

Technical Mapping Advisory Council (TMAC)

Virtual Administrative Meeting Notes

November 18, 2021, 10 AM – 2 PM ET

TMAC Members

Doug Bellomo, *AECOM, Chair*

Nancy Blyler, *USACE, USACE Representative*

Ed Clark, *NOAA, NOAA Representative*

Joshua Davies – *Texas Division of Emergency Management, State Mitigation Officer*

Vince DiCamillo, *Stantec Consulting, Mapping Member*

Dave Guignet, *Maryland Department of the Environment, State CTP Representative*

Carey Johnson, *Kentucky Division of Water, State CTP Representative*

David Love, *Mecklenburg County Storm Water Services, Local CTP Representative*

Robert Mason, *USGS, DOI Designee*

Jon Paoli, *Iowa Homeland Security & Emergency Management, GIS Representative*

Luis Rodriguez, *FEMA, FEMA Designee*

Jeff Sparrow, *Moffatt & Nichol, Mapping Member*

Michael Tischler, *USGS, USGS Representative*

Subject Matter Experts

Stephen Aichele (Day 1), *USGS, Future Conditions Subcommittee*

Stacey Archfield, *USGS, Future Conditions Subcommittee*

Will Lehman, *USACE, Enterprise Risk Management Subcommittee*

Doug Marcy, *NOAA, Future Conditions Subcommittee*

Salomon Miranda – *California Department of Water Resources, Future Conditions Subcommittee*

Leonard Shabman, *Resources for the Future, Enterprise Risk Management Subcommittee*

Charles Yoe, *Notre Dame of Maryland University, Enterprise Risk Management*

Government Attendees

John Ebersole, *FEMA, Legal Advisor*

Brian Koper, *FEMA, DFO*

Support Staff

Henry Cauley, *Team Deloitte*

Milani Chatterjilen, *AECOM*

Phetmano Phannavong, *Atkins Global*

Ann Terranova, *AECOM*

Molly Tuttle, *AECOM*

Sarah Vining, *Team Deloitte*



Welcome, Roll Call, and Administrative Items

Mr. Brian Koper, the TMAC DFO, welcomed members and participants to the meeting and introduced the Government attendees and support staff. Mr. Koper proceeded with a roll call of TMAC members and TMAC SMEs and went through the day's agenda. Mr. Koper reminded everyone that the meeting is an administrative meeting.

Opening Remarks

Mr. Doug Bellomo welcomed everyone, thanked them for attending the administrative meeting, and noted that much progress has already been made on the report. Mr. Bellomo provided an additional overview of the agenda and noted that there were roughly 100 pages of the draft report to review today. Mr. Bellomo requested that anyone who is speaking to please turn on their camera and reminded those who are not speaking to remain on mute. Mr. Bellomo noted that the TMAC would need to be adaptive today and that the agenda would be altered so that the Enterprise Risk Management (ERM) subcommittee would go first.

Mr. Bellomo then introduced several new members of the TMAC. Ms. Maria Cox Lamm and Mr. Lian Xu were unable to attend the meeting today. Mr. Ed Clark has been working as a SME for the TMAC for some time and expressed his excitement to be an official member of the TMAC. Mr. Josh Davies is currently the Hazard Mitigation Officer for the State of Texas and is looking forward to working with everyone. Mr. Vince DiCamillo is a Senior Principle with Stantec Consulting and has been involved with the FEMA mapping program in some capacity for over 46 years, including with the first iteration of the TMAC under the previous Map MOD program. Mr. Bellomo added that Ms. Nancy Blyer would be retiring and Mr. Will Lehman, who has been serving in a SME capacity with the TMAC, would be replacing Ms. Blyer as the USACE Representative. Mr. Bellomo thanked Ms. Blyer for all of her contributions to the TMAC, congratulated her on her upcoming retirement, and wished her the best of luck in her future endeavors.

Report Out: Enterprise Risk Management Chapter

Mr. Phetmano Phannavong began by providing an overview of the chapter, noting that some headings may need to be revised or changed. Mr. Phannavong noted that the subcommittee is aware that some of the language also needs to be tightened up and shortened because the chapter runs long. Mr. Bellomo replied to Mr. Phannavong's overview by stating the TMAC should focus on the key findings and recommendations portion of the chapter today. Mr. Lehman added that it has been difficult to get the chapter completed in the current timeline because ERM is such a large undertaking. Mr. Lehman continued that it is important to articulate the difference between ERM, FRM, and risk informed decision making, so that readers of the report have the right context. Mr. Lehman concluded that if FIMA would be more forthcoming with their ERM documentation and information, there could be more homogeneity and standardization in the report chapter regarding the use of ERM.

Mr. Bellomo thanked Mr. Lehman for his thoughts, agreeing that demonstrating that FIMA can help shape State, Local, Tribal, and Territorial (SLTT) ERM frameworks by sharing their own ERM framework is key. Mr. Bellomo added that while the TMAC does focus on recommendations, education on the subject is also valuable so the subcommittee should not condense the information within the chapter too much. Mr. Lehman replied that the subcommittee is not trying to force FIMA to dictate ERM at the state and local level, and Mr.



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Charlie Yoe added that the subcommittee took the four FIMA strategic outcomes, broke them into 11 subobjectives, and tried to demonstrate what success with ERM might look like.

Mr. Yoe continued that the subcommittee had developed a sub-objectives matrix, which compares 12 enterprise risks with 10 sub-objectives and that the federal ERM playbook was referenced to guide the risk definitions. Mr. Bellomo commented that sometimes people get tripped up on good risks versus bad risks, and that one way to think about this is a good risk is akin to a good bet. Mr. Leo Shabman added that it can be difficult to shift thinking around risk to a new framework or mindset, and that the focus should be on helping to build an understanding on this mindset shift, rather than getting hung up on the matrix since it is only an example.

Mr. Mason asked whether the purpose of the report is to say that FEMA should complete this exercise, or to make more specific recommendations that FEMA should follow. Mr. Lehman replied that around the same time that the tasking memo was issued, FIMA began to focus on ERM, but FIMA still has not shared their plan because it is in development. Mr. Lehman added that the subcommittee has developed two recommendations in light of this challenge. First, FEMA should invest in their ERM plan and not use it simply as a check the box exercise. Second, FEMA should apply ERM to better manage the risks across their different strategic objectives. Mr. Mason agreed that it made sense for the TMAC to recommend that FEMA continue to develop it's ERM process. Mr. Bellomo added that it will be important for the Future Conditions Subcommittee to also be reviewing this information as the calendar moves into December to help eliminate any possible crossover areas. Mr. Bellomo also asked for clarification that the TMAC is not suggesting that the risk treatments within the chapter be turned into Big R recommendations, and the TMAC agreed.

Mr. Bellomo then asked Mr. Lehman to elaborate on the two Big R recommendations in this chapter. Mr. Lehman replied that the recommendation states that FIMA must use ERM to a degree greater than just meeting the OMB A-123 ERM requirement. Mr. Luis Rodriguez replied that the recommendation as currently written does not encourage FIMA to continue its current efforts. Mr. Bellomo agrees that it does not say it directly. Mr. Shabman replied that the subcommittee has no reason to believe that FEMA is not taking ERM seriously but wants to emphasize that they do need to take it seriously. Mr. Rodriguez asked for clarification as to why the subcommittee assumes FEMA is not taking this effort seriously, and Mr. Lehman replied that it comes from the experiences of other agencies who have used this solely as a check the box exercise. Mr. Yoe added that there is a stronger version of the recommendation in another document that is more emphatic on not checking the box. Mr. Mason agrees with Mr. Rodriguez that the language seems backhanded and could be made more positive. The rest of the TMAC agreed with these suggestions.

Mr. Lehman then presented the second draft recommendation, which is to recommend that FIMA leverage the ERM process and ERM concept of opportunity risk, in order to structure and prioritize risk treatments. Mr. Bellomo asked whether this is recommending a locally derived tolerance threshold versus a national tolerance threshold. Mr. Shabman replied that the subcommittee is trying to communicate that there are a series of structures and practices in FEMA that are barriers to them providing graduated risk information to others to use but are not necessarily recommending that others should use this information. Mr. Rodriguez added that it took several iterations to understand this recommendation which seems to leverage concepts of ERM to help advance a graduated risk approach. Mr. Bellomo commented that the purpose of today is not to dive too deep into this, but to just understand where the subcommittee is headed moving into December. The TMAC then took a



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fifteen minute break.

Returning from the break, Mr. Bellomo stated that recommendation 1 seems clear and asked for additional thoughts on recommendation 2. Mr. Shabman stated that Mr. Yoe's version of the recommendation gets to the heart of what the TMAC is trying to recommend, and Mr. Lehman agrees. Mr. Bellomo then asked if there were thoughts on a potential third recommendation, which would encourage FEMA to promote the use of ERM and graduated risk in communities seeking to go beyond the NFIP minimum floodplain standards. Mr. Lehman stated he did not like this recommendation in regard to the usage of ERM and Mr. Rodriguez added that the recommendation feels too broad. Mr. David Love agreed with both, noting that if the term ERM was removed from the recommendation it would clearly not fit within the context of the chapter.

Mr. Bellomo noted that one of the findings in the chapter is that ERM is not applied widely across different communities. He then asked if there is anything the subcommittee wants to say about this from a recommendation perspective. Mr. Shabman replied that the term "widespread use" could be incorporated into recommendation 2 in some capacity. Mr. Bellomo thanked everyone for all of their hard work on the chapter and expressed his excitement to see the next version in December.

Report Out: Stakeholder Engagement Chapter

Mr. Bellomo asked Ms. Molly Tuttle to provide an overview of the Stakeholder Engagement Chapter, as neither Mr. Scott Giberson, nor Mr. James Nadeau, were in attendance. Ms. Tuttle began by noting that the current chapter does not include recommendations, and that the chapter working group would be meeting next week to further refine the chapter. Ms. Tuttle continued that there were three focus areas within the chapter: behavior change, tools and products to simplify the message, and existing and foreseen barriers. Ms. Tuttle noted that the stakeholder engagement findings were shared during the previous TMAC Public Meeting and that no additional developments have been included in the current iteration of the chapter. Ms. Tuttle requested that if anyone has any concerns with the three focus areas to please share them with the working group. Mr. Bellomo noted that the three areas align well with what is discussed in the ERM chapter and will likely align well with the Future Conditions chapter as well.

Mr. Bellomo questioned whether a small R recommendation could be implemented to give the TMAC opportunities to engage with stakeholders as topics arise throughout the year. Mr. Bellomo also noted that there was no trend or compare and contrast section that looks at last year's findings as compared to this year's findings. Ms. Tuttle responded that the barriers section was looking at this, but it could be brought to a higher level within the chapter. Ms. Tuttle added that some questions aligned with those from the previous year, and some did not. Mr. Carey Johnson asked whether the data for the two years was additive and whether there is now a larger sample size. Ms. Tuttle replied that she would take this question back to the data team to investigate further. Mr. David Love asked whether there was a way to see if people responded both years, and Ms. Jen Marcy clarified that of the 700 respondents from year 1, there is only identifying data for a few hundred of them. Mr. Bellomo asked if there were any other comments or questions, and none were put forward.

Report Out: Future Conditions Chapter



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Mr. Johnson began by thanking everyone on the Future Conditions Subcommittee for all of their hard work. Mr. Johnson stated that the subcommittee has been attempting to understand the progress FEMA has made related to future conditions via SME briefings. Mr. Johnson added that after a short introduction, the chapter consists of over 40 pages of content, and that the chapter still needs a conclusion section. Mr. Bellomo thanked Mr. Johnson for this brief overview, and suggested that the TMAC jump to section 4.3, where the subcommittee goes through each of the seven future conditions recommendations from the 2015 report.

Mr. Rodriguez began with the first recommendation, noting that a variety of activities have taken place in line with the recommendation but that the entirety of the recommendation has not yet been fully implemented. The subcommittee has provided a discussion section which addresses the current status of the recommendation and where the subcommittee believes the recommendation should change moving forward. The subcommittee then addressed the second recommendation, which addresses the need for analytical capabilities to be established. The subcommittee noted that this recommendation has many similar suggested changes as the first recommendation. Mr. Bellomo questioned how the report can avoid confusion in places where it recommends changes to the 2015 recommendations, but also recommends next steps, and suggested using the term “considerations” moving forward instead of next steps.

Mr. Bellomo questioned whether the report was advising to change these recommendations and if so, does the TMAC need to put this up to a formal vote. Mr. Johnson agreed that this has been a challenge for the subcommittee over the past several months. Mr. Johnson stated that if a recommendation is tweaked based on newly available information, does this make it a new recommendation? And how would this change trickle down to the sub-recommendations? Mr. Bellomo replied that the tasking memo says to look at the recommendations and make modifications when necessary. Mr. Bellomo suggested being explicit in stating the recommendations are being updated and noted the original recommendation language could be included in the report with track changes to show how it has been altered. Mr. Bellomo stressed that recommendations are the inventory of the TMAC, and the TMAC should not lose track of its inventory.

Mr. Johnson noted that the subcommittee can include a matrix later in the chapter that highlights the changes made to each of the recommendations. Mr. Sparrow stressed the importance of not losing the language of the 2015 recommendations, and instead suggested creating a naming convention to identify the old versus new recommendations, such as “FC1 2015” vs “FC1 2021”. Ms. Anne Terranova then shared her screen to display the matrix as currently designed. Mr. Bellomo asked whether the TMAC needed to vote to remove old recommendations or to just communicate to FEMA that they no longer need to address 2015 recommendations if there are 2021 modifications. Mr. Johnson recommended not deleting any prior recommendations since the past context is important, but instead just to be clear and explicit on the changes to the recommendations.

Mr. Bellomo questioned how to best address this issue. Mr. Johnson suggested either using a matrix or using track changes in the report. Mr. Sparrow recommended posting a document to the TMAC website that identifies the different recommendations and how they have changed. Mr. Bellomo then suggested an appendix of all the recommendations that could be included in each annual report moving forward and the rest of the TMAC agreed to consider this idea.

Mr. Johnson returned to the discussion on recommendation two, stating that the recommendation is not to



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change the recommendation but to add additional context to the recommendation. Mr. Michael Tischler agreed on the value of the recommendation and the need to add additional context on what it means to be accurate and uncertain. Mr. Doug Marcy then provided the overview of recommendation 3, noting that he had shared the recommendation with several subject matter experts on the subcommittee and they identified several additions that should be made to the recommendation to better describe flooding, coastal erosion, and land use. Mr. Marcy added that there are 11 sub recommendations associated with this recommendation and provided an overview of each of these as well.

Following this summary, Mr. Bellomo stressed the limited time remaining in the meeting and the subcommittee agreed to only address the high-level and most pressing information for each of the remaining recommendations. Ms. Stacey Archfield provided an overview of recommendation four, which addresses providing information on future conditions for flood risk products in riverine areas. Ms. Archfield noted there were not major changes recommended for this recommendation as the text is still true and accurate, but that the context and discussion section for this recommendation can be expanded to include additional information since 2015.

Mr. Johnson noted that Mr. Jonathan Smith had worked on recommendation five but was not present at the meeting today; however, the subcommittee has determined that FEMA has not yet implemented this recommendation, which addresses generating future conditions information to frame communication messages. Mr. Johnson added that the subcommittee would not be changing the recommendation but would discuss aligning it more closely with Future of Flood Risk Data (FFRD) efforts. Mr. Johnson also presented on recommendation six, which was for FEMA to develop a future conditions pilot project. Mr. Johnson noted that this recommendation is now completed and the text for the recommendation section could be reduced via the use of an information graphic.

Finally, Mr. Mason presented on recommendation 7, stating that this recommendation has several sub-recommendations and that there are a number of issues with the language and what the recommendation is trying to communicate. Mr. Mason stated the subcommittee is concerned that it isn't clear that the subcommittee is discussing non-regulatory products when asking FEMA to do additional work on climate change. The subcommittee has updated the language to make it clear that the focus is on non-regulatory products, and Mr. Mason expressed concern that it will be difficult to make this a regulatory product.

Mr. Johnson concluded the subcommittee section by discussing the big R recommendation that is being made by the subcommittee, which revolves around the continued and future enhancement of FFRD. Mr. Johnson added that this recommendation is much more broad than previous big R recommendations made by the TMAC. Mr. Bellomo noted that the last sentence of the recommendation is key and asked the TMAC whether there were any additional comments. No additional comments were received, and the subcommittee concluded their presentation.

Next Steps and Closing

Mr. Bellomo thanked everyone for their hard work and summarized the next steps for the TMAC. The TMAC will hold a public meeting on December 15th and 16th where the next version of the report can be reviewed and finalized. The TMAC will then hold an additional meeting in the new year to formally vote on the report for



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completion and submission. Mr. Bellomo asked that everyone continue to work diligently on their sections and noted that any additional information on disadvantaged communities, unmapped areas, and building codes for floodplain management would be helpful. Mr. Rodriguez agreed to coordinate with FEMA on providing additional information on unmapped area. Mr. Bellomo agreed to follow up with Mr. Rodriguez and the subcommittee co-chairs offline to discuss next steps. He stated that the next draft of the report would be due December 13th and thanked everyone again for all of their hard work. Mr. Bellomo then adjourned the meeting.