

Floodway Mapping along Levees

- **Source of Legitimacy and Authority - the relative standing of legislation, regulation, and guidance**
 - **Adverse Unintended Consequences' and how they will have to be dealt with**
 - **The Need for Separately Depicting "Policy Floodways" and "Hydraulic" Floodways**
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With FEMA's MapMod program well underway and delivering new DFIRMs to communities, a policy that is unknown to floodplain managers, insurance underwriters, and community officials has become the standard for locating floodways where levees are present. This policy departs completely from the well-understood definition of the purpose and derivation of a floodway as practiced for decades. The hydraulic analysis of encroachments causing a specific but limited rise, modified in certain cases in openly negotiated adjustments among officials, has given way to an arbitrary delineation along the landward toe of a levee.

Ostensibly, the purpose of this policy is to "protect" a levee from damage by persons excavating along or into a levee for various purposes. That ignores the existing authority and protection already afforded levee districts by right-of-way, easements, and zoning powers, and is ripe for a counterproductive set of unintended consequences. In the need to meet the requirements for certification, levee owners may have to:

- enhance levee height for freeboard,
- add to the width for stability, or
- add to the toe thickness to reduce seepage potential.

In these cases, the community's floodplain manager, acting in good faith and according to his/her training, will refuse permission to do so because they would require placing fill in a floodway".

The only recourse will be to at least perform a no-rise analysis to demonstrate that the fill will not cause an additional flood increase. This analysis will be an exercise

in shadow boxing, because no hydraulic analysis will have been used in determining such a floodway in the first case, and will require spending time and money otherwise available for actual maintenance or improvement. In the worst case, a LOMR will be required, to move the floodway to a location that hydraulics would have dictated in the first place, requiring even far more dollars many iterations of review between the levee district's engineer and FEMA's review contractor.

Communities are unlikely to comment upon or appeal the changes in floodway determination because they will probably not know about them. The change is not shown on the DFIRMS notes, nor disclosed in the accompanying Flood Insurance Study (FIS). Community officials and their engineers see on the notes and in the FIS that the newly-drawn floodways were arrived at using hydraulic analysis. The only place the new "policy" exists at all is in the guidance manual for "Mapping Partners" – a document unlikely to be seen except by the mapping contractors themselves. Additionally, the definition of "appeal" is limited to BFE and does not include floodway placement.

The policy is not only unsubstantiated, it is unattributed. It did not evolve from any body, panel, or committee, whether legislative, regulatory, or technical. No one with FEMA has been willing to support or defend it other than to refer to the guidance document.

The consequences of this policy are too far-reaching to ignore. This session, to include the A/E sector, community floodplain managers, and FEMA, will allow a full airing of the issue, its intent, and its application.

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