U.S. Department of Homeland Security FEMA Region 6 800 North Loop 288 Denton, TX, 76209-3698



August 22, 2019

The Honorable Wade McKinney Judge, Henderson County 125 North Prairieville Street, Room 100 Athens, TX 75751

RE: Engineering Models and Draft Flood Insurance Rate Map (FIRM) Data Submission Notification – Henderson County, Texas – 481174

Dear Judge McKinney:

This letter is to notify your community of the engineering data models and draft data being used in the Department of Homeland Security's Federal Emergency Management Agency's (FEMA) ongoing flood risk project in the Unincorporated Areas of Henderson County, Texas and provide your community an opportunity to review the models selected and draft data. FEMA's goal is to offer useful, credible data, and a fair process to help you make informed decisions to continue building a safer and stronger community.

These engineering data models will form the basis for the proposed Special Flood Hazard Areas (SFHAs) that will be presented on the FIRM for your community. An SFHA is an area that is subject to inundation by the 1-percent-annual-chance flood (also called the base flood). Over time, water flow and drainage patterns in your area may have changed dramatically due to surface erosion, land use, and natural forces. Given these factors, the likelihood of flooding in certain areas may have increased or decreased over time, changing the SFHA designations.

Upon receipt of this notification, your community will have 30 days to consult with FEMA Regional Office staff (identified in the last paragraph of this letter) regarding the appropriateness of the models selected for the project and review the draft data that forms the basis of proposed SFHAs that will be presented on the FIRM for your community. Your community will have additional opportunities to comment on and provide feedback about the models and other draft flood hazard information, throughout the project. If there are uncertainties about the mapping data that have been collected and analyzed, a formal appeal process and period will be available to help resolve any remaining questions before the flood hazard information becomes effective.

Your community may download a copy of the draft data at http://bit.ly/2ZsSq4y

Please note, this data is draft provisional and subject to change and should not be considered final.

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Draft flood hazard information for the Unincorporated Areas of Henderson County, Texas developed by FEMA's mapping partner, Compass, used the engineering models shown on the attached Proposed Engineering Models Summary Table, which lists the flooding sources to be studied, along with details regarding the selected models and the rationale for their use. The engineering models were selected based on a variety of factors including, but not limited to, the type of study performed (e.g., base or enhanced, shallow flooding, coastal, alluvial fan, etc.), the size of the drainage area affecting the flooding source, and the type of terrain present (e.g., flat, hilly, mountainous, etc.) Please refer to the summary information below for the study type selected for this project:

 <u>Zone AE Detailed Study: 1D Steady with Floodway</u> – 1D Steady activities include use of one-dimensional steady-state hydraulic models along with best available topographic data, field surveyed cross-sections and engineering structures, in a riverine setting as appropriate for detailed study. Additionally, 1D Steady analysis with floodway determination will provide a Floodway Model in addition to the Detailed (AE) model. Where floodways currently exist on FIRMs, the contractor will begin running a floodway model to "hold" the existing floodway, if possible. If it is not possible to "hold" the current effective floodway, the contractor will use equal conveyance to adjust the floodway width to create a surcharge no greater than 1.0ft. The resultant analysis will be used to create/revise a Zone AE regulatory floodplain; additionally, a regulatory floodway run will be prepared to support the inclusion of a floodway delineation for a regulatory product update.

We want to ensure that the most up-to-date and accurate technical data are used to develop the flood risk products. FEMA relies on your feedback, partnership and knowledge during this important project to determine the extent of flood risk in your community, and in support of your efforts to reduce those risks. We look forward to working with community officials and other stakeholders in the Unincorporated Areas of Henderson County, Texas to increase flood risk awareness and reduce the risk to life and property from flooding. Your initial feedback will not affect your community's ability to provide feedback later, or to formally appeal the flood hazard information during a future appeal period.

Regarding this notification your community has 30 days from the date of this letter to provide FEMA with technical data that may supplement or modify the provided draft data. Data or information submitted must be completed to a level to be directly incorporated into the study without modification by the project, or it must demonstrate scientific incorrectness by:

- Identifying the methods or assumptions purported to be scientifically incorrect.
- Supporting why the methods or assumptions used were not appropriated.
- Providing new or alternative analysis and mapping data utilizing methods consistent with prevailing engineering principles and meeting FEMA's standards.

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• Providing technical support indicating why the new or updated analysis and mapping should be accepted as more correct than the draft.

Comments on the engineering models used and draft data may be sent to:

Diane Howe Risk MAP Lead – Risk Analysis Branch FEMA Region 6 Federal Regional Center 800 North Loop 288 Denton, TX 76209-3698

To assist you in this effort, we have listed the contact information of representatives who can answer your questions and respond to your concerns:

- Flood Hazard Mapping Alan Johnson, alan.johnson@fema.dhs.gov, (940) 383-7338
- Compliance Lauren Fulton, lauren.fulton@fema.dhs.gov, (940) 898-5474
- Insurance Gilbert Giron, Jr., gilbert.giron@fema.dhs.gov, (940) 383-7253

Your community's comments on the provided materials are in important part of our review process and will be carefully considered before we finalize the FIRM. If you are interested in discussing the provided materials, the FEMA Regional Office in Denton, Texas is available to assist your community at (940) 898-5127.

Sincerely,

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Ronald C. Wanhanen, Risk Analysis Branch Chief FEMA Region 6

Enclosure: Proposed Engineering Models Summary Table

cc: Joy Kimbrough, Emergency Management Coordinator, Henderson County Alan Johnson, Project Officer, FEMA Region 6 (electronic copy) Manuel Razo, NFIP State Coordinator, Texas Water Development Board (electronic copy) Jack Young, Regional Technical Coordinator, RSC 6 (electronic copy)

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Flooding Source	Study Type	Hydrologic Model Proposed	Hydraulic Model Proposed	Rationale for Models Selected
East Fork Trinity River Trinity River	1D Detailed with Floodway	HMS 4.2	RAS 5.0.6	Based on new detailed hydrologic modeling developed by the USACE and new detailed hydraulic modeling developed by FEMA's mapping partner, Compass.

Proposed Engineering Model Summary Table