

NTHMP SUBCOMMITTEE ANNUAL WORK PLAN

Subcommittee: Mapping & Modeling

Version date: February 6, 2018

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**)
2018 - Tsunami source database	1.1.1 Identify and address gaps in tsunami source characterization and modeling	<ul style="list-style-type: none"> • Complete template for tsunami source database • Request existing sources from members • Fill out database with existing sources developed • Evaluate development of historical and prehistorical tsunami event database (for probabilistic sources) 	MMS, MES	<ul style="list-style-type: none"> • CA lead • Perform work through MMS meetings • Need MES support with a definition for worst-case scenarios 	<ul style="list-style-type: none"> • Review existing source database structures • Leverage USGS Powell Center work • Leverage NCEI historic event database • NTWC has initial source database from members • California grant dependency to support collecting and filling out the database (e.g. an Excel spreadsheet) 	2018 – Initial source database schema/attributes This is a multiyear activity.

2018 – Maritime guidance	1.1.3 Identify and address the tsunami hazard assessment and product requirements and 2.4.1 Engage stakeholders on tsunami preparedness and response	Work with MES to develop guidelines for the maritime community. Include reference of criteria/guidance for analysis of modeled tsunami currents/vorticity.	MMS, MES	<ul style="list-style-type: none"> • CA lead • Lead MMS and MES members with work group; Update guidance for modeling tsunami currents • Update mapping and modeling guidance • Initiate development of preparedness, response, mitigation, and recovery guidance • Incorporate special guidance for various customers, especially large ports, cruise industry, Navy, and US Coast Guard 	<ul style="list-style-type: none"> • Significant work has been completed on draft guidance • Will require grant support for lead MMS/MES representatives from CA • Funding from FEMA for California can help support work on guidance for currents and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. 	2018 - Preparation for completion of maritime guidance document. This is a multiyear activity.
2018 - Complete inundation and evacuation map gap analysis	1.1.2 Complete inundation and evacuation maps for all unmapped U.S. coastal communities	Develop list of areas not covered by inundation and evacuation maps	MMS, MES	<ul style="list-style-type: none"> • MMS group activity • AK and East Coast will work together as leads 	<ul style="list-style-type: none"> • Some information on inundation maps has been collected • East Coast grant dependency to support identification of the gaps 	2018 – Develop a preliminary list/summary of areas/regions not covered by inundation and evacuation maps. This is a multiyear activity.
2018 - Complete current modeling criteria	1.1.3 Identify and address the tsunami hazard assessment and product requirements	Develop criteria for modeling current velocities for use in maritime products	MMS	<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. 	2018 – Complete report with criteria for modeling currents

2018 - Updating mapping and modeling guidance	1.1.2 Complete inundation and evacuation maps for all unmapped U.S. coastal communities	Update existing tsunami mapping and modeling guidance and facilitate the use of those guidelines	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"> • Review recent workshops and other projects can be included • Dependency – none. 	2018 – Update existing mapping and modeling guidelines with new information
2018 - Sediment transport modeling guidance	1.1.1 Identify and address gaps in tsunami source characterization and modeling	Explore the current state of sediment transport modeling research and other activities that could serve as the basis for establishing benchmark tests, as background for a future benchmarking workshop	MMS	<ul style="list-style-type: none"> • WA lead • WA will support through TsuInfo and library at WA-DNR • Gather information on existing studies and pilot projects 	<ul style="list-style-type: none"> • WA-DNR grant dependency in order to perform this activity 	2018 - Initiate development of the catalog of studies and pilot projects. This is a multiyear activity
2018 - 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	Develop guidelines for NTHMP partners and communities to use HAZUS tsunami module and results	MMS, MES	<ul style="list-style-type: none"> • WA lead 	<ul style="list-style-type: none"> • Dependency: WA beta test workshop (FEMA grant to WA-DNR if funded) 	<ul style="list-style-type: none"> • 2018 - Synopsis on beta testing workshop in WA
2018 - Landslide-generated tsunami modeling guidance	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 • East Coast grant dependency 	<ul style="list-style-type: none"> • 2018 - Initiate development of the guidance for partners use
2018 - 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, East Coast, Gulf Coast, PR, and US VI to the Powell Center 	<ul style="list-style-type: none"> • AK, CA, HI, OR, WA, East Coast, Gulf Coast, PR, and US VI grant dependencies 	2018 - Contribution to the Powell Center workshop discussion

				workshops.		
2018 – Tsunami Assembly Area Terminology and Guidance		Through a Work Group, develop guidance on terminology for tsunami assembly area, evacuation areas (reception center) and place of reunification / disaster recovery center.	MMS, MES	<ul style="list-style-type: none"> • Volunteers for work group selected by • MMS and MES • Convene conference calls, work through wording of guidance 	<ul style="list-style-type: none"> • Dependency – none. 	<ul style="list-style-type: none"> • 2018 - Complete guidance and develop terminology
2018 - 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, 2017 for work to be done in 2018. 	<ul style="list-style-type: none"> • 2018 - Complete development of four DEMs
Under review - Meteotsunami modeling guidance	1.1.1 Identify and address gaps in tsunami source characterization and modeling	Meteotsunami hazards	MMS	Gulf Coast lead	Gulf Coast grant dependency (if MMS endorsement)	<ul style="list-style-type: none"> • 2018 – Initiate development of the meteotsunami guidance for partner use