



**PROCEDURES FOR “NO-RISE” CERTIFICATION
FOR PROPOSED DEVELOPMENTS IN ADOPTED REGULATORY
FLOODWAYS**

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 a certification stating the proposed development will not impact the pre-project base flood elevations, floodway elevations, or floodway data widths. 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. 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 or Flood Boundary and Floodway Map (FBFM) and the results tabulated in the community’s Flood Insurance Study (FIS).

Although communities are required to review and approve the “no-rise” submittals, they may request technical assistance and review from the FEMA regional office. However, if this alternative is chosen, the community must review the technical submittal package and verify that all supporting data, listed in the following paragraphs, are included in the package before forwarding to FEMA.

To support a “no-rise” certification for proposed developments encroaching into the regulatory floodway, a community will require that the following procedures be followed:

Currently Effective Model

1. ***FEMA Engineering Library***
847 S. Pickett Street
Alexandria, VA 22304
Phone: 1-877-336-2627
Facsimile: 1-703-212-4090



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 existing conditions by adding new cross-sections (two or more) 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 over-bank roughness coefficients should remain the same unless a reasonable explanation of how the proposed development will impact Manning's "n" values should be included with the supporting data. 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, floodway elevations, or floodway widths shown in the Duplicate Effective Model or in the Existing Conditions Model.**

The original FIS model, the duplicate effective FIS model, the revised existing conditions model, and the proposed conditions model should all produce the same exact results.



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 permit.

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

- a. Duplicate of the original FIS step-backwater model printout and electronic file on CD.
- 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 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 FIS HEC-2 model was taken.
- k. CD or DVD with all input files.
- l. Printout of output files from EDIT runs for all three floodway models.



The engineering “no-rise” certification and supporting technical data must stipulate NO impact on the 100-year flood elevations, floodway elevations, or floodway widths 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 and downstream of the development site to insure proper “no-rise” certification.

Review and complete “NO-RISE” certification on the next page.



ENGINEERING "NO-RISE" CERTIFICATION

This is to certify that I am a duly qualified engineer licensed to practice in the State of Arizona. It is to further certify that the attached technical data supports the fact that proposed development _____ in the floodplain will
(Name of Development)

not increase, floodway elevations and the floodway widths to adversely impact adjacent properties at published sections in the Flood Insurance Study for
_____, dated _____
(Name of Community)

and will not increase floodway elevations and floodway widths at unpublished cross-sections in the vicinity of the proposed development.

Date _____

Signature _____

Phone Number _____ **Email** _____

Representing _____

Address _____

City _____ **State** _____ **Zip Code** _____

