an unofficial source be appropriate?
- ➤ How will the public get information?
- Where will they turn if they don't find what they're looking for?



- Describe the type of information EM needs.
- What type of information might the public have that could be useful to EM?
- Could any information from an unofficial source be appropriate?
- ➤ How will EM get that information?
- Describe the possible consequences if EM does not receive important information from the public?



Group Exercise

Needs Assessment

- Identify 3 necessary information capabilities
- Identify gaps or shortcomings to improve
- Identify 3 current tactics used
- Identify 3 future strategies to be used

Think About:

- The effectiveness of current efforts that work well
- Lessons learned from recent incidents
- How would the public describe your Agency's communications channels?



Next Steps

- Strategic Needs Synopsis
- Report and Recommendations
- Social Media Policy Review
- Develop Strategy
- Adapt Plans, Policies and Procedures
- Training, Testing and Exercises
- Implement New Strategies and Tactics
- Evaluate, Monitor and Adapt



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#SMEM #SMEMchat Friday's @ 12:30 EST

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Wrap Up

• Questions, Comments, Observations...