

NTHMP SUBCOMMITTEE ANNUAL WORK PLAN

Subcommittee: Mapping & Modeling

Version date: January 28, 2019

Ranked Activity / Key Action Objectives	Strategy(ies) addressed (#)	Annual Action Step(s)/Milestones	Activity Lead and workers	Activity Requirements	Supporting Resources / Existing Work / Dependencies	Metrics – expected outcome and target date (**Many of these activities are multi-year projects which will be included in MMS Vision Plan**)
2019 - Tsunami source database (continued)	1.1.1 Identify and address gaps in tsunami source characterization and modeling	<ul style="list-style-type: none"> • Generate metadata for collected tsunami sources • Integrate GIS/KML/figures showing source dimensions • Finalize database format, definitions, metadata, and attachments (GIS, figures) • Finalize and incorporate PTHA and Powell Center sources • Determine final location of DB and assist transfer 	MMS, MES	<ul style="list-style-type: none"> • CA lead • Perform work through MMS meetings 	<ul style="list-style-type: none"> • Leverage USGS Powell Center work • California grant dependency to support finalizing the shape and format of the database (e.g. an Excel spreadsheet) 	2019 – Continue development of the source database schema/attributes This is a multiyear activity.

<p>2019 – Maritime guidance (continued)</p>	<p>1.1.3 Identify and address the tsunami hazard assessment and product requirements</p> <p>and 2.4.1 Engage stakeholders on tsunami preparedness and response</p>	<ul style="list-style-type: none"> • Develop initial web-based guidance format and available linked example products from NTHMP partners. Guidance addresses hazard assessment, preparedness and outreach, response, mitigation, and recovery planning. Guidance will also include: one webpage for NTHMP partners’ use, and separate pages for customers (recreational, commercial, and large vessels; large ports; cruise industry; Navy; and US Coast Guard). • Plan workshop at large port to engage special/unique customer needs (workshop will be held in early 2020). • Update work group and NTHMP, and update products accordingly. <p>Formalize location of webpage(s), possibly through NTHMP website, individual partner website, or both (plan finalized in 2020).</p>	<p>MMS, MES</p>	<ul style="list-style-type: none"> • CA lead • Continue to lead MMS and MES members through work group. • Get feedback from work group and NTHMP, and update products. 	<ul style="list-style-type: none"> • Significant work has been completed on guidance • Will require grant support for lead MMS/MES representatives from CA • Funding from FEMA for California can help support work on guidance for currents and mitigation/recovery work • Dependency – none 	<p>2019 – Continued development and format completion of maritime guidance website(s). This is a multi-year activity (work finalized in 2020).</p>
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<p>2019 - Complete hazard assessment gap analysis (continued)</p>	<p>1.1.2 Complete inundation and evacuation maps for all unmapped U.S. coastal communities</p>	<p>Develop and refine list of hazard mitigation products, activities, infrastructures.</p>	<p>MMS, MES</p>	<ul style="list-style-type: none"> • MMS group activity • MES group activity 	<ul style="list-style-type: none"> • Some information on inundation maps has been collected • East Coast was grant funded to support identification of the gaps 	<p>2019 – Develop an inventory of the status of hazard mitigation products, such as modeling/mapping activities (e.g., tsunami hazard maps, port maritime guidance, evacuation modeling) and education/outreach (e.g., sirens, guidance plans, etc.), across all NTHMP partners This is a multiyear activity.</p>
<p>2019 - Complete current modeling criteria (continue)</p>	<p>1.1.3 Identify and address the tsunami hazard assessment and product requirements</p>	<p>Develop criteria for modeling current velocities for use in maritime products</p>	<p>MMS</p>	<ul style="list-style-type: none"> • MMS group activity • Convene conference calls, work through developing criteria for current velocity modeling for inclusion in the maritime guidance 	<ul style="list-style-type: none"> • MES application of output from this project. • WCS application of output to inform message for maritime community • Dependency – none. 	<p>2019 – Complete draft report with criteria for modeling currents</p>

2019 - Updating mapping and modeling guidance (continued)	1.1.2 Complete inundation and evacuation maps for all unmapped U.S. coastal communities	Finalize an update to existing tsunami mapping and modeling guidance	MMS	<ul style="list-style-type: none"> • MMS group activity • Convene conference calls, work through updating the existing guidance 	<ul style="list-style-type: none"> • Dependency – none. 	2019 – Update existing mapping and modeling guidelines with new information
2019 - Sediment transport modeling guidance (continued)	1.1.1 Identify and address gaps in tsunami source characterization and modeling	Form a work group to discuss sediment transport modeling research, review existing approaches, and discuss a potential workshop on incorporation sediment transport into the tsunami inundation modeling.	MMS	<ul style="list-style-type: none"> • East Coast lead • WA will support gathering information on existing studies and pilot projects 	<ul style="list-style-type: none"> • Dependency – none 	2019 - Initiate development of the sediment transport research work group. This is a multiyear activity
2019 - HAZUS guidance	1.2.1 Provide technical assistance for risk assessments and 1.2.2 Develop and implement a strategy for using HAZUS and product guidance	Review existing HAZUS tsunami module	MMS, MES	<ul style="list-style-type: none"> • OR lead 	<ul style="list-style-type: none"> • OR grant dependency in FY20 	<ul style="list-style-type: none"> • 2019 - Update MMS on HAZUS
2019 - Landslide-generated tsunami modeling guidance (continued)	1.1.1 Identify and address gaps in tsunami source characterization and modeling	Develop guidelines for consistent modeling of landslide-triggered tsunamis	MMS	<ul style="list-style-type: none"> • East Coast lead 	<ul style="list-style-type: none"> • Model benchmark workshop report can be referenced 	<ul style="list-style-type: none"> • 2019 - Present a document for partners use
2019 - Travel to the Powell Center workshop	1.1.1 Identify and address gaps in tsunami source characterization and modeling	MMS contribution to the discussion of the tsunami sources at the Powell Center workshops. Identification of needs by the states/territories.	MMS	<ul style="list-style-type: none"> • Support travel of the MMS Tsunami Science representatives for AK, CA, HI, OR, WA, CNMI, American Samoa, Guam to the Powell Center workshops. 	<ul style="list-style-type: none"> • AK, CA, HI, OR, WA, CNMI, American Samoa, Guam grant dependencies 	2019 - Contribution to the Powell Center workshop discussion

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2019 - NCEI DEM development	1.1.2 Complete inundation and evacuation maps for all unmapped U.S. coastal communities	Prioritize and develop four DEMs for the partner use	MMS	<ul style="list-style-type: none"> • MMS group activity • NCEI lead 	<ul style="list-style-type: none"> • This work was pre-funded from NWS to NCEI transfer in June, 2018 for work to be done in 2019. 	<ul style="list-style-type: none"> • 2019 - Complete development of four DEMs
Summarize meteotsunami modeling results (continue)	1.1.1 Identify and address gaps in tsunami source characterization and modeling	Meteotsunami hazards	MMS	Gulf Coast lead	Gulf Coast grant dependency	<ul style="list-style-type: none"> • 2018 – Summary findings on the meteotsunami research for partner use