

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**) |
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| 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. |

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| <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. • Formalize location of webpage(s), possibly through NTHMP website, individual partner website, or both (plan finalized in 2020). | <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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| 2019 - Complete hazard assessment gap analysis (continued) | 1.1.2 Complete inundation and evacuation maps for all unmapped U.S. coastal communities | Develop and refine list of hazard mitigation products, activities, infrastructures. | MMS, MES | <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 | 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. |
| 2019 - Complete current modeling criteria (continue) | 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. | 2019 – Complete draft report with criteria for modeling currents |

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| 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 |