

Federal Emergency Management Agency

Region IV 3003 Chamblee-Tucker Road Atlanta, GA 30341

<u>GUIDANCE FOR ''NO-RISE / NO-IMPACT'' CERTIFICATION</u> FOR PROPOSED DEVELOPMENTS IN REGULATORY FLOODWAYS

The National Flood Insurance Program (NFIP) floodplain management criterion that is adopted by all participating communities in their local ordinances, as described in Title 44 of the Code of Federal Regulations, Section 60.3(d)(3), states:

"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 flood discharge."

Prior to issuing any 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, regulatory floodway elevations, or regulatory floodway widths. The certification should be obtained from the permittee and be signed and sealed by a professional engineer in accordance with State Licensing Board specifications.

The engineering or "No-Rise / No-Impact" certification must be supported by technical data. The supporting technical data should be based upon the standard step-backwater hydraulic model utilized to develop the regulatory 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 or disapprove the "No-Rise/No-Impact" submittals; however, they may request technical assistance and review from the FEMA regional office. If this alternative is chosen, the submittal will be treated as a Conditional Letter of Map Revision (CLOMR) by the National Service Provider, and will be subject to the same fees as such.

To support a "No-Rise / No-Impact" certification for proposed developments encroaching onto the regulatory floodway, a community will require that the following procedures be followed:

1. Currently Effective Model

Furnish a written request for the step-backwater hydraulic 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:

Federal Emergency Management Agency http://www.fema.gov.fhm/st_order.shtm

or to:

MOD RMC Region 4 Faxed to (678) 459-1030 to the attention of: "Back-up Technical Data Request"

2. Duplicate Effective Model

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

3. Existing Conditions Model

Revise the duplicate effective model to reflect site-specific existing conditions by adding new cross-sections (two or more) in the area of the proposed development, without the proposed development in place. Regulatory 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 waterway should remain unchanged. The results of these analyses will indicate the base flood elevations and the regulatory floodway elevations for the effective hydraulic model revised to incorporate existing conditions at the proposed project site.

4. Proposed Conditions Model

Modify the existing conditions models to reflect the proposed development using the new cross-sections, while retaining the currently adopted regulatory floodway widths. The overbank roughness parameters should remain the same unless a valid explanation of how the proposed development will impact the roughness parameters is included with the supporting data. The results of this floodway hydraulic model will indicate the regulatory floodway elevations for proposed conditions at the project site. These results must indicate NO impact on the base flood elevations, regulatory floodway elevations, or regulatory floodway widths shown in the duplicate Effective Model or in the Existing Conditions Model (items 2 and 3 above, respectively).

The "no-impact" analysis along with supporting data and the original engineering certification must be reviewed by the appropriate community official prior to issuing a development permit. The original effective FIS model, the duplicate effective FIS model, the Existing Conditions Model, and the Proposed Conditions Model should be reviewed for any changes in the base flood elevations, regulatory floodway elevations and floodway widths.

The "No-Rise / No-Impact" supporting data should include, but may not be limited to:

- (1) Copy of the currently effective FIS hydraulic models (legible hard copy and a disc (if available))
- (2) Duplicate effective FIS hydraulic models (hard copy and a disc).
- (3) Existing conditions hydraulic models (hard copy and a disc).
- (4) Proposed conditions hydraulics models (hard copy and a disc)
- (5) Annotated effective FIRM or FBFM and topographic map, showing regulatory floodplain and floodway boundaries, the additional cross-sections, and the site location along with the proposed topographic modifications.
- (6) Documentation clearly stating analysis procedures. All modifications made to the duplicate effective hydraulic models to correctly represent existing conditions, as well as those made to the existing conditions models to represent proposed conditions should be well documented and submitted with all supporting data.
- (7) Annotated effective Floodway Data Table (from the FIS report).
- (8) Statement defining source of additional cross-sections, topographic data, and other supporting information.
- (9) Cross-section plots of the additional cross sections for existing and proposed conditions hydraulic models.
- (10) Certified planimetric (boundary survey) information indicating the location of structures on the property.
- (11) Hard copy of all output files.
- (12) Clear explanation of how roughness parameters were obtained (if different from those used in the effective hydraulic models).
- (13) Engineering certification (sample attached).

The engineering "No-Rise / No-Impact" certification and supporting technical data must stipulate NO impact or NO changes to the base flood elevations, regulatory floodway elevations, or regulatory 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 upstream and downstream of the development site to insure proper "No-Rise / No-Impact" certifications.

Attached is a SAMPLE "No-Rise / No-Impact" 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. This form does not have to be utilized to submit for a "No-Rise / No-Impact" certification. It is provided as a guide, if needed.

Note: Definitions of terms base flood, development, and regulatory floodway are same as those included in Title 44 of the Code of Federal Regulations, Section 59.1. Additional regulations pertaining to this certification are described in Title 44 of the Code of Federal Regulations, Section 65.3.

ENGINEERING "NO-RISE" CERTIFICATE

SITE INFORMATION		
Community	County	
Applicant	Date	
Address	Engineer	
Telephone	Address	
	Telephone	
	Lot	Block
Project Address	Subdivision	
	Legal Description	
PROJECT INFORMATION		
Description of Development:		
Principal Use of Premises:		
FLOOD INSURANCE RATE MAP (FIRM) INFORMATION		
NFIP map(s) and panel(s) affected:		
Effective date of map:		
Base Flood Elevation on FIRM:		
Name of flooding source:		
CERTIFICATION		
This is to certify that I am a duly qualified Professional Engineer licensed to practice in the State of Pennsylvania. I further certify that the attached engineering data supports the fact the proposed development would not result in any increase in flood levels within the community during the occurrence of a base flood event.		
CERTIFIER'S NAME	LICENSE NUMBER	
COMPANY NAME		(embossed seal)
SIGNATURE	DATE	
TITLE		