

# Federal Emergency Management Agency

Region IV 3003 Chamblee-Tucker Road Atlanta, GA 30341

## GUIDANCE FOR "NO-RISE / NO-IMPACT" CERTIFICATION 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. <u>Duplicate Effective Model</u>

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.

# SAMPLE FORM

# FLOODWAY "NO-RISE / NO-IMPACT" CERTIFICATION

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the fact that proposed will not impact the base flood (Name of Development)			ne ouse noou
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cross sections in the Flood Insurance Study for,			
		ommunity) , dated	(Date)
and will not impact the base flood eleva	ations, floodway elevation	ns, and floodway widths a	at the
unpublished cross-sections in the area of the proposed development.			
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FEMA, MT DTD.09/2004



#### **ENGINEERING & OPERATIONS**

PO Box 1110, Tampa, FL 33601-1110 813-276-2530 | Fax: (813) 272-5811

Subject: Floodway Certification and No Impact Analysis

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John W. Lyons

The County regulates construction within flood-hazard areas to a greater development standard than areas not designated as

such. This construction and development review process is in compliance with the County's Construction and Land Development Codes and pursuant to the County's participation in the National Flood Insurance Program.

If a proposed development or construction potentially effects a regulatory floodway, then a "No Rise" Certification must be submitted for review, which will be examined for consistency with procedures illustrated by the Federal Emergency Management Agency and with the County's Code. A certification submittal is to include at a minimum:

- 1. Current Flood Insurance Study (FIS) effective model data,
- 2. Existing model that duplicates conditions identified within the effective FIS (i.e. Duplicate effective model),
- 3. Existing Conditions model data that revises duplicate effective model to reflect current sitespecific conditions, and
- 4. Proposed Conditions model.

The submittal of information from an engineer, and the respective company, will include a "No Rise" Certification and associated analyses. The principal Federal citation that is applicable to Hillsborough County, Florida is Section 60.3 (44 Codes of Federal Regulation). Additionally, County requirements may be found within 3.06 of the Land Development Code and within Chapter 3 of Construction Code. Federal requirements include the following:

- (c)(10) Require until a regulatory floodway is designated, that no new construction, . . . shall be permitted within A1-A30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, . . . , will not increase the water surface elevation of the base flood . . .
- (d)(3) Prohibit encroachments, . . . within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analysis 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.

The certification will illustrate and will be relied upon as an acknowledgement that principles for determining an impact into a regulatory floodway have been followed by the engineer of record and

respective company, and that said company and engineer acknowledge that the County and FEMA may review this document for consistency during any period in which the County remains as a participant in the National Flood Insurance Program. If the analysis is incorrect, the analysis and any directed course of mitigation will require action from the engineer of record and respective company, if applicable, regarding compliance. Additionally, the engineer and company will have signed to the affect that they have made the determination that the proposed development as permitted within the regulatory floodway will not increase the flood level or floodway width of, or otherwise impact, the regulatory floodway as pursuant to Chapter 44, Part 63, Codes of Federal Regulation, Hillsborough County Construction and Land Development Codes, and the County's Stormwater Technical Manual.

Note: The County has updated modeled data that is available to the engineer performing a No Rise Certification. It is located on the Hillsborough County's FTP site and the specific riverine site data may be requested through the Public Works Stormwater team. In meeting with responsibilities in verifying protection to persons and property and with the intent of the code, the updated model is available to perform similar analyses that includes replicating the process using the corresponding County modeled data and using the existing (updated) model data that duplicates conditions identified within the modeled data; existing conditions to said model data that reflect current site-specific conditions; and proposed conditions to said modeled data.

These added analyses do not substitute performing a No Rise Certification using the FEMA's Current-Effective model.