

Issue 40: Guidance for Obtaining Concurrence on Hydrologic and/or Hydraulic Modeling Changes Post NCFMP-FEMA Approval

Background

The North Carolina Floodplain Mapping Program (NCFMP) has engineering and mapping contractors qualified to perform hydrologic and hydraulic (H&H) engineering studies to be used to map the flood hazard areas in the State of North Carolina. Through the scoping and delivery order process, the NCFMP determines the reaches and methods of study for the contractors. Costs are negotiated before work begins. Each contractor is required to submit all hydrologic modeling to the NCFMP and FEMA (through Dewberry) for review and approval before beginning the hydraulic modeling. The hydraulic modeling must be approved by the NCFMP and FEMA (through Dewberry) before the digital Flood Insurance Rate Maps (DFIRMs) are produced.

Issue

There are times when the hydrologic and/or hydraulic modeling must be updated after it has been approved by the NCFMP and FEMA. These revisions may occur due to a variety of factors including: an omission or error found by the NCFMP contractor post approval, resolution of a tie-in issue with a contiguous model, or resolution of an appeal or protest. If a change must be made to either the hydrologic or hydraulic modeling after it has been approved by the NCFMP and FEMA, the revised modeling must be reviewed and approved again before the mapping is revised. This requirement applies to both pre-preliminary and post-preliminary modeling changes and encompasses minor through significant changes.

Recommendations

To reduce additional review time, the NCFMP contractors will notify the NCFMP and Dewberry of the error and the related modeling issues to discuss possible resolution. The notification may be at an NCFMP Contractors Meeting, via email, or over the phone.

Errors determined by the study contractors to be hydraulically insignificant which do not affect Base Flood Elevations (BFEs) will require a submittal to the NCFMP and Dewberry in memo format describing the reason for change, any changes to the H&H, and comparisons of the previously approved H&H and the revised H&H (see Appendix A). The NCFMP and Dewberry will review the memo and supporting data and provide approval for the H&H amendments, as appropriate.

Errors that are hydraulically significant and/or affect BFEs will require resubmission of the H&H modeling and associated data (spreadsheet calculations, GIS data, calibration data etc) for the stream affected by the error and subsequent review and approval by the NCFMP and Dewberry. The resubmission must include the memo outlined above. The NCFMP and Dewberry will review the submittal following established H&H review procedures.

North Carolina Cooperating Technical State Mapping Program

Discussion Summary

Date Discussed: TBD

Discussion Attendees: TBD

Summary of Discussion

Final Guidelines

Points of Contact

Abdul Rahmani, NCFMP
Emily Hirsch, FEMA HQ
Ken Ashe, Dewberry

**Appendix A
Draft Memo for Concurrence on H&H Changes Post Approval**

Memo should include the contractor's company logo and can be provided via email or in hardcopy format.

To: Abdul Rahmani, NCFMP
Ken Ashe, Dewberry
CC: John Dorman, NCFMP
Tara Schmitz, Dewberry (*if changes affect BFEs*)
Rick Sacbibit, Dewberry
From: *contractor name*
RE: *issue*

BACKGROUND

Outline history of study here.

ISSUE AND RESOLUTION

Outline why the H&H changed and what changed. Include comparison of previously approved model and revised model. Explain BFE changes where necessary.

ATTACHMENTS

Include any graphics, models, profiles, etc to justify changes.