



Technical Mapping Advisory Council

Virtual Public Meeting Notes

November 19, 2024, 8:00 a.m. – 5:00 p.m. ET

TMAC Members

Vince DiCamillo, Stantec Consulting, Mapping Member, Chair
Jamie Reinke, Nebraska Department of Natural Resources, State CTP Representative, Vice Chair
Jeff Sparrow, Moffatt & Nichol, Floodplain Management Member
Luis Rodriguez, FEMA, FEMA Designee
William Lehman, USACE, USACE Designee
Kim Dunn, T&M Associates, Professional Engineering Representative
Brooke Seymour, Mile High Flood District, Regional Flood and Storm Water Member
Stacey Archfield, USGS, Department of Interior Designee
Stephen S. Aichele, USGS, Geological Survey Representative
Colleen Kiley, North Carolina Department of Information Technology, State GIS Representative
Maria Cox Lamm, South Carolina Department of Natural Resources, NFIP Coordination Offices
Ronald Jacobson, Coleman Engineering Company, Surveying Member
Glenn N. Heistand, Coordinated Hazard Assessment and Mapping Program, State CTP
Jonathan Smith, Resource Inventory Division of NRCS, USDA Designee

Subject Matter Experts

Doug Bellomo, AECOM
Scott Giberson, CoreLogic Flood Services
Salomon Miranda, California Department of Water Resources

Government Attendees

John Ebersole, FEMA, ADFO
Brian Koper, FEMA, DFO

Support Staff

Necolle Maccherone, STARR II PTS
Mary Jo Mullen, STARR II PTS
Kerry Desmond, AECOM PTS
Sonia Clemens, Compass PTS
Christine Brittle, ARC PTS
Chyna Borja, PM Support
Ethan Charlip, PM Support
Margaret Johnston, PM Support
Brian Koch, ARC PTS
Shannon Miller, ARC PTS
Grace Morris, STARR II PTS
Shilpa Mulik, FEMA, FPM
Shobha Pathmanathan, ARC PTS
Dora Szalai, ARC PTS

Purpose

The purpose of this Technical Mapping Advisory Committee meeting was to review and vote on the recommendations for the 2024 Annual Report and to plan the final report development.

Subcommittee Working Session

TMAC members participated in subcommittee meetings to review materials related to the TMAC agenda.

Welcome, Roll Call, Administrative Items, and Opening Remarks

Mr. John Ebersole, TMAC Alternate Designated Federal Officer, welcomed everyone to the meeting. After the roll call, Mr. Ebersole explained the requirements and protocols associated with this public meeting compared to previous administrative meetings. Administrative meetings solely discuss or receive administrative information, while public meetings provide notice in the Federal Register and allow the public to hear TMAC deliberation and submit public comment prior to votes.

Mr. Vince DiCamillo reviewed the agenda and the overarching objectives for the TMAC. The agenda included a review of the draft recommendations and subcommittee progress, a review of the 2024 Annual Report outline and graphics, and a final vote on the recommendations.

Recommendations: Topic 1 – Validating FEMA’s Technical Methodology

Mr. Jeff Sparrow presented the draft recommendations for Topic 1:

1. FEMA should utilize an independent third party to lead a review and validation of FEMA’s methodology;
2. Third-party validation approach should ensure that FEMA’s methodology for both flood hazard and risk considers fluvial, pluvial, alluvial, and coastal hazards, and other hazard and risk variations;
3. The third-party approach should evaluate FEMA’s modeling approach for future conditions; and,
4. The third-party validations should ensure that FEMA’s data sources, assumptions, and methodology are transparent and publicly available. The validation process itself should also be clearly documented and accessible, so others can easily follow and understand it.

The group discussed Recommendation 1. Mr. Luis Rodriguez recommended finding a balance between testing pilot programs and implementation to avoid an endless loop of piloting and testing.

Mr. Sparrow agreed and added that the balance also depends on the comfort level of FEMA stakeholders, since they need to have confidence in the program before they will use it for mitigation decisions and risk reduction. Mr. Rodriguez concurred and added that floodplain management and risk reduction methods are being applied in communities affected by Hurricanes Helene and Milton. The local interest seems to be in expanding risk communication capability through a more comprehensive understanding of risk.

The group discussed Recommendation 2. Mr. DiCamillo recommended shortening the recommendation text by moving the list of hazards to the supporting text. Mr. Will Lehman commented that it would be difficult to include the full list, and that including only a partial list might result in readers discounting other hazards that weren't included, such as ice jams. Mr. Lehman also commented that the recommendations will be pulled out of the report and used as a stand-alone list, so it would be helpful to keep the recommendation as inclusive as possible of a wide range of hazards. Ms. Kim Dunn agreed with Mr. DiCamillo and recommended shortening Recommendation 2, since including the list will either make the recommendation too long or leave out hazards. Mr. Doug Bellomo, Ms. Brooke Seymour, and Mr. Sparrow altered the wording of Recommendation 2 to "FEMA's methodology for both flood hazard and risk considers all relevant flood hazards in geographic variations."

The group discussed Recommendation 3. Mr. Lehman commented that the largest flooding events are not always the most recent, and that historic flood data is not always included when evaluating current conditions. Mr. Sparrow responded that current conditions often do include known impacts of past flooding, such as high-water lines. Ms. Stacy Archfield commented that Hurricanes Helene and Milton are discussed in Recommendation 3's supporting notes, but that consideration of these storms should not overshadow events in the rest of the country. Ms. Archfield also noted that flooding is not getting worse in all parts of the country. Mr. Sparrow agreed and added that Hurricanes Helene and Milton should not take priority over larger historic events.

The group discussed Recommendation 4. Mr. Stephen Aichele recommended considering stakeholders as two separate groups: stakeholders that want to understand the validation methodology, and stakeholders that use the validation process to confirm results. Mr. Scott Giberson and Mr. Bellomo recommended removing the word "easily" to make the wording less subjective and easier to quantify. Mr. Aichele asked who the "others" mentioned in the recommendation are. Mr. Sparrow responded that the use of the word "others" generally referred to stakeholders and was meant to improve transparency. However, Mr. Sparrow and Ms. Colleen Kiley noted that not everyone will understand the process, as most people do not have a technical background and that the process is not necessarily designed to be understood by the average person. Ms. Kiley and Mr. Aichele suggested changing the wording from "others can easily follow and understand" to "understandable and replicable to industry professionals."

Ms. Seymour and Mr. Aichele clarified that Recommendation 4 focuses on the validation process, not the methodology. They suggested using similar language in the first sentence and changing the wording to "repeatable." The recommendation now indicates that industry professionals "can understand and replicate."

Recommendations: Topic 2 – Effective Use of Comprehensive Flood Risk Data

Ms. Maria Cox and Ms. Necolle Maccherone presented the four recommendations on Topic 2. There had previously been five recommendations, but Subcommittee 2 removed one since the October Public Meeting. The recommendations prior to discussion were:

1. FEMA should develop a change management strategy with input from a wide group of users and stakeholders to successfully implement the transition from flood hazard data to flood risk data;

2. FEMA should, with the input of States, Localities, Tribes, and Territories (SSLTs), evolve its communication and education strategy in ways that intentionally supports the transition to effectively using flood risk data;
3. FEMA should work with SSLTs to identify a diverse group of NFIP communities to perform feasibility testing for implementing the use of flood risk data; and,
4. FEMA should develop federal guidance for flood risk management and support communities in the development of their local flood risk management strategies.

The group discussed Recommendation 1. Mr. DiCamillo noted that because hazard is part of risk, the transition from flood hazard data to flood risk data is more of a broadening of focus than a full transition. Ms. Cox, Mr. Sparrow, Ms. Mary Jo Mullen, Mr. Rodriguez, Ms. Kerry Desmond, and Mr. Bellomo provided alternative suggestions to the wording accordingly. Mr. Rodriguez commented that there is an awareness within FEMA that a transition plan to a risk-informed NFIP is needed.

Mr. Sparrow asked for clarification between the users and stakeholders in the context of the recommendation. Ms. Jamie Reinke responded that not all stakeholders would be users, but the committee had not specifically clarified that in the recommendation text.

After the discussion, Recommendation 1 was updated to say, “FEMA should develop a change management strategy with a wide group of stakeholders to enhance flood risk management and support a risk-informed NFIP.” Ms. Sonia Clemens suggested letting the editors review the wording before the vote later in the day.

The group discussed Recommendation 3. Ms. Cox provided context that the phrase “pilot communities” was changed to “perform feasibility testing” to avoid a long-term cycle of pilot testing, which will be elaborated on in the supporting information. Mr. Lehman clarified that the recommendation is meant to help communities make risk-informed decisions. The wording of Recommendation 3 was ultimately changed to “FEMA should work with SSLTs to identify a diverse group of NFIP communities to test flood risk data for usability in making risk-informed decisions.”

The group discussed Recommendation 4. Ms. Christine Brittle asked if the word “federal” was needed. After feedback from Ms. Cox and Mr. Bellomo that FEMA does not have control over other federal programs and that guidance is from the federal level to the local level, the word was removed.

Review Report Outline

Ms. Clemens presented the working draft report, using the headers as an outline for the 2024 Annual Report. The version presented in the November Public Meeting will be archived.

The 2024 Annual Report will include:

- Cover page
- Terminology, Definitions & Acronyms
 - Approximately 1 page
 - Will be created during report writing
- Executive Summary (1-2 pages)

- Chapter 1 – Introduction
 - 3-4 pages
 - Mr. DiCamillo will update language from last year’s introduction to match the current topics, membership, and meeting information
- Chapter 2 – TMAC Approach to 2024 Assessment
 - 3-4 pages
 - Will include listening session content and sprint design process
- Chapter 3 – Shift from Hazard-Based Program to Risk-Informed Program
 - 4-5 pages
 - Intended to help readers understand the differences and what the changes mean
 - Per Mr. DiCamillo, this section should highlight FFRD initiatives and how they relate to past TMAC recommendations
- Chapter 4 – Approach for Review and Validation of FEMA’s Technical Methodology for Development of Flood Risk Data
 - 10-15 pages
 - Will include an introduction and four recommendations
- Chapter 5 – Approach to Ensure Effective Use of Flood Risk Data for Managing Flood Risk
 - 10-15 pages
 - Will include an introduction and four recommendations
- Chapter 6 - Conclusions and Recommendations
- Appendices
 - 2024 Memorandum
 - References
 - Listening sessions
 - Previous recommendations

The group discussed Chapters 4 and 5. Mr. DiCamillo suggested re-ordering Topics 1 and 2, so that Topic 2 would come first in Chapter 4, while Topic 1 would come second in Chapter 5. However, after a poll of TMAC members, it was decided the order in the Annual Report will be the same order as in the FEMA Memorandum, with Topic 1 in Chapter 4 and Topic 2 in Chapter 5.

Mr. Sparrow suggested that, after the report is complete, the group create a visual one-page graphic displaying the recommendations. The visual could be used as an easily accessible reference and could be included in presentations.

Review Initial Report Content and Chapter Assignments

Ms. Seymour presented the working draft of the 2024 Annual Report and chapter assignments. Subcommittees 1 and 2 have been meeting regularly to work on the report. Ms. Clemens shared that the editors would like to have a draft ready for review by the December Administrative Meeting, which will serve as a touchpoint to check in on report development. During this meeting, the council will also make decisions on graphics.

Writing Assignments:

- Executive Summary
 - Lead writers: Mr. DiCamillo and Ms. Reinke
 - TMAC members will review
- Chapter 1: Introduction - Lead writers: Mr. DiCamillo and Ms. Reinke
- Chapter 2: TMAC Approach to 2024 Assessment
 - Lead writer: Mr. DiCamillo, pulling and updating content from the 2023 Annual Report
 - Supporting writers: Mr. Rodriguez, Mr. David Rosa, Ms. Reinke, and Mr. Giberson
 - FEMA and Risk-Informed NFIP content: Mr. Rodriguez
 - Listening session writer: Ms. Brittle
 - Overall support and review: Ms. Reinke
- Chapter 3: Shift from Hazard-Based Program to Risk-Informed Program
 - Lead writer: Mr. DiCamillo
 - Supporting writer: Mr. Rodriguez
 - Will reference earlier TMAC recommendations
- Chapter 4: Approach for Review and Validation of FEMA's Technical Methodology for Development of Flood Risk Data
 - Introduction lead writer: TBD
 - Recommendation 1 lead writer: Ms. Archfield
 - Recommendation 2 lead writer: Ms. Dunn
 - Recommendation 3 lead writers: Mr. Lehman and Mr. Ataul Hannan
 - Recommendation 4 lead writer: Mr. Aichele
- Chapter 5: Approach to Ensure Effective Use of Flood Risk Data for Managing Flood Risk
 - Introduction lead writers: Ms. Reinke and Mr. Jonathan Smith
 - Recommendation 1 lead writer: Mr. Ron Jacobson
 - Recommendation 2 lead writer: Mr. Giberson
 - Recommendation 3 lead writer: Ms. Reinke
 - Recommendation 4 lead writer: Ms. Cox
- Chapter 6: Conclusions and Recommendations
 - Lead writer: Mr. DiCamillo
 - Will include content from the 2023 Annual Report
- Letter to FEMA Director - Lead writer: Mr. DiCamillo

Review Report Style Guide and Graphic Needs

Ms. Desmond shared and reviewed the Style Sheet, to be used as a guide during Annual Report writing. As writers move forward, they can reference back to the style guide and add new style choices. The Style Sheet provides an overview of voice and punctuation rules, terminology and word usage, capitalization, figures, tables, callout boxes, acronyms and abbreviations, numbers and percentages, and references and citations. During review of the Style Sheet, the council decided to officially reference the FEMA letter as the 2024 Memorandum and to use only FEMA recognized acronyms. References will be added to the appendix.

Ms. Clemens shared the graphics that had been designed by PTS contractors. Some of the graphics, including the listening session images and audience poll responses from the ASFPM conference, will

be added to the appendix and referenced in the report chapters. Some graphics will need minor changes before they're finalized.

Review Listening Session Content

Ms. Clemens and Ms. Brittle shared the process for the initial listening sessions. In the annual report, this section will begin with a high-level overview and will include graphics showing the participants and their feedback from each of the listening sessions. The summarizing graphic will include both Topics 1 and 2 in the same image.

TMAC Vote on Recommendations

Ahead of the vote, Ms. Clemens pulled the updated recommendations into a new document for review. Ms. Seymour read the Topic 1 Recommendations out loud, and Ms. Reinke read the Topic 2 Recommendations.

Under Topic 1, Recommendation 1, Mr. Rodriguez and Mr. DiCamillo suggested adding “methodology for the development of comprehensive flood hazard and risk data” to the wording of “future conditions.” On Topic 1, Recommendation 3, Mr. Rodriguez and Ms. Seymour suggested replacing “modeling approach” with “methodology.” Under Topic 2, Recommendation 2, there was clarification from Mr. Giberson on the version of the word “localities” used in the SSLT abbreviation.

Mr. DiCamillo asked the council if they were ready to vote on the finalized recommendations, which are still subject to minor wording and punctuation changes. Mr. Aichele officially called for a vote, with Ms. Reinke seconding the motion. There was a unanimous vote to accept the recommendations, with 12 out of 12 online members voting yes.

Public Comment Period

Mr. Ebersole began the public comment period at 3:30 p.m. ET, opening the forum for public comments. With no public comments, Mr. Ebersole adjourned the public comment period.

Close Out and Adjourn

Mr. DiCamillo reviewed the next steps for the Subcommittees and the 2024 Annual Report writers. The Administrative Meeting scheduled for December 16, 2024, will serve as a touchpoint to review writing process, discuss graphics, and schedule upcoming meetings. The meeting adjourned at 3:39 p.m. ET.