

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>, National Tsunami Warning Center, Palmer, AK  
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  
Dr. Laura Kong<sup>3</sup>, International Tsunami Information Center, Honolulu, HI  
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 von Hillebrandt, Caribbean Tsunami Warning Program, Mayagüez, PR

FEMA

No representatives

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  
Ms. Elinor Lutu-McMoore<sup>4</sup>, American Samoa NWSO, Pago Pago, American Samoa

California

Mr. Kevin Miller, California Office of Emergency Services, San Francisco, CA  
Mr. Rick Wilson, California Geological Survey, Sacramento, CA

Commonwealth of the Northern Mariana Islands

Mr. Chip Guard<sup>4</sup>, NWS Forecast Office, Guam (CNMI Science Member)  
Mr. Gerald Guerrero, Special Assistant for Homeland Security, Saipan, MP

East Coast States

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

Guam

Mr. Chip Guard<sup>4</sup>, NWS Forecast Office, Guam (Guam Science Member)

Gulf Coast States

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

Hawaii

Dr. Kwok Fai Cheung, University of Hawaii, Honolulu, HI  
Mr. Kevin Richards, Hawaii Emergency Management Agency, Honolulu, HI

Oregon

No representatives

Puerto Rico

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

Washington

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

29 present, 11 state votes (min 7); 5 Fed votes (min 4). Quorum requirement was met.

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

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

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

<sup>4</sup> Coordinating Committee member and NOAA employee, non-voting

3. Approval of Coordinating Committee meeting minutes of March 21, 2017

Dr. Cooper called for approval of the March 21 NTHMP Coordinating Committee minutes. Without objection, the minutes were approved as submitted.

4. Appointments for NTHMP CC upon retirement of Paul Whitmore

Dr. Cooper confirmed that the second NOAA Voting Member of the NTHMP Coordinating Committee is Christa von Hillebrandt-Andrade, Manager of the Caribbean Tsunami Warning Program, Mayagüez, Puerto Rico.

Dr. Paul Huang, Science Officer, National Tsunami Warning Center, will serve as interim Co-Chair of the NTHMP Warning Coordination Subcommittee until appointment of the new NTWC Director.

Dr. Cooper also congratulated Kevin Richards for being selected as Manager of the Year by Hawaii Emergency Management.

5. NTHMP Grants Allowable Activities Work Group Update

Rocky Lopes described that the Grants Allowable Activities Work Group appointed by the NTHMP Chair – composed of Jon Allan, Tamra Biasco, Ed Fratto, Victor Huerfano, and Kevin Miller – has met three times in May and June. MES and MMS Work Group representatives Allan and Miller have distributed a copy of interim results of discussions on activities to be considered as allowable for NTHMP grants in advance of the upcoming summer subcommittee meetings. Further discussions and refinements to this list will be made during the summer meetings.

What is important is to prioritize activities to inform elements of the NTHMP Strategic Plan in development. Not all activities can be rated “high,” so some difficult decisions will need to be made.

The results of these recommendations will be discussed at the September 19 NTHMP Coordinating Committee meeting. The National Weather Service will consider the recommendations for allowable activities for the *FY18 NTHMP Grant Guidance* that will be released in November.

6. Update of *Terms of Reference* (ToR) for each Subcommittee (TWERA-required reference)

Rocky Lopes stated that the *Tsunami Warning, Education, and Research Act of 2017* is requiring some technical updates for each subcommittee's Terms of Reference, which are like By-Laws.

Rocky has made some edits to the ToRs where he thought necessary. Also, one new element was added for each subcommittee – an Annual Work Plan.

The WCS has had an annual work plan for years. They call it a "Meeting Actions Chart." This chart, or work plan, identifies specific activities for the subcommittee to work on throughout the year. Milestones are indicated and progress is noted during each subcommittee meeting (phone or in-person.) This work plan gives the WCS a method of organizing, focusing, and reporting on its annual activities.

Rocky institutionalized the development of this annual work plan for all subcommittees in each respective Terms of Reference. An annual work plan provides benefits of organizing and keeping track of each subcommittee's work and task assignments, and can be used for development of the NTHMP Annual Report at the end of each year.

With each subcommittee having an annual work plan, it will also remove the iterative outcomes from the NTHMP Strategic Plan and help keep the Strategic Plan at the full strategic level, and not be a list of detailed outcomes.

Each subcommittee is expected to discuss the proposed update for respective Terms of Reference, either at the summer subcommittee meetings or via conference call. The proposed ToRs are posted on the "read-ahead" materials section of the [NTHMP Summer Meeting page on the website](#).

7. Final announcements for NTHMP Summer Subcommittee meetings in Salt Lake City August 1 – 3.

Marie Eblé reported for the MMS that Jon Allan has provided input for discussion about the Grants Allowable Activities list. There will also be discussion about the USGS Powell Center tsunami workshops, including how many workshops will be held per year (1 or 2). There will be a Strategic Plan discussion with input from a working paper developed by Rick Wilson. Landslide modeling workshop results will also be discussed. Dmitry Nicolsky mentioned that the MMS will be updating guidelines for tsunami inundation modeling.

Kevin Miller reported for the MES that the meeting agenda is set. Tuesday afternoon, there will be a briefout on tsunami preparedness campaigns. Each partner is expected to provide an update for about three minutes. There will also be discussions on TsunamiReady Tier II, the Strategic Plan, grant allowable activities, and the external review report.

Rocky Lopes announced that we will have an optional Group Dinner on Wednesday, August 2, at a brew pub three blocks from the hotel. He also said that he will not be printing copies of read-ahead materials or agendas, so please visit the website, download the items relevant to you, print them out and bring them with you to Salt Lake City.

See the website for more information:

<http://nws.weather.gov/nthmp/2017mesmms/index.html>

## 8. 2018 NTHMP Annual Meeting – venue hunt

Rocky Lopes explained that our requirements for the Annual Meeting include having to have free meeting space in a location where we can walk to places for meals. The hotel and meeting space should be walkable between each other, or the hotel will provide free transportation. The meeting location should be relatively close enough to a major airport so we can use public transit or shared van service to get there.

Kevin Miller with help of Alex Tardy has explored meeting space availability in San Diego for the last two months. Kevin was hopeful that we could use a new CalTRANS building in San Diego, but they won't let outsiders reserve space before November, and there is no guarantee that we could get the space we need on the dates we need it. They also explored other potential meeting locations. Regretfully, it doesn't look like we can find adequate free space in San Diego to meet that meets our capacity requirements as well as need to reserve space in advance.

As an alternative to San Diego, Kevin suggested that we consider meeting in Pasadena, California, at the FEMA Region IX office. Rocky did a cost analysis and results indicate that due to the high tax rate and hotel per diem costs, Pasadena was not feasible from an affordability perspective.

Rocky prepared full cost workout for seven potential meeting locations. We try to meet at a partner location because the partner is more likely to provide free meeting space. (That's why, for example, we don't meet in locations where our partners don't have space.) For "optics" reasons, we cannot meet outside the Continental United States.

The cost workout considers:

- Contract Carrier Airfare from person's home airport to closest major airport serving the destination
- Baggage fees for airlines that charge them
- Hotel per diem using FY17 rates. Note: these rates will go up for FY18, but we will not know the new rates until September.
- Hotel occupancy tax rate
- Hotels that will honor the Federal Government rate (not all do all year)
- Meals & Incidental expenses at FY17 rates
- Ground transportation in host city (estimate for public transit or shared van service)
- Including estimates for all "regular suspects" -- 52 people, but there are often more who attend on their own dime.

When all costs are considered, these are the full rate cost estimates for selected locations:

Location	Total Travel Cost Estimate	Hotel Per Diem	Tax rate	M&IE rate
San Diego, CA	\$104,877.85	\$162.00	18.25%	\$64.00
Pasadena, CA	\$115,220.21	\$175.00	23.75%	\$64.00
Menlo Park, CA	\$111,129.33	\$199.00	20.25%	\$59.00
Portland, OR	\$99,769.06	\$169.00	15.30%	\$64.00
Seattle, WA	\$97,621.12	\$167.00	15.60%	\$74.00
Galveston, TX	\$89,109.70	\$100.00	15.00%	\$64.00
Silver Spring, MD	\$97,486.02	\$182.00	13.00%	\$69.00

We just met in Portland, so we prefer to rotate around. Meeting space in Silver Spring, Maryland (NOAA campus) is not likely to be available for as many days as we need it.

Considering all of this, we are now looking at Galveston, TX, and Seattle, WA. Both Marie Eblé and Juan Horrillo are checking on available meeting space. More information will be shared when it is known.

## 9. [NTHMP External Review Report](#)

Members of the 2017 NTHMP External Review Team joining us for this conversation: Chris Jonientz-Trisler, Dr. Jim Goltz, Dr. Mike Lindell, and Patti Sutch.

Dr. Cooper thanked each member of the Review Team for extraordinary volunteer efforts to attend the NTHMP Annual Meeting and write this report during the last six months.

Rocky Lopes provided a brief overview of the report's development, structure, and contents. He stated that the contents were written by the Review Team and he only organized and formatted the report for publication.

Dmitry Nicolsky: the report is comprehensive. Thanked the authors.

Patti Sutch: impressed by the depth and breadth of the NTHMP and innovative accomplishments in a short time frame. She extended her commendations to all partners.

Kevin Miller: the report has made valid observations. Engagement during the annual meeting was deep and exhaustive. Kevin noted that social science needs are not addressed well by the NTHMP currently. He asked, "are the social science needs listed in the report in order of priority?"

Mike Lindell: the social science needs listed were based on how we wanted to write things, but are not in priority order. All social science needs are high priority. We wanted to call attention to the need to integrate social science into the program and that members were best able to judge which of these activities were a priority.

Dan Belanger: Is there a plan on how to address the NTHMP Weaknesses in the report as a group?

Rocky Lopes: There are times during the upcoming subcommittee meetings where the report, including weaknesses, can be discussed. Subcommittees should make recommendations to the full Coordinating Committee about how to deal with the reported NTHMP weaknesses.

Rick Wilson: extended his appreciation to the members of Review Team. The Executive Summary suggested developing a mitigation and recovery subcommittee. What are your thoughts on timing of how and when we could implement such a subcommittee?

Patti Sutch: the NTHMP is on the verge of moving into that direction, however the establishment of an additional subcommittee is a long-term approach. Consider a phased approach because not all states are at same point of the process.

Jim Goltz: we always knew that the MES was very large and has a lot on its plate. Hazard mitigation is becoming a more important factor; thus, mitigation deserves its own subcommittee. It could be phased in with Preparedness & Education as one subcommittee, and mitigation another.

Rick Wilson: would starting this Mitigation subcommittee as a caucus be useful?

Jim Goltz: a caucus reasonable as a start.

Kevin Richards: grateful for the Review Team for this report. There is a lot to digest. When I look at it, now that we have these great ideas, what are we going to do with it? That's the next step.

Rocky Lopes: what are each reviewer's suggestions on the report's contents and suggested priorities?

Patti Sutch: research needs – maps – the NTHMP needs to get behind probabilistic maps. A well thought-out approach is needed.

Jim Goltz: agencies that support NTHMP outside of NOAA – need to look at providing greater support (such as USGS) but it is important that the services from these agencies are supported within and receive recognition from their own agencies.

Nate Wood: will forward the report to USGS leadership. Nate is working on a strategic plan within the USGS. This report will help support synergy with this strategic report. There are many similarities between both reports.

Mike Lindell: try to recruit social scientists in each state to work with. For example, I am working with a transportation engineer in Oregon to validate evacuation analysis.

Chris Jonientz-Trisler: social science is important to determine how products developed over time are effective. The NTHMP has done a fantastic job since its beginnings. Concern remains that as new visitors come into at-risk areas or attrition of knowledge occurs, the need for ongoing outreach remains. What we had in early years were questions that we asked after a tsunami warning was issued. We were able to see that things were done in communities and they learned from it so they responded differently in subsequent events. Professional survey development.

Chip Guard: culture plays an important role in how people respond to different things which is an important point from social science. I will address this within the Island Caucus. Thanked the review team members as well.

Corina Forson: great recommendations for the Strategic Plan. Challenge now is trying to come up with funding to achieve these goals.

Rocky Lopes: summarized that the purpose of this report is to inform the NTHMP Coordinating Committee during its Strategic Plan development process. Together with past actions to carry forward, and input of priorities for grant activities, the next NTHMP Strategic Plan should be comprehensive and visionary.

#### 10. New Business:

Tim Walsh said that he and Corina Forson are sponsoring a session on titled, "Tsunami Hazards: Innovations in Mapping, Modeling, and Outreach" during the upcoming Geological Society of America conference being held in Seattle October 22 – 25, 2017. Abstracts for presentations at the conference are due by August 1 and conference registration deadline is September 18. More information is here:

<http://community.geosociety.org/gsa2017/home>

#### 11. The meeting was adjourned by the Chair at 3:58pm.

The next Coordinating Committee meeting will be : September 19, 3:00pm  
EDST.

Respectfully submitted,

Rocky Lopes  
NTHMP Administrator