

NTHMP MMS meeting 23 September 2021

Participants:

J. Allan, D. Arcas, K. Carrigan, K.F. Cheung, D. Eungard, J. Fujimoto, K. Gately, N. Graehl, S. Grilli, C. Guard, M. Kaipat, J. Kirby, J. Horillo, V. Huerfano, S. Ohlendorf, S. Ross, I. Sears, D. Snider, R. Wilson.

Topics covered:

1. DEM update (K. Carrigan)
2. Sediment transport update (J.Kirby/S. Grilli)
3. MMS 3rd co-chair – nominations/interested parties (J. Allan/S. Ohlendorf)
4. Feedback from NTHMP on the USGS Slab Models (J. Allan/S. Ohlendorf)
5. Other business:
 - i. TSTAP update (R. Wilson)
 - ii. Powell Center update (S. Ross)
 - iii. Recent Cumbre Vieja eruption and tsunami hysteria (S. Grilli)
6. Planning for MMS Winter meeting in Portland

1. DEM Update (K. Carrigan)

Progressing slowly

Coastal Act tiles (East Coast) are expected to be complete by the end of November.

Southern Oregon (Brookings) is close to being completed...

To follow, Cook Inlet/Alaska followed by South San Francisco bay, CA.

Action item: None.

2. Powell Center Update (S. Ross)

Due to ongoing challenges with hosting in person meetings, there remains some uncertainty about a face-to-face meeting in January. The USGS Powell Center is currently re-evaluating all in person meetings; one of the other Cascadia Powell groups focused on recurrence has already had to move their meeting to March 2022. To that end, the USGS/NTHMP Cascadia Powell meeting will be looking at a possible back-up date ~April/May 2022.

Pacific source meeting is tentatively scheduled for August 3-5 2022

Diego: Question on the status of results from the earlier Powell meetings?

Stephanie: Hong Kie is currently working on the Alaska sources now. Note that there is no funding to actually develop the sources and so funding to do this must come from other funding entities.

Victor: Question on status of Caribbean sources?

Stephanie: plan right now is to develop sources for Puerto Rico and the Caribbean, develop a paper to be submitted to Natural Hazards, and then share with the MMS.

3. Sediment Transport update (J. Kirby/S. Grilli)

Sediment transport workshop event and agenda still under development. Hoping to make significant headway in the next quarter.

Currently identifying possible benchmarking data sources.

Will have an initial steering committee meeting soon.

In person meeting tentatively scheduled for summer/fall 2022

Action item: Jim will clarify possible dates for the initial sediment transport workshop. He will also share with the MMS his initial list of workshop attendees.

4. USGS SLAB model discussion (J. Allan/S. Ohlendorf)

Summer was approached by Kirstie Haynie (USGS) who is interested in learning whether any NTHMP members use the USGS SLAB model. Specific questions included:

- what people use the slab models for?

- how can the USGS improve the slab models for their use case (i.e., would a slab volume be preferred over just the currently supplied slab surface? Should we work to increase resolution?)

- is formally releasing updated USGS slab models every ~6-8 years preferred or would users prefer to have an easy way of creating slab models by supplying their own seismic data and/or by tweaking model parameters?

Diego: they do use the SLAB model. Noted that the current update cycle was fine though 3-4 years would be ideal. However, best case situation is to move to real-time. Diego also indicated that they are interested in learning more about the latest updates.

Stephanie: noted that the USGS will be coming out with a web form that will allow potential users to provide more detailed feedback on the SLAB model.

Action item: Jon to forward the questions directly to Diego and have him connect with Kirstie.

5. Nominations for 3rd MMS co-chair (J. Allan/S. Ohlendorf)

Alex Dolcimascolo indicated he would be interested in serving in the capacity of 3rd MMS co-chair.

Jon: requested discussion and hearing none, called for a vote. The MMS unanimously voted in Alex as 3rd co-chair.

Ian: noted that Alex could not formally adopt the position until the NTMHP CC had formally voted. For now, Alex could serve as an interim/acting MMS co-chair.

6. Other Business (J. Allan/S. Ohlendorf)

Rick: mentioned that the Tsunami Science and Technology Advisory Panel (TSTAP) report has been presented to the NOAA SAB and will be finalized over the next few months. You can find it here:

https://sab.noaa.gov/wp-content/uploads/2021/08/TSTAP-Draft-Report_8-19-2021_Final.pdf

They are moving forward on an annual work plan.

Action item: MMS members to review the report and provide any comments back to Rick.

Stephan: led a discussion on the La Palma (Cumbre Vieja) Volcano in the Canary Islands, which recently erupted. Noted that many houses have been destroyed and that seismic activity continues to increase. There has been much media speculation about a potential collapse of the volcano flank, driven largely by the Ward and Day (2001) study of the volcano.

Also noted that recent tsunami modeling undertaken by Stephan and Jim of a potential Cumbre Vieja flank failure indicates significantly (~50%) reduced inundation along the US East Coast.

Victor: suggested that the TWC could provide some heads-up information to Puerto Rico and US Virgin Islands emergency managers about the volcanoes status.

Dave: questioned this approach, since it was not clear what information could be provided, as the TWC responds primarily to immediate threats.

Kara: Noted that the TWC has seen a tremendous amount of interest. TWC posted on social media that there was no known immediate threat and that all parties are monitoring the situation very carefully. Of concern the TWC had received lots of requests on what to do should and how they would receive alerting information, which is troubling. Also having to combat disinformation that is also circulating.

Rick: noted that the MMS had helped draft a one-pager. This was an opportunity to re-visit and update the document.

Jon: seconded Rick's suggestion.

Action item: Ian to dust off the original Cumbre Vieja briefing, work with Ed Fratto, Stephan Grilli and Jim Kirby to update its contents. Once an updated draft is complete, Ian to circulate the revised briefing to the MMS for final review.

Carrie: Noted that Oregon State University and its partners recently received significant NSF funding for a new Cascadia Coastlines and People Hazards Research Hub, which will involve numerous researchers throughout the PNW region. Part of this effort will be directed at Cascadia tsunami sources.

Jon: suggested that the Cascadia CoPes hub could be presented in more detail at our next MMS meeting.