

Mitigation and Education Subcommittee (MES) Meeting

January 28, 2019

Location: North Park Room

Hilton Mission Valley Hotel, San Diego, CA

Attendees:

Baker	Brad	Director, Public Safety	Santa Rosa Co. FL	Milton, FL
Ballman	Jason	Communications Manager	SoCal Earthquake Center	Los Angeles, CA
Bausch	Doug	Risk Analytics Program Mgr	NiyamIT Inc.	Maui, HI
Belanger	Dan	E'quake & Tsunami Pgm Mgr	Alaska DHS & Emer. Mgmt	Anchorage, AK
Brown	Cinta	Deputy Director	American Samoa DHS	Pago Pago, AS
Degrate-Word	Domini que	Outreach & Grant Liaison	California Office of Emergency Services	Mather, CA
Dixon	Maximilian	Earthquake, Volcano, Tsunami Program Mgr	Washington Emer. Mgmt	Camp Murray, WA
LaDuke	Yvette	Tsunami Planning Coordinator	California Office of Emergency Services.	Valencia, CA
Lewis	Denise	Acting Director	Virgin Islands Terr. Emer. Mgmt. Agency	St. Croix, VI
Miller	Kevin	Geologic Hazards Program Manager	California Office of Emergency Services	San Francisco, CA
Moore	Teron	Business Analyst	Ocean Networks Canada	Victoria, BC
Nicholas	Brien (BJ)	Grants Mgr / Lead Planner	DHS / Emergency Mgmt.	Saipan, CNMI
Pselio	Antonina	Tsunami Specialist	American Samoa DHS	Pago Pago, AS
Pridmore	Cindy	Engineering Geologist	California Geological Survey	Sacramento, CA
Richards	Kevin	Natural Hazards Planner	Hawaii Emer. Mgmt Agency	Honolulu, HI
Rizzo	Althea	Geological Hazards Coord.	Oregon Emer. Mgmt	Salem, OR
White	Robert	Seismic Specialist	Emergency Mgmt BC	Victoria, BC
Villagomez	Jon	Tsunami Planner	DHS / Emergency Mgmt.	Saipan, CNMI

Introductions and Agenda/Week Overview

Each attendee introduced themselves and provided a brief bio. Kevin Miller provided an overview of the agenda for upcoming week.

Social Science Project Update (20 mins) - Maximilian Dixon/Keily Yemm (MES 2018 Work Plan)

MES Social Science is a joint project being led by Washington, with (California, Oregon, Washington, Alaska, Hawaii, and Florida)

Received three good applications and the team is in the final stage of signing the contract.

- Social Science research can be expensive, so instead of developing a website and application, the first phase of research will focus on evaluating outreach materials, brochures, and products. The outcome will be a final report of recommendations and receiving all of the collected data that can be used for other purposes.
- Currently working on survey work in Oregon, and then will conduct survey work in one community within each of the 5 states.
- Maximillian requested the latest evacuation maps/brochures from each state; the social scientist will run those products through the communities to ascertain their understanding. The submissions must be submitted digitally/electronically.
- Need contacts within each state to assist with Spanish translation and Access and Functional Needs requirements.
- The initial evaluation will be completed by July 31, 2019 and the final report and provision of data will be done by August 31, 2019.
- Frame next steps based on output, and also consider expanding the project to compare website and applications (Social Science #2).
- MES subcommittee will make a recommendation to NTHMP/NOAA, as due to the type of projects underway, States might need extended performance periods and/or more than one-year to complete projects.

Maritime Guidance (20 mins) - Kevin Miller/Yvette LaDuke (MES 2018 Work Plan)

- NTHMP Guidance will develop over several sections
- Focus will be
 - Part 1: Hazard Assessment,
 - Part 2: Preparedness,
 - Part 3: Response Planning,
 - Part 4: Response Exercise,
 - Part 5: Outreach And Education,
 - Part 6: Mitigation Planning,
 - Part 7: Recovery Planning
- A website approach will assist with accessibility, flexibility, and provide guidance, state/territory examples, and links to additional resources
- New Website pages will include resources for recreational boaters, medium-size vessels (fishing) and large ships (cruise, military, shipping)
 - Who regulates what, key contacts, key safety/planning considerations unique to each group
- Other discussion items included adding ferries to the list and defining benefits and gaps for states/local emergency managers planning and response efforts.

2019 Schedule/Workplan

Series of Calls (timeframe:

March 2019-email, check in, kickoff, schedule calls

- ✓ Discuss Survey and Project Outline

April 2019-Conference call

- ✓ Discuss how to obtain and incorporate state/territory info

May 2019-Review Draft

- ✓ Coordinate relevant info from in-state stakeholders

June 2019-Review Draft

- Review Chapters/Structure/Gaps

July 2019-Review Draft

August 2019- Draft complete for CC

Tsunami Zone Update (20 mins) - Jason Ballmann (MES 2018 Work Plan)

- Launched California's campaign for Tsunami Preparedness week, to occur during the week of March 25 – 29, 2019.
- To address concerns with overload, Tsunami Zone is now hosted in the Amazon cloud so it should not have shutdown issues
- Working to make Tsunami Zone and Shakeout websites mobile responsive
- California's goal is to have 367,000 registered this year
- The CaribeWave TsunamiZone page is activated
- Revamped resources to be used for social media campaigns and the Redwood Coast Tsunami Work Group (RCTWG) developed Tsunami Zone graphics in multiple languages
- Plan to add an information statement defining of warning, watch, and threat notifications.
- AK will provide a sign-language tsunami wave video and a link to a website that is more user/public friendly
- Confirmed desire by Oregon, Washington, Alaska, and Hawaii for pages

10:30 - 11:30 Alert & Warning needs from state & territory perspective – Maximilian Dixon

- Polygons do not completely match up to National Weather Service (NWS) zones, or NTWC zones for State of WA. There are potential gaps inside Puget Sound.
- Key questions for States: have you sat down with National Tsunami Warning Center (NTWC) to look at the alert warning zones, what type of modeling do they have for your coastlines, are there any gaps in your State?
- Action Item: WA will take the lead on collating a list of gaps, issues, and items in need of resolution. End of April/Early May 2019, WA will meet with NTWC to discuss alert and warning polygons, and walk through the software to determine how alerts are setup for WA. AK (currently working on its warning zones) and CA would like an invitation to observe, discuss ways to improve communication efforts to maintain a respectful partnership with the NWS, update risk information and tsunami modeling, ensure that there is consistency within the NTWC, the possibility of NWS developing Tsunami specific zones similar to its Hurricane specific zones, and potential funding options for NTWC to update its software.
(Note: Lopes add – the NWS is the lead on all of these matters and requests input from states through the WCS, but states do not have a role in dictating requirements to a Federal Agency nor can be involved in any way on agency budget decisions.)

- NWS HQ could be revising its alert/warning model. Red/Alert/Purple, however purple is the Tsunami warning color, so there could be a need to coordinate with NWS to ensure that messaging is consistent with states, specifically related to Emergency vs. Warning vs. Alert.

12:30 - 1:30 FY2019 NEW Workplan discussion – State priorities identified for FY2019

MES 2019 Work Plan Topics for development include

1. Guidance Vertical Evacuation Implementation and/or Outreach Material
2. Guidance on Pedestrian Evac/Beat the Wave/Time to Safety mapping
3. Guidance / Training on HAZUS Tsunami Module
4. Exercise Scenario planning w NTWC / PTWC (PacifEX CaribeWave, etc.)
5. Mitigation & Recovery Group
6. Landslide modeling
7. Local Source modeling
8. Maritime Safety Product Guidance Project
9. Review of Social Science project (once completed)

What are your state priorities? Bring them to talk about!

Oregon

- Developing guidance documents of community caches of emergency supplies, such as what should and should not be included and basic operating principles for rotating supplies inside and out, cost of \$20,000 to be matched with National Earthquake Hazards Reduction Program (NEHRP) direct assistance grant, as this is not 100% funded through NTHMP.
- Updating evacuation maps and conducting evacuation drills
- Ongoing Education and Outreach activities
- Continuing discussions regarding retrofitting bridges and land use issues with sighting elderly communities in tsunami zones. This is becoming an issue and there are concerns that there is no regulatory model in-place to enforce restrictions. In the meantime Emergency Managers will continue its efforts to update evacuation/inundation zone maps.

Hawaii

- Foreign Language Radio, Tsunami mapping
- Research project to identify local tsunami sources other than Volcanos
- Ongoing Education and Outreach activities
- Tsunami Safety Products – 9 commercial harbors mapping, impact of local tsunamis, tsunami scenario methods, and HAZUS Tsunami Modules
- Developing vertical evacuation/protective action guidance, with the assistance of an engineer.
- Continuing efforts to onboard more TsunamiReady communities
- Regular maintenance funding/travel

Alaska

- No longer producing pedestrian maps due to the close proximity of communities; currently developing inundation/evacuation maps for communities
- Ongoing Education and outreach activities

- AK sirens were installed 12-15 years ago and are showing signs of aging. Made use of the AC20 list; working with vendor on siren maintenance, troubleshooting, and training.
- Conducting a regional emergency managers training on how to train communities, fire department personnel, visitors bureaus, and hotel industries
- Working with the National Park Service regarding concerns of landslides or glacial cavity induced tsunamis and/or other tsunamis sources. National Park Services in consideration of its Peak Glacier Parks, realizes high visitor capacity due to the cruise industry, so they are reviewing/developing emergency response recovery plans; this could potentially be a two-year project.
- “Landslides” due to glacier melting, the land once protected by water/glacier is now being exposed (see Lituya Bay Megatsunami of 1958).

Washington

- Siren maintenance, 72 already installed, will be installing 3 in NOAA 18 and upgrading additional sirens as necessary
- Planning an inner and outer coast tsunami roadshow to include outreach efforts in 8 communities in one week
- Regular maintenance funding/travel
- Continued development of TsuInfo Alert, prepared by the WA State Department of Natural Resources, on behalf of NTHMP.
- Developing modeling based on Tsunami L1 and Alaska Max, to include pedestrian evacuation maps
- Developing animations showing inundation of communities, which can be a powerful tool for public outreach (Washington Geological Survey (WGS))
- Publishing WGS maps
- Maritime mitigation and response planning using CA guidance (Playbooks)
- Analysis on all communities that need emergency vertical evacuation structures, including walk times and other critical factors.

American Samoa

- Inundation and evacuation mapping updates
- Maritime hazard products for all 5 islands (3 inhabited by people)
- Maritime hazard workshops
- Developing tsunami evacuation routes, however there are challenges with evacuating in some areas due to potential pushback from owners of privately-owned land. Working with local governments to aid in resolving via workshops and education/outreach. Also, working with National Parks to clear land for evacuation purposes and developing Hazard/Safe zone signage.
- Enhancing response capabilities through workshops and exercises
- Siren maintenance 81 already installed, (56 outdoor and others installed in schools). A siren maintenance audit was performed last year; the next phase will include corrective maintenance, but due to the NOAA cap on siren costs, the project will be complete in phases at 20 sirens per year.
- GIS training

- September 29, 2019 will mark the 10 year anniversary of the 2009 Samoa earthquake and tsunami that occurred in the southern Pacific Ocean adjacent to the Kermadec-Tonga subduction zone.

United States Virgin Islands

- USVI is still recovering from 2017 Hurricanes Irma and Maria; 44 Sirens on 4 islands were destroyed so extensions for NOAA17, 18, 19 will be requested. The sirens were just upgraded with NOAA17 funding. USVI will request a FEMA grant to replace the sirens which is an estimated \$1.8 million project; completion could take up to 12-18 months.
- There will be no new projects requested for this grant period, however will request funding for salaries, travel, outreach and education.

California

- Continue tsunami preparedness activities in coastal communities; and based on new information and evacuation maps, update Tsunami Evacuation Response Decision-Support Guidance (Playbooks).
- TsunamiReady Support and Coordination with a goal to designate new TsunamiReady communities.
- Inundation and Evacuation Zone Improvements based of offshore tsunami-source faults and landslide locations requiring updates to evacuation zones and plans.
- Expand planning and preparedness efforts by providing technical support, education and outreach participation within California's maritime communities.
- TsunamiZone.org; Tsunami Source Database, based on the Mapping and Modeling Subcommittee endorsed task, to develop improvements to database templates, and incorporate findings from USGS Powel Tsunami Source Project.
- HAZUS Scenario Development for Impact Analysis
- California's NTHMP Maritime Guidance Implementation & Collaboration
- Exercise Series Development and Implementation born out of after-action discussions following the M8.2 Alaska earthquake and resulting Tsunami Watch issued by NTWC.
- NTHMP Meetings/Workshops/Training

Puerto Rico Component of NTHMP Tsunami Exercise; Dr. Victor Huerfano

- CaribeWave Exercise upgraded from LANTEX (Large Atlantic Tsunami Exercise)
- 82 public broadcasters in the network
- This year they will also include/focus on community (regional and local) participation

Are there grant activities needing MES subcommittee support/approval?

American Samoa:

- Travel to America September 25, 2019; Tsunami Exercise Observers
Voted: PASSED UNANIMOUSLY

Note: this is technically not an item for subcommittee endorsement. (Lopes added later)

California

- NTHMP Maritime Guidance Implementation
Voted: PASSED UNANIMOUSLY

Oregon

- Developing guidance documents of community caches of emergency supplies, such as what should and should not be included and basic operating principles for rotating supplies inside and out, cost of \$20,000 to be matched with National Earthquake Hazards Reduction Program (NEHRP) direct assistance grant, as this is not 100% funded through NTHMP.
- Voted: PASSED UNANIMOUSLY
- *Note: this is technically not an item for subcommittee endorsement. (Lopes added later.)*

1:30-2:10 Discussion: Mitigation and White Paper recommendations to Coordinating Committee – Tamra Biasco/Kevin Miller

Discussion Inputs: NTHMP Subcommittee Structure and Workload Analysis and Mitigation and Recovery Recommendation Paper

Miller presented an overview of the Structure and Workload Analysis and Mitigation and Recovery Recommendation Paper, including a series of questions walking the NTHMP through various topics, issues, and appendices with a spreadsheet of suggested solutions.

Suggestions included things like

- Form a Pacific Caucus to provide an NTHMP sanctioned forum
- Form a trial workgroup within the NTHMP to look at ways to address M&R for states that want to pursue it

Workload Ideas

- Rotate the responsibility among member states as opposed to just having co-chairs and appoint a note taker/secretary
- Have a SME, conduct a strategic review of all activities on the plate for each subcommittee and develop a list of priorities for these activities
- Invite an official from the local offices to sit in on the NTHMP meetings and provide input, instead of having materials be reviewed at a top down level (29 states plus 5 territories)

2:10-2:30 – Exercise Discussion/Planning – Victor Huerfano

Victor Huerfano, Puerto Rico Seismic Network, provided a presentation based on the CaribeWave Exercise, which is an annual tsunami exercise held in the Caribbean, including Puerto Rico and the Virgin Islands, under the coordination of UNESCP (ICG/CARIBE EWS), NTHMP and the Pacific Tsunami Warning Center, CTWP, CTIC and State Members. The presentation can be found here: <https://nws.weather.gov/nthmp/2019annualmeeting/PRCaribeWave.pdf>.

2:30-2:50 – HAZUS Tsunami Module Update – FEMA R10

Tabled. And included as part of a presentation later in the week.