

1. Call to order: Chair Grant Cooper called the meeting to order at 3:01pm EDST.

2. Roll Call

NOAA

Mr. Mike Angove<sup>1</sup>, NOAA/National Weather Service HQ, Silver Spring, MD  
Dr. Diego Arcas, NOAA/Pacific Marine Environmental Lab, Seattle, WA  
Dr. Grant Cooper, NWS Western Region Director, Salt Lake City, UT  
Ms. Marie Eblé<sup>2</sup>, NOAA/Pacific Marine Environmental Lab, Seattle, WA  
Mr. Lewis Kozlosky<sup>3</sup>, NOAA/National Weather Service HQ, Silver Spring, MD  
Dr. Rocky Lopes<sup>1</sup>, NOAA/National Weather Service HQ, Silver Spring, MD  
Ms. Christa Rabenold<sup>3</sup>, Tsunami Program, NWS HQ, Silver Spring, MD  
Ms. Christa VonHillebrandt<sup>3</sup>, Caribbean Tsunami Warning Program, Mayagüez, PR  
Mr. Paul Whitmore, National Tsunami Warning Center, Palmer, AK

FEMA

Ms. Tamra Biasco, FEMA Region 10, Lynnwood, WA  
Ms. Gala Gulacsik<sup>2</sup>, FEMA Region 10, Lynnwood, WA

USGS

Ms. Stephanie Ross, U.S. Geological Survey, Menlo Park, CA  
Dr. Nate Wood, U.S. Geological Survey, Portland, OR

Alaska

Mr. Dan Belanger, Alaska Dept. of Homeland Security & Emer. Mgmt, Anchorage, AK  
Dr. Dmitry Nicolsky, University of Alaska at Fairbanks, Fairbanks, AK

American Samoa

Ms. Jacinta Brown, American Samoa HS/EM, Pago Pago, American Samoa  
Mr. Lancaster Allen<sup>3</sup>, American Samoa HS/EM, Pago Pago, American Samoa  
Ms. Elinor Lutu-McMoore, American Samoa NWSO, Pago Pago, American Samoa

California

Mr. Rick Wilson, California Geological Survey, Sacramento, CA

Commonwealth of the Northern Mariana Islands

No representatives

East Coast States

Dr. Ed Fratto, Northeast States Emergency Consortium, Boston, MA  
Dr. Jim Kirby, University of Delaware, Newark, DE

Guam

Mr. Leo Espia, Guam Homeland Security, Agana Heights, Guam

Gulf Coast States

Dr. Juan Horrillo, Texas A&M University at Galveston, Galveston, TX

Hawaii

Mr. Kevin Richards, Hawaii Emergency Management Agency, Honolulu, HI

Oregon

Dr. Jonathan Allan, Dept. of Geology and Mineral Industries, Portland, OR  
Dr. Althea Rizzo, Oregon Emergency Management, Salem, OR

Puerto Rico

Dr. Victor Huérfano, Puerto Rico Seismic Network, Mayagüez, PR  
Mr. Wilfredo Ramos, Puerto Rico Emergency Management Agency, San Juan, PR

U.S. Virgin Islands

Ms. Kieran Isidore<sup>3</sup>, Virgin Islands Territorial Emer. Mgmt. Agency, St. Croix, VI  
Mr. Roy Watlington, Professor Emeritus, St. Thomas, VI

Washington

Ms. Corina Forson, Washington Division of Natural Resources, Olympia, WA  
Mr. Maximilian Dixon, Washington EMD, Camp Murray, WA  
Mr. Tim Walsh<sup>3</sup>, Washington Division of Natural Resources, Olympia, WA

33 present, 11 state votes (min 7); 7 Fed votes (min 4). Quorum requirement was met.

---

<sup>1</sup> Ex-Officio, non-voting

<sup>2</sup> Subcommittee Co-Chair, non-voting

<sup>3</sup> Guest, non-voting

### 3. Minutes of Coordinating Committee meeting of February 3, 2017

Chair Grant Cooper called for approval of the minutes. With no objections, the minutes of the February 3 meeting were approved.

4. Recognition and welcome of new Coordinating Committee member: Corina Forson, State of Washington Department of Natural Resources, has been appointed to serve as the State of Washington Science member in place of Tim Walsh.

Dr. Cooper welcomed Corina. She introduced herself to the group.

### 5. Subcommittee Meetings

- Rocky Lopes announced that after a lot of investigation of potential meeting locations, the MES Summer Meeting & MMS Science Exchange Meeting will be held in Salt Lake City, Utah, August 1 – 3, 2017, at the NWS Western Region Headquarters (where Grant Cooper works.) An additional meeting day for the members of the Strategic Planning Work Group will occur on August 4.

Grant-funded members are expected to use FY16 NTHMP grant funds to cover travel expenses to this meeting. Non-grant funded CC members and Co-Chairs will be issued invitational travel by the National Weather Service (to the degree that funds are available). Good news is that hotel per diem rate is \$115/night + 12.6% taxes. A block of rooms has been reserved at the Marriott City Center Hotel. More information will follow.

- Periodic subcommittee conference calls – The MES and the WCS have scheduled periodic conference calls. Schedule of these calls is on each subcommittee's page on the NTHMP website:  
MES: [http://nws.weather.gov/nthmp/mitigation\\_subcommittee.html](http://nws.weather.gov/nthmp/mitigation_subcommittee.html)  
WCS: [http://nws.weather.gov/nthmp/warning\\_guidance\\_subcommittee.html](http://nws.weather.gov/nthmp/warning_guidance_subcommittee.html)  
The MMS has not scheduled any periodic conference call meetings. We hope they will as requested.

### 6. Disclaimer language for "NTHMP approved" publications

Standard disclaimer language for "NTHMP approved documents" was discussed. The following edited language was approved by unanimous consent.

*Disclaimer: The members of the National Tsunami Hazard Mitigation Program (NTHMP) make no representation or warranties regarding the accuracy of the information provided nor the data from which this information was derived. The NTHMP nor any Federal Agency, state, or territory shall be liable under any circumstances for any direct, indirect, special, incidental, or consequential damages with respect to any claim by any user or any third party on account of or arising from the use of this information. The user takes full responsibilities for their decisions and actions.*

## 7. NTHMP Document Approval

The Chair called for a vote by the voting CC members to approve the following documents to be accepted as "NTHMP Publications."

a. *Proceedings and Results of the National Tsunami Hazard Mitigation Program 2015 Tsunami Current Modeling Workshop*

Discussion: none. Vote to approve: unanimous consent.

b. *Guidance for safe Minimum Offshore Depth for Vessel Movement for Tsunamis*

Discussion: Nicolsky asked, "How can changes to this document be made?" Lopes answered: if anyone wants to make a change, they propose it to the MMS and if approved, the MMS brings it to the Coordinating Committee for approval of the update.

Forson asked, "Will the disclaimer go into these documents?" Lopes answered: yes.

von Hillebrandt had some technical questions about the content of the document. Rick Wilson answered them to Christa's satisfaction.

Wilson stated that this document was developed to serve as a quick reference and easy-to-use table for US Coast Guard reference. It would not apply to cruise ships; applies to recreational boaters.

von Hillebrandt: are there internal contradictions?

Wilson: we can't tell people not to take their boats off shore. We don't recommend that you do, but IF you do, this is what we recommend.

Fratto: is this intended to give to recreational boaters directly?

Wilson: it is meant to be given to the U.S. Coast Guard, not directly to recreational boaters, but information from it may appear in public education materials developed by NTHMP partners.

von Hillebrandt: could the USCG add themselves to disclaimer language?

Lopes: yes

NTHMP Chair Cooper called for a vote. The document was accepted by unanimous consent.

## 8. Meetings at NTHMP Annual Meeting – Work Group?

Rocky Lopes described that there are a number of competing requests for meeting time during NTHMP Annual Meeting week and requested volunteers for appointment to a work group to plan next year's meeting week. Kevin Richards, Marie Eble, and Corina Forson volunteered. One additional volunteer is needed from the MES and WCS. Please email Rocky if you wish to volunteer to plan next year's NTHMP Annual Meeting week.

## 9. World Tsunami Awareness Day (WTAD)

Mike Angove stated that Japan is trying to get other countries to do some activities to recognize WTAD and he would like to see some U.S. commitment to honor this day. Mike would like to see if NTHMP member states/territories would also do some WTAD activities.

Christa Rabenold said that she is making a list of activities by NTHMP partners and is looking at how other UN Days are being recognized.

Angove: has anyone given any thought about WTAD recognition?

von Hillebrandt: theme for 2017 WTAD is "reduction in number of affected people." Annual WTAD themes are based on the Sendai platform for disaster reduction. General themes for next six years have already been determined.

Dan Belanger: This year, November 5<sup>th</sup> is on a Sunday, and is the same day as DST conversion.

von Hillebrandt: the 5<sup>th</sup> is the date, but it broadens to a week or more.

Cooper: should we put this on the agenda again and will you have more information at the next meeting?

Angove: probably. We will run a comprehensive social media campaign.

Discussion ended.

## 10. NTHMP Island Caucus

Kevin Richards said that we haven't met since the annual meeting, but plan to have a conference call before the summer meeting. Planning for that meeting is under way. Meanwhile, there will be an informal meeting among the members of the island caucus for those who are in Hawaii this week for the PRiMO Conference.

## 11. ASCE 7 Chapter 6 Tsunami Load Code

Corina Forson stated that she wanted to bring this up to make members aware that something is happening. The new ASCE 7 Chapter 6 Tsunami Load Code presents challenges to each state involved.

Tim Walsh said that this code will affect WA, OR, CA, AK, and HI in the 2018 National Building Code. WA has already built a tsunami vertical evacuation structure and is 70% toward design stage for another structure. It is hard to be compliant with building code when we don't know what they are.

Rick Wilson said that there have been two conference calls about this matter already among the 5 states involved. Should there be more calls?

Forson: yes continue, but also invite any others who may wish to participate.

Wilson: should we continue the established format and just add others?

Forson: yes.

Arcas: I want to participate.

Watlington: wants to participate as well.

Lopes: please inform him when calls are scheduled.

## 12. Old Business

None

## 13. New Business

Watlington: requested an update from Christa von Hillebrandt on how the CaribeWave exercise (March 21) went.

vonHillebrandt: 48 countries participated. 457,990 people registered participation via tsunamizone.org, including many smaller island states with as much as 25% of their population. The PTWC issued simulated domestic and international products. Communications went well with a few glitches. No false alarms. Follow-up surveys and a report will be issued.

Other new business: The HAZUS 4.0 with the tsunami module has been released! The Tsunami Module represents the first new disaster module for the Hazus software in almost 15 years and is the culmination of work completed on the Hazus Tsunami Methodology Development (FEMA, 2013) by a team of tsunami experts, engineers, modelers, emergency planners, economists, social scientists, geographic information system (GIS) analysts, and software developers. A Tsunami Oversight

Committee provided technical direction and review of the methodology development.

The software can be downloaded for free on the FEMA Flood Map Service Center (MSC) here: <http://msc.fema.gov/portal/resources/hazus>

14. Subcommittee reports:

a. Mapping and Modeling Subcommittee:

- Three models: Cliffs, HySEA, and NHWAVE are considered to be benchmarked
- A spreadsheet with models which are currently in use is being updated
- Explore possibilities to gather bathymetry data with the NOAA's Office of Hydrographic Surveys

b. Mitigation and Education Subcommittee:

- MES Meeting (webinar) held on February 22.
- The MES has reviewed the current strategic plan and categorized the activities as completed, recommend modifying, and carry forward thru 2018. This information will be used along with the results of the NTHMP review, which are due in June/July, as input to the next strategic plan.
- The subcommittee was to vote on the following change to the MES Terms of Reference (the By-Laws of the MES), but we did not have quorum. Voting members will be asked to vote over email.
- Task Updates:
  - TsunamiReady – Rocky Lopes would like to discuss the TsunamiReady Tier 2 guidelines at the summer MES meeting. He would like to have a conference call prior to the meeting to reorient the group to these guidelines, identify communities to target, and define what it would mean to be a Tier 2 community.
  - MES Input to Maritime Guidance – Discussed at annual meeting. Kevin Miller is adding more preparedness language to the document. Once added, he will circulate it with the tiger team and convene a call to discuss. Part 3 on mitigation and recovery is still pending the completion of other work in California.
- New Task:
  - Beginning work on task 14-13 of the education and outreach plan: Create materials that describe how FEMA's Community Rating System can enhance tsunami mitigation and support efforts to achieve TsunamiReady recognition.
- Completed tasks:

- Common Media and social media outreach (Boiler plate social media messages for World Tsunami Awareness Day; Calendar with tsunami events and anniversaries)
- MES/MMS Guidelines (mapping and modeling guidelines streamlined and combined into series)

- Next MES Meeting (webinar) is on April 18 at 12pm PDT

c. Warning Coordination Subcommittee:

- Conference call to finish annual meeting agenda held on February 28.
- Quarterly call are schedule for the rest of 2017.
- Two Tsunami warning breakpoints have been added for northern California and are now operational.

15. Adjourn

The Chair adjourned the meeting at 3:54pm EDST.

The next meeting of the Coordinating Committee is scheduled for May 16 at 3pm EDST.

Respectfully submitted,

Rocky Lopes  
NTHMP Administrator