



Federal Emergency Management Agency

Region VII

2323 Grand Boulevard, Suite 900
Kansas City, Missouri 64108-2670

PROCEDURES FOR "NO-RISE" CERTIFICATION

FOR PROPOSED DEVELOPMENT IN THE REGULATORY FLOODWAY

Section 60.3 (d) (3) of the National Flood Insurance Program (NFIP) regulations states that a community shall "prohibit encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base (100-year) flood discharge."

Prior to issuing any building, grading, or development permits involving activities in a regulatory floodway, the community must obtain an engineering certification stating the proposed development will not impact the pre-project base flood elevations (mandatory), floodway elevations (optional), or floodway data widths (optional). The certification should be obtained from the permittee and be signed and sealed by a professional engineer.

The Engineering or "no-rise" certification must be supported by technical data or an explanation of why a hydraulic analysis is not required. A hydraulic analysis is anticipated to be required in most cases. The supporting technical data should be based upon the standard step-backwater computer model utilized to develop the 100-year floodway shown on the community's effective Flood Insurance Rate Map (FIRM) or Flood Boundary and Floodway Map (FBFM) and the results tabulated in the community's Flood Insurance Study (FIS).

Communities are required to review and approve the "no-rise" submittals. The community must review the technical submittal package and verify that all supporting data, listed in the following paragraphs are met and maintained in the community's project file.

When a hydraulic analysis is performed to support a "no-rise" certification for proposed floodway development, the following steps should be taken:

Currently Effective Model

1. Obtain the step-backwater computer model for the specified stream and community, identifying the limits of the requested data. A fee will be assessed for providing the data.

Send data requests to:

FEMA Library
Michael Baker, Jr., Inc.
3601 Eisenhower Avenue, Suite 600
Alexandria, Virginia 22304
(703) 960-8800

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Duplicate Effective Model

2. Upon receipt of the step-backwater computer model, the engineer should run the original step-backwater model to duplicate the data in the effective FIS.

Existing Conditions Model

3. Revise the original step-backwater model to reflect site specific conditions by adding sufficient new cross-sections in the vicinity of the proposed development, without the proposed development in place. Floodway limits should be manually set at the new cross section locations by measuring from the effective FIRM or FBFM. The cumulative reach lengths of the stream should also remain unchanged. The results of these analyses will indicate the 100-year floodway elevations for revised existing conditions at the proposed project site.

Proposed Conditions Model

4. Modify the revised existing conditions model to reflect the proposed development at the new cross-sections, while retaining the currently adopted floodway widths. The overbank roughness coefficients should remain the same, unless a reasonable explanation of how the proposed development will impact Manning's "n" values, is included with the supporting data. The existing floodway should be reviewed to determine if the encroachment will have an impact on floodway parameters. The results of this floodway run will indicate the 100-year floodway elevations for proposed conditions at the project site. These results must indicate NO impact on the 100-year flood elevations, as shown in the Duplicate Effective Model or in the Existing Conditions Model.

The "no-rise" supporting data and a copy of the engineering certification must be submitted to and reviewed by the appropriate community official prior to issuing a permit.

The "no-rise" supporting data should include, but may not be limited to:

- a. Duplicate of the original FIS step-backwater model printout or floppy disk.
- b. Revised existing conditions step-backwater model.
- c. Proposed conditions step-backwater model.
- d. FIRM and topographic map, showing floodplain and floodway, the additional cross-sections, the site location with the proposed topographic modification superimposed onto the maps, and a photocopy of the effective FIRM or FBFM showing the current regulatory floodway.
- e. Documentation clearly stating analysis procedures. All modifications made to the original FIS model to represent revised existing conditions, as well as those made

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to the revised existing conditions model to represent proposed conditions, should be well documented and submitted with all supporting data.

- f. Copy of effective Floodway Data Table copied from the FIS report.
- g. Statement defining source of additional cross-section topographic data and supporting information.
- h. Cross-section plots of the added cross sections, for revised existing and proposed conditions.
- i. Certified planimetric (boundary survey) information indicating the location of structures on the property.
- j. Copy of the microfiche, or other applicable source, from which input for original Step-Backwater model was taken.
- k. Floppy disk with all input files.

The engineering "no-rise" certification and supporting technical data must stipulate NO impact on the 100-year flood elevations (mandatory), floodway elevations (mandatory by state), or floodway widths (optional) at the new cross-sections and at all existing cross-sections anywhere in the model. Therefore, the revised computer model should be run for a sufficient distance (usually one mile, depending on hydraulic slope of the stream) upstream of the development site to ensure proper "no-rise" certification.

If published floodway widths are changed as a result of the encroachment, then a floodway revision will be required as described in Part 65.7 of the NFIP regulations.

Attached is a sample "no-rise" certification form that can be completed by a registered professional engineer and supplied to the community, along with the supporting technical data when applying for a development permit.

Floodplain Development Permit No. _____

ENGINEERING "NO-RISE" CERTIFICATION

Community: _____ County: _____ State: _____

Applicant _____ Date _____ Engineer _____ Date _____

Address _____ Address _____

Telephone _____ Telephone _____

SITE DATA:

1. Location: ____ 1/4; ____ 1/4; Section ____; Range ____; Township _____

Street Address: _____

2. Panel(s) No. of NFIP map(s) affected: _____

3. Type of development: Filling ____ Grading ____ Excavation ____ Minor Improv ____

Substantial-Improv ____ New Construction ____ Other _____

4. Description of Development: _____

5. Name of flooding source: _____

COMMENTS:

This is to certify that I am a duly qualified engineer licensed to practice in the State of _____. It is to further certify that the attached technical data supports the fact that the proposed development described above will not create any increase to the 100-year elevations on said flooding source above at published cross-sections in the Flood Insurance Study for the above community dated ____ and will not create any increase to the 100-year flood elevations at unpublished cross-section in the vicinity of the proposed development.

Signature _____ Date _____

(Seal)

Title _____ License No. _____