NTHMP Subcommittee Structure and Workload Analysis – Discussion Paper

Executive Summary

The National Tsunami Hazard Mitigation Program (NTHMP) has been formed in its current structure with three subcommittees (Mapping & Modeling, Mitigation & Education, and Warning Coordination) and the Coordinating Committee with governing oversight since 2007.

Activities related to tsunami preparedness, mitigation, response, recovery, and resilience that have varying priority for different partners have evolved through a dynamic process with inputs from the 2017 NTHMP External Review, NTHMP 2018-2023 Strategic Plan, and updated Federal legislation (*Tsunami Warning, Education, and Research Act* [TWERA], 2017). The NTHMP has struggled with finding ways to address these increasingly complex demands within current volunteer personnel and funding constraints.

When discussing whether and how a "mitigation and recovery" effort could and should be addressed by the NTHMP during the 2018 Summer Meeting, a broader question surfaced: "is the current structure of the NTHMP appropriate and sufficient to meet these new demands, as well as continue to support tsunami capabilities, needs, and interests of the nation, to the coastline?

In response to that, the Chair appointed a Work Group to write a paper for discussion during the NTHMP Coordinating Committee meeting scheduled for February 1, 2019. (Reference, NTHMP Coordinating Committee minutes of July 25, 2018).

The February 1, 2019, meeting of the full NTHMP Coordinating Committee was not able to be held in person due to a shutdown of the Federal Government that prevented Federal agency employees from traveling. So this discussion was deferred until the NTHMP meeting in August when there would be more time to discuss it face-to-face.

This paper provides an overview of the NTHMP subcommittees as they are currently structured. It provides a thoughtful list of statements regarding the strengths and weaknesses of the current subcommittees and respective workloads. In addition, gaps on unmet activities were identified. This paper is not about the NTHMP as a whole and does not serve as an "internal review" companion to the *2017 External Review*.

Further, a thorough analysis (Appendix A) with documentation of the history of the NTHMP's evolution since its founding was created to inform discussions among the Working Group that wrote this paper (Appendix B).

The paper culminates with questions for the NTHMP Coordinating Committee to consider, discuss, address, and decide actions to address regarding the subcommittee structure and workload.

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Overview

The NTHMP is a model organization that has achieved important accomplishments in the areas of science-based tsunami hazard assessment, public and governmental preparedness, and alert and warning capabilities. Over its tenure, the organization has delivered on its goals through internal collaboration, developing tasks via strategic planning, and implementing work and policy through an established organizational framework.

The NTHMP has evolved organically over time. The *NTHMP Historical Actions Affecting Structure* (Appendix A) reveals that when the current subcommittee structure was fully implemented by 2007, the increased focus and demand from external sources on the tsunami hazard in the United States and its territories has caused an increase in awareness and demand from stakeholders at risk which has naturally caused a shifting of NTHMP priorities.

NTHMP partners naturally are in a different place on the continuum of capability, due to various reasons. There is a growing list of activities that share interests among NTHMP partners where collaboration is needed. However, some of these activities do not fit exactly into activities shown as assigned to the subcommittees as we know them now.

The NTHMP's success is based on collaboration amongst its members; however, there is a limited time and funding to conduct face-to-face business, collaboration, and planning efforts. The NTHMP is looking for ways to expand and possibly redefine how the program collaborates.

Participation to address the majority of NTHMP task development has often been limited to the same core members and partners. A challenge is how to broaden and encourage participation by those who may not feel completely comfortable or engaged at the national level, and to provide a way for external partners to share their successes with all NTHMP members despite funding limitations.

This paper outlines the subcommittees as they currently stand, some of the major challenges the subcommittees are facing, strengths and weaknesses of the existing subcommittee structure, and ends with questions for the coordinating committee that will hopefully start a discussion about subcommittee structure and options for going forward.

Subcommittee Structure Foundation

The NTHMP was initiated in 1996 and consisted of five states (Alaska, California, Hawaii, Oregon, Washington) and four Federal agencies (NOAA, FEMA, USGS, NSF¹). In 2007, the NTHMP membership evolved to the current members including NOAA, FEMA, USGS and all states and territories that have ocean coastlines.

A "mitigation subcommittee" was formed in 1996 to provide a mechanism for Federal and State emergency managers and geo-science participants to address mitigation, preparedness, response

¹ NOAA: National Oceanic and Atmospheric Administration; FEMA: Federal Emergency Management Agency; USGS: United States Geological Survey; NSF: National Science Foundation

and recovery with regard to tsunami risk in impacted FEMA Regions, coastal states and local jurisdictions. The subcommittee's role was to analyze and prioritize state and local needs, address them through products and activities, and then share these products with other at-risk communities.

The first product was the *Strategic Implementation Plan for Mitigation Projects* that listed, prioritized and then led to the development of relevant projects and initiatives to address those needs, and to widely disseminate the products to the original West Coast, Alaska Coast and Hawaii Coast jurisdictions funded by NOAA.

In November 2004, the NTHMP formed a Modeling and Mapping Working Group to support the needs of emergency managers. This group became the Mapping and Modeling Subcommittee (MMS) in 2007.

The foundation language of this subcommittee was to act in an advisory capacity to the NTHMP Coordinating Committee on tsunami run-up modeling and mapping issues including: standards, Digital Elevation Model (DEM) development priorities, and strategic guidance on modeling and mapping priorities. The MMS identifies educational opportunities related to modeling and mapping products as well as hazard mitigation deficiencies that can be addressed by further mapping and modeling research, and identifies opportunities to integrate modeling and mapping efforts into NTHMP mitigation activities.

The MMS purpose statement is: *The NTHMP's Mapping and Modeling Subcommittee (MMS)* brings together expertise on a variety of tsunami and coastal mapping, modeling, and hazard issues. The MMS supports the NTHMP Coordinating Committee on tsunami hazard analysis, modeling, and mapping activities including but not limited to: tsunami hazard and source identification; inundation, evacuation, and maritime modeling; strategic guidance and standards for modeling and mapping priorities; and DEM development priorities.

In 2007, the NTHMP expanded to all U.S. coastal states, territories, and commonwealths. Also in 2007, the Warning Coordination Subcommittee (WCS) was established.

The WCS purpose is to help improve U.S. tsunami warning system effectiveness by providing NTHMP partners a means to exchange experiences and discuss improvements related to operational product dissemination. WCS members will formulate and agree to actions and recommendations regarding components of the tsunami warning system such as warning center products, warning procedures, message dissemination, system exercises, and Emergency Alert System activation. The WCS will execute strategies as assigned in the NTHMP Strategic Plan, and activities as assigned by the NTHMP Coordinating Committee. (*Note: The WCS has not updated its statement of purpose since it was created.)

Quick Overview Timeline: 1996 - NTHMP formed 1997 - Mitigation Group Formed – later called Hazard Mitigation Subcommittee 1998 - Local Warning Subcommittee formed 2004 - Modeling and Mapping Working Group Formed 2006 - Hazard Mitigation Subcommittee renamed to Mitigation and Education Subcommittee (MES) and Local Warning Subcommittee expanded to Warning Coordination Subcommittee (WCS) formed. NTHMP membership beyond original five states to include territories and all coastal states.

2007 - Mapping and Modeling Subcommittee formed.

2008 - NTHMP *Rules of Procedures* formally adopted establishing three working groups (MES, MMS, & WCS).

2014 - Finalized that the Coordinating Committee has no role in the review or approval of grant funding because the Coordinating Committee is not an official Government Advisory Committee (exempt from the *Federal Advisory Committee Act*) and may not advise NOAA on its budget decisions.

2016 – Informal subcommittee assignments were formalized to have the emergency management member serve on the MES <u>and</u> the WCS. The science member serves on the MMS. That does not prevent members from attending meetings of other subcommittees as they may wish.

Subcommittees

Mitigation & Education Subcommittee

For several years, the Mitigation & Education Subcommittee (MES) has been increasing its scope to address a wider range of activities. The initial focus for MES in 2008 - 2013 was on education and outreach, materials development & consistency. The National Weather Service representative organized and managed the MES workload. Since her departure, this has not been the case for the NOAA MES rep and work has fallen onto FEMA and the State co-chair.

In 2008, all of the program's partners were focused on inundation mapping and evacuation planning, preparedness, and outreach and education to facilitate public understanding about what to do in response to tsunami alerts. This still remains the ultimate goal of the MES, MMS, and WCS. As we further our goal of having a country that is prepared for and able to respond to tsunami hazards we continue to evolve and broaden our scope to include activities such as mitigation, recovery, maritime guidance, vertical evacuation, and building code implementation.

The scope of the <u>MES has broadened to include</u>:

- Conducting and application of social science² (per TWERA)
- Support of tsunami exercises, guidance coordinated w/FEMA Homeland Security Exercise and Evaluation Program (HSEEP) (per TWERA)
- Training for local officials (risk management, hazard overview, education and planning TWERA)
- Consulting on the NWS TsunamiReady[®] Program
- Implementation of TsunamiReady[®] Tier II

² Technically, while TWERA states that NOAA "shall conduct" and states "will apply" social science, as discussed during the TWERA implementation discussions by the NTHMP CC, NOAA has no funding appropriated by Congress to conduct social science studies on behalf of the NTHMP, so unless a state includes social science activities in a grant proposal and funds are awarded, it will not happen.

The scope of both the MES and the MMS has broadened to include:

- Mitigation of the physical environment (ASCE Chapter 7), such as building codes
- Vertical evacuation (lessons learned, new techniques) staging and engineering
- Development of multiple guidelines (maritime, evidence-based education and outreach) (TWERA)
- Guidance on the application of HAZUS-Tsunami module and other Risk Assessment programs.
- Understanding and communicating about 3D inundation modeling, sediment and debris transport, other tsunamigenic sources, etc.

Mapping & Modeling Subcommittee

Basic coastline mapping is incomplete for some Pacific island and state coastlines. New and higher resolution data are available which can refine and improve maps that were previously developed for states. As science continues to evolve and new scenarios are developed for crustal and subduction zone faults, inundation modeling should continue to be updated and the information and data must be presented to the public and emergency management community. As the MMS learns more about maritime hazards, 3D inundation modeling, sediment and debris transport, and other tsunamigenic sources, there is a demand for new and improved products that capture this information.

There may not be the same challenges presented for the Mapping & Modeling Subcommittee (MMS) as for the MES described above. The MMS has adopted input from TWERA and included activities related to the subcommittee's growth in its Annual Work Plan and five-year Vision Plan. There is no record of concern about the structure or scope of activities of the MMS other than some MMS members wish to attend meetings of other subcommittees and when meeting times overlap, that isn't always possible.

Major challenges with the increased scope of work on the MMS were referenced above.

Collaboration between MES and MMS

There is a need for MES and MMS membership to collaborate under the existing subcommittee structure to support topics in a way that allows adequate focus to address and produce results or capability around the topic at hand.

Some actions that can benefit from participation by both subcommittees include:

- Vertical evacuation planning.
- Probabilistic Tsunami Hazard Analysis maps related to the building code.
- Harbor Mitigation
- Land-use planning
- Recovery planning.
- Modeling sediment and debris movement

Warning Coordination Subcommittee

The Warning Coordination Subcommittee (WCS) has a clear mandate in its Terms of Reference.

The WCS provides a strong service and method of facilitating the relationship between the National Tsunami Warning Center (NTWC) and the Pacific Tsunami Warning Center (PTWC) and their constituent states and territories. These relationships and non-emergency conversations become invaluable during live tsunami events. WCS in the past typically has set aside time to discuss initiatives in the past, but with current turnover the WCS has not been actively engaged with MES or MMS as in past Annual meetings.

Existing challenges include a strong overlap between MES and WCS membership such that scheduled meetings for each of these subcommittees cannot overlap.

Another challenge has been providing enough discussion time at such meetings to address all the issues and topics of concern to members.

Strengths, Weaknesses, and Gaps of Current Subcommittee Structure

Strengths

The 2017 NTHMP External Review listed these strengths for the NTHMP as a whole; some these strengths are derived from the subcommittees:

- The NTHMP leverages the collective knowledge of tsunamis and provides an effective forum to share research, outreach, and emergency management practices.
- The NTHMP and its subcommittees have established a consistent and standard set of model practices that have been adopted and applied in partner states. Working toward common themes and messages benefits all. Without the NTHMP, tsunami knowledge and technology transfer would be difficult and time-consuming, if not impossible.
- The cooperation between the states and federal partners is a key element in the overall effectiveness of the NTHMP. The participation of federal agencies provides administrative support (NOAA's National Weather Service—NWS), expertise in areas of critical importance (NOAA, FEMA, and the USGS), and an overall framework in which the NTHMP operates.
- The partnership at the state level of the program brings together key players who must cooperate in the delivery of program elements and will be called upon to function seamlessly in a tsunami event. The interaction between tsunami warning center personnel and state physical science and emergency manager representatives has been particularly helpful in responding to tsunami events when they occur.
- State programs are essential in shaping the overall NTHMP to address unique regional and local needs. The state programs reflect the diverse geography, demography, regional cultures, and vulnerability of the built environment that characterize participants in the NTHMP.

Additional input by the Work Group (Appendix B):

- The subcommittee members are focused in the subject matter of their respective subcommittees.
- Collaboration and camaraderie exists among and across subcommittees, promoting overall program goals and mitigation.
- The annual meetings allow for exposure to new ideas from other states and subcommittees.
- Separate subcommittee meetings allow for each group to focus on their specific portion of the process or topic that may not appeal to other subcommittees.
- Each subcommittee must develop an annual work plan along with measurable milestones.
- The engagement on lessons learned and model practices are the most successful outcomes of this group.

Weaknesses

- Collaboration and moving the program forward without forgetting the decisions made in the past and updating those decisions is huge. Engagement is the biggest issue and then the workload of that success.
- Not all members feel comfortable engaging at all times. The structure and scope of the national program can be daunting, even intimidating to the newcomer. It can take years to get up to speed with the Program and effectively engage during the Annual and Winter subcommittee meetings.
- Some members have not engaged on some topics of little or no interest to them, such as recovery and "hard" mitigation such as ASCE Chapter 7-16 building codes.
- Some members have felt that discussions on issues that apply to Pacific states have taken time away from discussions on items that have a broader interest and applicable to more partners.
- The NTHMP subcommittees are limited in technology usage.
- Time constraints for all partners are real and some funded partners are not active outside the current in-person meetings.
- There is reluctance to hold virtual meetings. This may be due to lack of time for someone to volunteer to organize, facilitate, take notes for, and otherwise assume ownership.
- There is no procedure to promote efficiency by linking related activities, such as the MMS hazard analysis metric with the MES vulnerability assessment.

Gaps

A mechanism for focusing on any "next level" tasks is needed for NTHMP partners, in particular those who need to address building code standards developed and proposed by the American Society of Civil Engineers and proposed for adoption by the International Building Code (IBC) and state building codes, is needed.

A working group within the MES to focus on the topic of mitigation & recovery has been formed and approved to discuss a way forward. This working group met in May and July, 2019. It has no official leadership, and no accountability tracking.

Partners who face implementation of ASCE chapter 7-16 would benefit from a framework supporting focus and establishing a knowledge base on these topics. As with basic hazard assessment, the NTHMP members may assist one another to understand the issues and develop guidance toward implementation. Allowing for natural progression for the work of partners is something the organization wants to ensure to address its ability to meet the needs of its partner states and their coastal constituents.

The NTHMP has mainly addressed tsunami hazard assessment, warning, preparedness, and—to a lesser extent—mitigation, but recovery has not been addressed. Given that the impacts of a major domestic tsunami will require strategies and plans for recovery, it has been suggested that this area should be considered for incorporation into the NTHMP. However, this can and should only be done consistent with State Recovery Planning efforts, since tsunami is not the only hazard that states should include in a state recovery plan consistent with the FEMA Recovery Framework.

While the role of the NTHMP is focused on mitigation, there are often constraints that prevent many members from volunteering further, outside of their own scope and state requirements. In addition, the focus of the MES is mostly outreach and exercises. Ultimately, there is value in continuing to work toward achievement of more accomplishments that can have long-term benefits against the economic impacts that a tsunami can cause to a community, like completing vertical evacuation structures and other "hard mitigation" projects.

A challenge currently facing the NTHMP is how to capture mitigation and recovery actions when few (and especially the same few) volunteer, and leadership of these activities is considered an added workload. Additionally, with limited Federal grant funding, additional exploration may be required to expand the activities to include major mitigation and recovery projects.

Mitigation and recovery are important components of the NTHMP, however, the mechanism and method for how or if these activities are incorporated is less clear.

Questions and considerations for the Coordinating Committee

Given these constraints and considerations:

- The NTHMP meets in person twice a year: 4.5-day "annual meetings week" composed of subcommittee and caucus meetings as well as topical workshops and all-day annual meeting. Effective in 2019, the annual meeting is held in the summer. Meetings of the MES and MMS are held in the winter in conjunction with an overall program review related to the grant deliverables and future proposed grant activities.
- Subcommittee and Work Group conference calls and webinars are conducted between these meetings.
- The ability to travel and coordinate on weekends is impacted by state and Federal policies as well as personal preferences of some members, so in-person meeting times have been limited to meeting on Monday through mid-day Friday.
- Members of some other subcommittees wish to attend meetings related to other areas of interest outside their designated subcommittee purview.
- NOAA/NWS cannot secure or leverage more invitational travel and offer more travel funding for travel to NTHMP meetings due to budget constraints that will only get worse, not better.³
- TWERA's language regarding "financial assistance" requires funds be made available only to states, territories, tribes, and local governments. Financial assistance when appropriated by Congress may not be transferred to another Federal agency.
- Federal Government employees are prohibited from accepting support from a Federal Grant for anything (travel, meals, etc.).
- Travel funding placed on grants for additional meetings and work groups takes away funds for other activities and excludes Federal partners.

Meetings and collaboration

- 1. What can be done to build more participation in NTHMP activities, to work on the development of products such as Guidelines, and participation in both face-to-face and virtual meetings?
- 2. What can be done to make meetings more open (free-flowing) for participation by attendees who have different interests?
- 3. What can or should be done regarding meeting scheduling issues that present conflicts of time for people wishing to engage on certain topics?
- 4. Given the constraints on travel funding, what should or can be done regarding perceived needs for more face-to-face workshops and meetings, especially if that means not having Federal agency partners be able to participate due to funding constraints? What is a reasonable limit the CC would recommend for additional travel placed on grants beyond the two regularly-scheduled meetings?

³ Currently, NOAA/NWS pays about \$50,000 in travel funding to support travel by NOAA and FEMA employees to participate in the NTHMP Annual Meeting and winter subcommittee meetings. This funding is from the NWS AFS base budget – not from the pool of funds allocated for financial support to states.

- 5. There has been a recommendation to engage local emergency managers and NWS WCMs beyond inviting them to various meetings. How can we engage these people given the constraints described above?
- 6. The learning curve to participate fully is steep. What can be done to increase participation from a few core participants and be more inclusive of new members?
- 7. How do we build on the strength and caliber of the knowledge being developed rather than "hold back" the entire organization to the level of most basic capability of newer partners?
- 8. Should anything be done differently regarding frequency of subcommittee meetings (inperson and virtual?)

Current Subcommittee Structure

- 9. How should the NTHMP balance interests of serving the nation vs. serving individual states, particularly the Pacific states? Should the NTHMP be structured by geographic area rather than subject area? *Note: the History section in Appendix B shows that a geographic structure was attempted in 2006 to 2008, but only the Pacific Region met.*
- 10. Should anything be done regarding subcommittee leadership and frequency of Co-Chair change?
- 11. Given the constraints on travel funding, should anything be done regarding subcommittee Membership? Note: there is no restriction on membership to serve on subcommittees. Anyone may serve upon acceptance by the respective subcommittee.
- 12. Considering a perceived drift from original expectations, should subcommittee statements of purpose and duties (found in each subcommittee's *Terms of Reference*) be revised?

Workload

Much has been discussed in the past several years and presented in this paper about the workload placed upon the NTHMP to consider dynamic and increasing activities that have varying priority for different states.

Ideas have been floated to create a formal Mitigation Subcommittee, Recovery Subcommittee, or a Mitigation & Recovery Subcommittee. Another idea has been presented to form a Pacific Caucus (A geographic organization structure rather than topical) so that the five NTHMP founding states that have a need to address ASCE Chapter 7-16 tsunami load issues, land use planning, and "hard" mitigation, could have a forum in which to meet and conduct business to serve their interests, which are not of priority to the East Coast region, Gulf Coast region, or territories.

- 13. What can/should be done regarding subcommittee workload?
- 14. How does the Coordinating Committee support maintaining the duties assumed by the subcommittees and ask them to take on new responsibilities with the limited funding, time and participation we have?
- 15. Should the tasks assigned to subcommittees be prioritized and some not accepted?
- 16. What does the Coordinating Committee recommend be done about the workload and a path forward to address gaps and weaknesses identified in this paper?

- 17. How does the NTHMP bring new members up to speed and keep all members engaged?
- 18. How can the NTHMP be expanded given constraints described in this paper?

Next Steps

The NTHMP Coordinating Committee will consider this report and will determine the next steps to take regarding any content of this report. This is not a proposal or a motion for action. This report is for information purposes only.

We ask that the members of the Coordinating Committee review the proposed recommendations (provided separately) and add any additional recommendations they have. If you like or have concerns about one or more of the existing recommendations, please add your comments.

Date	NTHMP Action	Documentation
Dute		(HERE unless otherwise cited)
February 1996	Partnership with HI, AK, WA, OR, CA (states) and NOAA, FEMA, USGS, and NSF (Federal) formed – this is the foundation of what we know as the NTHMP.	Report to Senate Appropriations Committee [citation]
December 1996	First Chair appointed: Eddie Bernard, NOAA/PMEL	Steering Group minutes December 5- 6, 1996
May 1997	Tsunami Inundation Mapping Effort (TIME Center), Newport, OR formed	Steering Group minutes March 4-5, 1997
June 1997	NTHMP "Mitigation Group" formed	Steering Group minutes June 18-19, 1997
April 1998	First reference to "Public Affairs Working Group"	Steering Group minutes April 15-16, 1998
October 1998	First reference to formation of "Local Warning Subcommittee"	Steering Group minutes October 7-8, 1998
April 1999	Hazard Mitigation Subcommittee formal reference w/actions	Steering Group minutes April 27-30, 1999
November, 2000	First time Mitigation Committee has dedicated meeting time at Steering Committee meeting	Steering Group minutes November 14-15, 2000
November, 2000	First engagement by NTHMP on NWS TsunamiReady Program	Steering Group minutes November 14-15, 2000
August, 2001	2001 NTHMP Assessment (external review) completed	Conducted as part of the 2001 International Tsunami Symposium
November, 2002	Working Group appointed to prepare draft mapping certification procedures	Steering Group minutes November 5- 7, 2002
November, 2003	Jeff Ladouce, NWS Pacific Region Director, becomes Chair	Steering Group minutes November 6 - 7, 2003
November, 2003	No more reference to Public Affairs Working Group	Steering Group minutes November 6 – 7, 2003
May 2004	Motion to develop a Technical Advisory Board morphed into 2 things: 1) have 5-year external reviews; and 2) "form ad hoc technical groups to address specific technical issues." (further action unclear.)	Steering Group minutes May 18 – 20, 2004

Appendix A: NTHMP Historical Actions Impacting Structure

May 2004	Establish a working group driven by Emergency Management needs, that will develop recommendations on technical and policy issues related to NTHMP mapping and modeling efforts. * This is where it says the MMS is driven by emergency management needs.	Steering Group minutes May 18 – 20, 2004
November,	NTHMP Modeling and Mapping	Steering Group minutes November 2
2004	Working Group established. First meeting held November 2, 2004. Activities of new MMWG listed.	- 4, 2004
June, 2005	Transition to form "Tsunami Coordination Group" chaired by John Jones, NWS Deputy Director. First designation of official voting membership by states and geographic regions. Voting members: NOAA (chair); USGS, NSF, FEMA; Pacific Region states; Alaska Region state; Western Region states; Eastern Region states; and Southern Region states.	Steering Committee minutes June 6- 9, 2005
February, 2006	Discussed formation of regional structure to expand program to additional states: 3 groups – Pacific – original 5 states; Southern and Eastern.	Steering Committee minutes February 1, 2006
February, 2006	John Jones designated as NTHMP Chair	Steering Committee minutes February 1, 2006
February, 2006	NTHMP Implementation Plan passed, designating group work: *Mitigation to be led by FEMA, with 5 states, USGS, NIST, and NSF. *Outreach group designated to be led by FEMA, but changed to NOAA. *Seismic, USGS Lead *Forecast & Warning, NOAA Lead *Interoperability of Systems, NOAA Lead (includes international systems) *Social Science "needs a team" *Research, NOAA/PMEL Lead	Steering Committee minutes February 1, 2006
November, 2006	Local Warning Subcommittee becomes the Warning Coordination Subcommittee	Steering Committee minutes November 1, 2006

November,	Elevation of Modeling and Mapping	Steering Committee minutes
2006	Working Group to "Mapping	November 1-2, 2006
	Subcommittee" (aka "reinstatement")	
November,	NTHMP Structure voting members:	Steering Committee minutes
2006	CA, OR, WA, AK, HI, 1 vote each	November 1-2, 2006
	PR, USVI, 1 vote each	
	Eastern States, 1 vote	
	Gulf States, 1 vote	
	Pacific territories, 1 vote (as a region)	
	FEMA, USGS, NOAA, NSF, 2 votes	
	each	
November,	Motion to have 1 annual meeting per	Steering Committee minutes
2006	year and separate "regional Meetings"	November 1-2, 2006
	for Pacific, Eastern, and Southern	
	regions approved. (4 meetings)	
January 12,	Congress passes and the President	Congressional Action
2007	signs the "Magnuson-Stevens Fishery	Tsunami Warning and Education Act
	Conservation and Management	
	Reauthorization Act of 2006" (P.L.	
	109-479) which incorporates the	
	Tsunami Warning and Education Act	
	(TWEA) as Title VIII. NTHMP is	
2007	first codified into Law (Section 805).	
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2007	National Science Foundation stopped	Stopped being referred to in meeting
2007	participating	minutes.
2007	participating	minutes.
2007 March 2007	participating	Pacific Regional Meeting minutes
March 2007	First reference to "Mitigation and	Pacific Regional Meeting minutes
March 2007	First reference to "Mitigation and Outreach Subcommittee"	Pacific Regional Meeting minutes March 15, 2007
March 2007 March 2007	National Science Foundation stopped participating First reference to "Mitigation and Outreach Subcommittee" "Mitigation subcommittee needs should drive M&M charter"	Pacific Regional Meeting minutes March 15, 2007 Pacific Regional Meeting minutes March 15, 2007
March 2007 March 2007 March 2007	First reference to "Mitigation and Outreach Subcommittee" "Mitigation subcommittee needs should drive M&M charter" Pacific Region Co-Chair system:	Pacific Regional Meeting minutes March 15, 2007 Pacific Regional Meeting minutes March 15, 2007 Pacific Regional Meeting minutes
March 2007 March 2007 March 2007	National Science Foundation stopped participating First reference to "Mitigation and Outreach Subcommittee" "Mitigation subcommittee needs should drive M&M charter" Pacific Region Co-Chair system: LaDouce (NOAA) & Wilson (state)	Pacific Regional Meeting minutes March 15, 2007 Pacific Regional Meeting minutes March 15, 2007 Pacific Regional Meeting minutes March 15, 2007
March 2007 March 2007 March 2007	National Science Foundation stopped participating First reference to "Mitigation and Outreach Subcommittee" "Mitigation subcommittee needs should drive M&M charter" Pacific Region Co-Chair system: LaDouce (NOAA) & Wilson (state) agreed by group to serve	Pacific Regional Meeting minutes March 15, 2007 Pacific Regional Meeting minutes March 15, 2007 Pacific Regional Meeting minutes March 15, 2007
March 2007 March 2007 March 2007 May 2007	National Science Foundation stopped participating First reference to "Mitigation and Outreach Subcommittee" ''Mitigation subcommittee needs should drive M&M charter" Pacific Region Co-Chair system: LaDouce (NOAA) & Wilson (state) agreed by group to serve Second NTHMP Assessment (external	Pacific Regional Meeting minutes March 15, 2007 Pacific Regional Meeting minutes March 15, 2007 Pacific Regional Meeting minutes March 15, 2007 Pacific Regional Meeting minutes March 15, 2007
March 2007 March 2007 March 2007 May 2007	National Science Foundation stopped participating First reference to "Mitigation and Outreach Subcommittee" "Mitigation subcommittee needs should drive M&M charter" Pacific Region Co-Chair system: LaDouce (NOAA) & Wilson (state) agreed by group to serve Second NTHMP Assessment (external review) completed	Stopped being referred to in meeting minutes.Pacific Regional Meeting minutes March 15, 2007Pacific Regional Meeting minutes March 15, 2007Pacific Regional Meeting minutes March 15, 20072007 Assessment report
March 2007 March 2007 March 2007 May 2007 January 2008	National Science Foundation stopped participating First reference to "Mitigation and Outreach Subcommittee" "Mitigation subcommittee needs should drive M&M charter" Pacific Region Co-Chair system: LaDouce (NOAA) & Wilson (state) agreed by group to serve Second NTHMP Assessment (external review) completed First time NOAA asserted control of	Stopped being referred to in meeting minutes.Pacific Regional Meeting minutes March 15, 2007Pacific Regional Meeting minutes March 15, 2007Pacific Regional Meeting minutes March 15, 20072007 Assessment reportCoordination Committee meeting
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February 2008	NTHMP Rules of Procedure discussed	Coordination Committee meeting minutes February 7, 2008 (teleconference)
April 2008	Provision of designation of an NTHMP Administrator instead of "secretary" required by NOAA General Counsel.	Coordination Committee meeting minutes of April 2, 2008.
April 2008	Designation of NTHMP Administrator – Jen Rhoades, NWS HQ	Coordination Committee meeting minutes of April 2, 2008.
April 2008	NTHMP Charter adopted	Coordination Committee meeting minutes of April 2, 2008.
April 2008	NTHMP Rules of Procedure adopted. Rules of procedure formally established 3 subcommittees: -Warning Coordination Subcommittee -Mitigation and Education Subc. - Modeling and Mapping Subc.	Coordination Committee meeting minutes of April 2, 2008.
April 2008	Vickie Nadolski nominated to serve as NTHMP Chair.	Coordination Committee meeting minutes of April 2, 2008.
August 2009	Approved 2009 – 2013 NTHMP Strategic Plan. This version specifically names 3 subcommittees and provides action items for each.	Coordinating Committee meeting minutes of August 13, 2009.
August 2009	Revised <i>Rules of Procedure</i> -Indicated that CC recommends grant award amounts to NWS Director. -Updated procedures to indicate that outside experts on subcommittees not participate on consensus recommendations (i.e., no vote.)	No vote shown in the record, but this version was posted on the NTHMP website from August 2009 to October, 2011.
January 2010	Annual Meeting format changed to provide time for individual subcommittee meetings the day before the annual meeting.	Coordinating Committee meeting minutes of January 28, 2010.
June 2010	Revised 2009-2013 NTHMP Strategic Plan based on GAO report.	Coordinating Committee meeting minutes of June 21, 2010. GAO report, " <u>NOAA Has Expanded</u> <u>Its Tsunami Programs, but Improved</u> <u>Planning Could Enhance</u> <u>Effectiveness</u> "
February 2011	MMS updated its <i>Terms of Reference</i> -Record of changes not available.	Coordinating Committee meeting minutes of February 3, 2011.
October 2011	NAS publishes Tsunami Warning and Preparedness: An Assessment of the U.S. Tsunami Program and the Nation's Preparedness Efforts	NAS Report (takes place of third external review)

November	Attempt to cancel in-person	Coordinating Committee minutes of
2012	subcommittee meetings (as a cost-	November 20, 2012.
	saving measure) was strongly	
	challenged.	
March 2013	Aimee Devaris appointed as NTHMP	Coordinating Committee minutes of
	Chair upon Vicki Nadolski's	March 19, 2013.
	retirement.	
May 2013	Adopted 2013 – 2017 NTHMP	Coordinating Committee minutes of
	Strategic Plan.	May 21, 2013.
May 2013	Grants supervision, recommendations,	Coordinating Committee minutes of
	and decision-making no longer involve	May 21, 2013.
	the NTHMP CC per decision by	
	NOAA General Counsel.	
July 2013	Request to re-engage the NSF on the	Coordinating Committee minutes of
	NTHMP. NSF is not interested.	July 16, 2013.
August, 2013	Subcommittee Co-Chairs who are not	Coordinating Committee minutes of
	CC members will be invited to observe	August 20, 2013.
	CC meetings, whether in-person or via	
	conference call.	
August, 2013	Discussion but no decision on	Coordinating Committee minutes of
	expansion of representation of Pacific	August 20, 2013.
	Territories (American Samoa, CNMI,	
	Guam). Decision to be made based on	
	results of I sunami Hazard Assessment	
Santambar	Continued discussion on	Coordinating Committee minutes of
2012	representation by Pacific Territories	Sontombor 17, 2013
2013	Still awaiting results of Assessment	September 17, 2015.
Sentember	MMS recommended CC approved	Coordinating Committee minutes of
2013	official NOA A/PMEL representative	September 17, 2013
2013	to serve on the MMS	September 17, 2015.
Sentember	MMS requested confirmation of an ad-	Coordinating Committee minutes of
2013	hoc non-voting member of this	September 17, 2013
2013	subcommittee to take the lead on new	September 17, 2015.
	guidance and workshops Motion	
	tabled pending a cost-benefit analysis	
	due to impact on NOAA travel budget	
	due to impact on reorder duver budget.	

October, 2014	NOAA General Counsel determines	Internal NOAA email from NOAA
	that the NTHMP CC is not a Federal	General Counsel to Mike Angove,
	Advisory group (the CC is FACA	Rocky Lopes, and Lewis Kozlosky.
	exempt) and therefore has no role in	
	advising the Government on handling	
	any portion of its budget. This	
	decision eliminated the role of the CC	
	reviewing the budget requests from the	
	states for NOAA grants, or advising	
	NOAA how and where to allocate	
	resources for tsunami observations and	
	TWC operations.	
January, 2014	Rocky Lopes appointed to serve as	Coordinating Committee minutes of
	NTHMP Administrator	January 31, 2014.
January, 2014	Based on results of Tsunami Hazard	Coordinating Committee minutes of
	Assessment, CC voted to extend	January 31, 2014.
	membership to American Samoa,	
	CNMI, and Guam with (1) emergency	
	management representative and (1)	
	science member – just the same as	
	other states/territories.	
January, 2014	Need to update the <i>Rules of Procedure</i>	Coordinating Committee minutes of
	discussed since the CC no longer has a	January 31, 2014.
	role on the budget. Work Group	
	appointed.	
September,	Discussion on expansion of CC to	Coordinating Committee minutes of
2014	include headquarters representation by	September 16, 2014.
	US Coast Guard and U.S. Navy.	
	Response: USCG HQ not interested;	
	works best in districts with respective	
	states. Navy has rep on WCS; they	
~ .	consider that sufficient.	
September,	Major update to NTHMP Rules of	Coordinating Committee minutes of
2014	Procedure adopted.	September 23, 2014.
February, 2015	Discussion regarding need for a	Coordinating Committee minutes of
	dedicated work group to handle	February 13, 2015.
	NTHMP-oriented media outreach. No	
2015	action or appointments made.	
May, 2015	Appointed a Work Group to review	Coordinating Committee minutes of
	and offer recommendations for update	May 19, 2015.
1.1. 2015	to the <i>NTHMP Rules of Procedure</i> .	
July, 2015	CC adopts minor update for <i>NTHMP</i>	Coordinating Committee minutes of
	<i>Rules of Procedure</i> that provide for	July 15, 2015.
	designation of official alternates to	
	attend CC meetings in absence of	
	primary member(s).	

November,	Dr. Grant Cooper appointed Chair	Coordinating Committee minutes of
2015	upon Aimee Devaris resignation from	November 10, 2015.
	NOAA/NWS to go to USGS.	
February, 2016	Island Caucus formation approved by	Coordinating Committee minutes of
	Coordinating Committee	February 5, 2016.
March, 2016	Transition from NOAA/NWS	Coordinating Committee minutes of
	providing travel funding for CC	March 22, 2016
	members to attend annual meeting and	
	summer subcommittee meetings to	
	travel being funded by grants, where	
	possible. (No more invitational travel	
	offered by NOAA for state/territory	
0.1.0016	partners to attend NTHMP meetings.)	
October, 2016	Formal designation that the emergency	Coordinating Committee minutes of
	Mitigation & Education Subsequentities	October 4, 2016
	and the Warning Coordination	
	Subcommittee The Science member	
	serves on the Manning & Modeling	
	subcommittee All subcommittees	
	may have additional members at their	
	discretion	
April. 2017	Tsunami Warning, Education, and	Act of Congress and signed into law
· · · p· · · · , - · · · · ·	Research Act of 2017 enacted into	by the President on April 18, 2017.
	Public Law 115-25.	Coordinating Committee minutes of
		May 3, 2017.
July, 2017	Institutionalization of creation of	Coordinating Committee minutes of
	Annual Work Plan by each	July 18, 2017.
	subcommittee.	
July, 2017	2017 NTHMP External Review	Coordinating Committee minutes of
	completed and published. Many	July 18, 2017.
	recommendations were made, to be	
	evaluated and some chosen for future	
	implementation.	
September,	<i>Terms of Reference</i> for MES, MMS,	Coordinating Committee minutes of
2017	and WCS updated (for Annual Work	September 19, 2017.
~ 1	Plan requirement.)	
September,	Update of "Allowable Grant Activities	Coordinating Committee minutes of
2017	List" accepted by CC and	September 19, 2017.
	recommended to NOAA/NWS. First	
	significant update of this list since	
Eshmany 2019	2008.	Coordinating Committee minutes of
February, 2018	CC adopts updated <u>NTHMP Rules of</u>	Coordinating Committee minutes of
	reflecting passage of TWEP A	Febluary 2, 2018.
	Tenecting passage of TwEKA.	

February, 2018	CC adopts 2018-2023 NTHMP	Coordinating Committee minutes of
	<u>Strategic Plan</u>	February 2, 2018. (actual adoption
		date February 20, 2018)
February, 2018	MES, MMS, and WCS adopt and CC	Coordinating Committee minutes of
	approves 2018 Annual Work Plans	February 2, 2018.
February, 2018	Work Group formed to develop	2018 NTHMP Winter Meeting
	recommendations for the CC on	session on mitigation & recovery.
	"mitigation & recovery."	
July, 2018	Formation of "Mitigation &	Coordinating Committee minutes of
	Recovery" work group within the	July 25, 2018
	MES approved by CC.	
July, 2018	NTHMP Subcommittee Restructuring	Coordinating Committee minutes of
	Work Group authorized by CC.	July 25, 2018

Appendix B: Work Group Members

This report was written by:

- Tamra Biasco, FEMA Region X
- Corina Forson, Washington
- Kevin Miller, California
- Chayne Sparagowski, Georgia
- Rocky Lopes, facilitator
- Althea Rizzo of Oregon was appointed to this Work Group, but her participation was minimal due to workload.
- Leo Espia of Guam was appointed to this Work Group, but due to significant impact from typhoons on Guam, he was unable to participate.