

NTHMP Mitigation & Education Subcommittee (MES) Meeting January 29, 2018 ~ Agenda

8:00 – 8:15 Introductions and Agenda Review

8:15 – 8:45 Activity: **MES Annual Work Plan – Session #1** Scoping (kick-off via work-group report out)

8:45 – 9:15 Discussion: **Social Science Research** (develop/assess education, outreach, alert, etc.) – Are there grant proposals being submitted by a State/Territory that need Sub-Committee approval? **Evaluating public understanding of evacuation products**

9:15 – 9:45 Discussion: **Development of Guidelines** (Education, Evacuation, Mapping, etc.) – Are there grant proposals being submitted by a State/Territory that need Sub-Committee approval? **Complete Maritime Guidance**

9:45 – 10:00 Break

10:00 – 10:30 Discussion: **NTHMP-level Outreach** (website, materials, marketing, campaigns)

10:30 – 11:00 Discussion: **Recent Tsunamis - Emergency Response Discussion – Issues / Questions / Feedback**

11:00 – 11:30 Activity: **MES Annual Work Plan – Session #2** review/prioritization/joint subcommittee meeting topics

11:30 – 11:40 **Election of FEMA Co-Chair**

11:40 – 12:00 Discussion of **Summer Meeting** (location/logistics)

12:00 Adjourn / Lunch

Mitigation & Education Subcommittee

The MES works to reduce tsunami impacts primarily through education and outreach that increase awareness and encourage preparedness. It also promotes and provides guidance on other risk reduction activities, such as evacuation planning and integration of tsunami risk into land-use policy and planning. And, it provides recommendations for NOAA's TsunamiReady program, which encourages communities to prepare for tsunamis.

Key Accomplishments:

- National Tsunami Education and Outreach Action Plan
- Guidance for education and outreach planning and activities resulting in an increase in number of TsunamiReady communities
- National Media Tsunami Guidebook and increased number of corresponding state guidebooks



Existing NTHMP Documents

MES/MMS

Tsunami Modeling and Mapping: Guidelines and Mapping Series <https://nws.weather.gov/nthmp/publications.html>

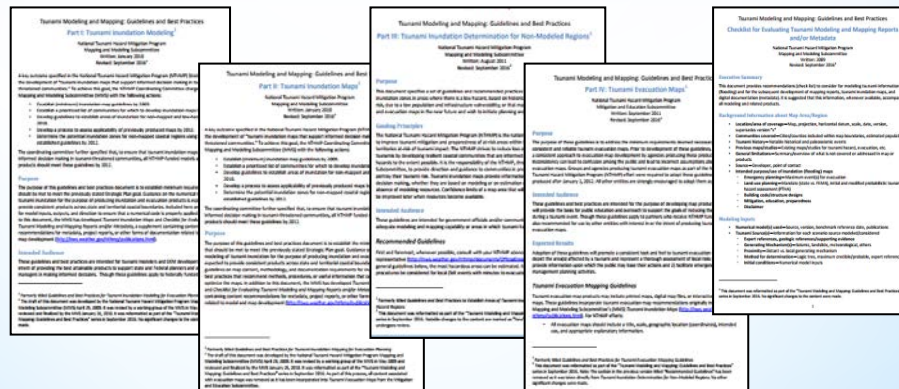
Part I: Tsunami Inundation Modeling

Part II: Tsunami Inundation Maps

Part III: Tsunami Inundation Determination for Non-Modeled Regions

Part IV: Tsunami Evacuation Maps

Checklist for Tsunami Modeling and Mapping Reports and/or Metadata



MES 2018 Workplan

Work Plan Development Group: Miller, Belanger, Dixon, Yemm, Rizzo, LaDuke, Richards

Questions:

1. **Existing/Effectiveness.** Based on existing state/territory partner projects/initiatives what areas of activity and accomplishments need to be surveyed, catalogued and assessed for effectiveness?
2. **Gaps.** What project/initiatives are yet to do or could benefit from guidance for consistent development?

Activity	Strategy(ies) addressed (#)	Action Step(s)/Milestones	Activity Lead and workers	Dependencies ¹ (including grants)	Metrics – expected outcome and target date
TsunamiAlert!	Strategy 2.1.2 Develop, update, and disseminate outreach materials and ensure consistency	1. Solicit articles 2. Review 3. Publish	Earls, Lopes, Von Hillibrand, Wilson, Eble	NOAA Grant (WA)	Ongoing Increase in annual readers
TsunamiZone.org	Strategy 2.1.3 Conduct training and educational outreach events and campaigns	1. Provide/develop content 2. Develop outreach campaign 3. Register activities 4. Register individuals	SCEC, CA, PR, USVI	NOAA Grant (CA)	Ongoing Increase in state/regional pages Increase in worldwide registration annually

¹ Dependencies: identify what this activity requires to get accomplished – personnel, estimated level of effort, inputs from other sources, and IF the activity depends on grant funding to a partner (and if so, which partner has the lead.)

MES 2018 Workplan

<p>Social Science Project(s)</p>	<p>Strategy 2.1.4: Conduct and incorporate social science evaluation of tsunami education outreach effectiveness</p>	<ol style="list-style-type: none"> Evaluate evacuation products (and inundation products if feasible). <ul style="list-style-type: none"> Maps Apps Outreach brochures Websites Compare different tsunami products/outreach/processes, showing them to different audiences (especially hospitality) in different states/locations, in order to get their feedback. 	<p>Dixon, Yemm, Richards, Rizzo, Miller, LaDuke, Belanger, Hahn</p>	<p>State of WA: 2018 NTHMP Grant - MES-Sponsored, Multi-state Proposed Project</p> <p>MES Subcommittee-initiated activity #22</p>	<p>2018 4th Quarter</p> <p>The goal is to compare evacuation products from the participating states/territories, showing them to different audiences (especially hospitality) in different locations, in order to learn what works best at informing these audiences on risk and evacuation/preparedness actions; and motivating them to take appropriate actions.</p>
<p>Complete development of Maritime Guidance Document (Chapters 2 & Chapter 3)</p>	<p>2.2.2 Increase TsunamiReady Communities 2.4.1 Engage stakeholders on preparedness and response 4.2.2 Improve community warning point reception capabilities</p>	<ol style="list-style-type: none"> Assess what exists by State/Territory (Existing protocols; Future mitigation planning recommendations) Develop National Guidance using MES/NTHMP partner Existing protocols; Develop future mitigation planning recommendations using experience and expertise. 	<p>Miller, LaDuke, Wilson, Richards, Waddell, Belanger, Biasco, Dixon, Rizzo, Preller</p>	<p>NOAA Grant (CA)</p> <p>MES + MMS Subcommittee-initiated activity #21: Evacuation Products/Tools Guidance (\$10,000 1 month of CA EM staff) time</p>	<p>2018 2nd Quarter</p> <p>NTHMP guidance document for consistency.</p>

MES 2019 Workplan

Engage public education institutions	Strategy 2.1.1: Engage public schools and institutions of higher learning for tsunami preparedness	<ol style="list-style-type: none"> 1. Survey and catalogue where this has occurred 2. 			2019 XX Quarter
“TsunamiReady Tier 2” communities development	Strategy 2.2.2: Increase number of recognized TsunamiReady Tier 2 Communities	<ol style="list-style-type: none"> 1. Develop brochure describing BENEFITS of achieving “TR Tier 2” status 2. Develop NTHMP Vertical Evacuation Guidance <ol style="list-style-type: none"> a. Provide lessons learned from case studies of new construction implementation 1. Develop Guidance for communities use & mitigation regarding existing structures 	TBD		
“TsunamiReady Supporter” communities development	Strategy 2.2.3: Increase number of designated TsunamiReady Supporters	<ol style="list-style-type: none"> 1. Develop brochure describing BENEFITS of becoming a “TR Supporter” 1. Fully develop/define criteria, list of candidates, and provide examples of existing TR Supporter Case Studies 	TBD		

MES 2019 Workplan

Community and Emergency Management Support	Strategy 2.4.1: Engage stakeholders on tsunami preparedness and response	1. Ongoing: Conduct and Report out on Tsunami Campaigns			
Continued improvement to NTHMP Website	Strategy 2.x.x	3. Develop list of areas for improvement (e.g. photos rotating; videos)			

2018 MES Work Plan

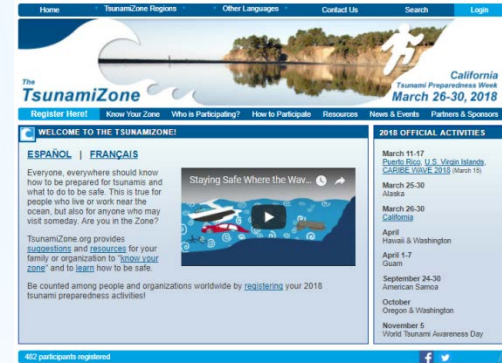
Proposed MES Multi-State Grants

Existing:

1. TsuInfo Alert!
2. TsunamiZone.org

New:

1. Social Science Project
 - a. Evaluate existing products for effectiveness
 - b. Survey Hospitality, Public, Schools
 - c. Determine desired commonalities
2. Complete Maritime Guidance -
 - a. Alert & Notification
 - b. Recovery



Social Science Project

Overall Social Science Effort Goals

- Find out what works best at informing key audiences on risk and preparedness actions and motivating them to take appropriate actions. A starting point is to compare different tsunami products/outreach/processes, showing them to different audiences (especially hospitality) in different states/locations, in order to get their feedback.
- Discussion calls held in late December & early January
- Who is leading/supporting
 - WA with HI, OR, CA, AK, FL
- Break the effort up into projects/milestones
 - Scopes of work for each project
- First Project
 - Evaluate evacuation products (and inundation products if feasible)
 - Compare evacuation products from the participating states/territories, showing them to different audiences (especially hospitality) in different locations, in order to learn what works best at:
 - informing these audiences on risk and evacuation/preparedness actions;
 - and
 - motivating them to take appropriate actions.

Maritime Guidance: Best Practices for Tsunami Hazard Analysis, Planning, and Preparedness



Part 1: Guidance for Tsunami Hazard Analysis, Modeling, and Mapping

1.1 Use of Numerical Tsunami Models and Digital Elevation Models/Grids

1.2 Maritime Tsunami Hazard Preparedness Products

Product 1: Identification of Areas of Past Damage and Strong Currents

Product 2: Mapping Current Velocities and Relationship to Damage

Product 3: Identification of Areas of Potentially Large Water Fluctuation

Product 4: Identification of Areas of Potential Bores, Seiches, and Amplified Waves

Product 5: Identification of Timeframe for Damaging Currents

Product 6: Identification of Safe Minimum Offshore Depth

Other Products

1.3 Basic Guidance on Design of Products

Part 2: Guidance for Tsunami Response, Preparedness, and Education

2.1 General Maritime Public Guidance

Public Education Strategies

2.2 Harbor-Specific Maritime Planning Guidance

2-Level Tsunami Response Guidance:

Multi-Level Tsunami Response Guidance (Playbooks):

Develop "Preparedness and Education..." section based on recent years' partner experience, application and recommendations

Part 3: Guidance for Tsunami Mitigation and Recovery Planning

3.1 Mitigation Planning Strategies

3.2 Recovery Planning Strategies

Work with FEMA to develop guidance for LHMP and funding
Work with CalOES
Mitigation/Recovery
Draw from current policy mitigation and recovery work in CA and other State/Territories

Resources - Maritime References, Products, and Entities

State/Territory Partner Project Matrix

Products & Activities	CA	HI	OR	WA	AK	GOM	FL	EC	PR	VI	AS	CNMI	Guam
RESPONSE:													
Inundation Modeling	D	D	D	D	D	D		D	D	D	D	D	D
Inundation Mapping	D	D	D	D	D				D		D		
Evacuation Mapping	D	D	D	D	D								
Evacuation Playbooks	D	D											
Emergency Response Plan/ConOps/Tsunami Annex	D	D	P						D	D			
Maritime Playbooks	D	P		P	P						P	P	
Offshore - safety plan	D	D	D	P	P	P		P	D	P	P	P	P
Comprehensive maritime guide		D	P						D				
Local Event Maritime											P		
Sirens	D	D	D	D					D	D	D	D	
OUTREACH:													
Website - Preparedness	D		D	D					D	D			
Website (w/address location capability)	D												
Mobile Apps (in any jurisdictions)	D	D											
Brochure - preparedness	D												
Brochure - local evacuation map	D												
Brochure - maritime recreational vessels	D	D	D		P						P	P	P
Brochure - maritime commercial vessels	P	G	G								P		
Brochure - large vessels	P	G	G							P	P		
Brochure/guidance multilingual	P		P						D		P	P	
Tsunami Warning Signs	D	D	D	D					D	D	D	D	
Videos	D	D							D				
Posters	D												
Educational Pamphlets/Magazines	D												
Magnets													
Training offered (e.g. Tsunami Awareness AWR-217)	D	D			D					D		D	

Recent Tsunamis Emergency Response Discussion Thoughts / Questions

M 7.9 Kodiak, Alaska - Jan 23, 2018

M 7.6 Off Honduras, Caribbean - Jan 9, 2018

M 8.1 Off Chiapas, Mexico - Sept 7, 2017

M 7.7 Eastern Aleutians - July 17, 2017

