## DEPARTMENT OF HOMELAND SECURITY FEDERAL EMERGENCY MANAGEMENT AGENCY RIVERINE HYDROLOGY & HYDRAULICS FORM

O.M.B. NO. 1660-0016 Expires August 31, 2007

## PAPERWORK BURDEN DISCLOSURE NOTICE

Public reporting burden for this form is estimated to average 3.5 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing, reviewing, and submitting the form. You are not required to respond to this collection of information unless a vaild OMB control number appears in the upper right corner of this form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden to: Information Collections Management, Department of Homeland Security, Federal Emergency Management Agency, 500 C Street, SW, Washington, DC, 20472, Paperwork Reduction Project (1660-0016). Submission of the form is required to obtain or retain benefits under the National Flood Insurance Program. Please do not send your completed survey to the above address.

Program. Please do not send y			dani of retain benefits under the	. National 1 lood insulance	
Flooding Source:					
Note: Fill out one form for eac	h flooding source studied				
		A. HYDROLOGY			
1. Reason for New Hydrologic	Analysis (check all that a	pply)			
Not revised (skip to section 2) No e		sting analysis			
Alternative methodology	Proposed Cor	nditions (CLOMR)	Changed physical condition of watershed		
2. Comparison of Representative	ve 1%-Annual-Chance Di	scharges			
Location	Dr	rainage Area (Sq. Mi.)	FIS (cfs)	Revised (cfs)	
3. Methodology for New Hydr	ologic Analysis (check al	I that apply)			
Statistical Analysis of Gage Records		Precipitation/runoff Model		(TR-20, HEC-1, HEC-HMS, etc.)	
Regional Regression Equations	Other (please attach description)				
	nent, "Numerical Models	Accepted by FEMA for NI	ing computation of parameters FIP Usage" lists the models acc	), and documentation to support cepted by FEMA. This	
4. Review/Approval of Analys	is.				
If your community requires	a regional, state, or federa	l agency to review the hydr	ologic analysis, please attach e	evidence of approval/review.	
5. Impacts of Sediment Transp	ort on Hydrology				
Was sediment transport cons	sidered? Yes	No			
If Yes, then fill out Section F (	Sediment Transport) of Fo	orm 3. If No, then attach yo	ou explanation for why sedimen	nt transport was not considered.	
		B. HYDRAULICS			
1. Reach to be Revised			Water-Surface Elevations (ft.)		
	Description	Cross Section	Effective		
Downstream Limit					
Upstream Limit					
2. Hydraulic Method Used					
Hydraulic Analysis	HEC-2, HEC-RAS, Other (Attach description)				

B. HYDRAULICS (continued)							
3. Pre-Submittal Review of Hydraulic Models							
FEMA has developed two review programs, CHECK-2 and CHECK-RAS to aid in the review of HEC-2 and HEC-RAS hydraulic models, respectively. These review programs verify that the hydraulic estimates and assumptions in the model data are in accordance with NFIP requirements, and that the data are comparable with the assumptions and limitations of HEC-2/HEC-RAS. CHECK-2 and CHECK-RAS identify areas of potential error or concern. These tools do not replace engineering judgement. CHECK-2 and CHECK-RAS can be downloaded from http://www.fema.gov/mit/tsd/frm_soft.htm. We recommend that you review your HEC-2 and HEC-RAS models with CHECK-2 and CHECK-RAS. If you disagree with a message, please attach an explanation of why the message is not valid in this case. Review of your submittal and resolution of valid modeling discrepancies will result in reduced review time.							
HEC-2/HEC-RAS models reviewed with CHECK-2/CHECK-RAS?							
4. Models Submitted							
Duplicate Effective Model*	Natural File Name	Floodway F	ile Name				
Corrective Effective Model*	Natural File Name Floodway		File Name				
Existing or Pre-Project Conditions Model	Natural File Name Floodway		File Name				
Revised or Post-Project Conditions Model	Natural File Name Floodway		File Name				
Other - (attach description)	Natural File Name	Vatural File Name Floodway		File Name			
*Not required for revisions to approximate 1%-annual-chance floodplains (Zone A) - for details, refer to the corresponding section of the instructions.  The document "Numerical Models Accepted by FEMA for NFIP Usage" list the models accepted by FEMA. This document can be found at: http://www.fema.gov/mit/tsd/en_modl.htm.							
mps// www.noman.go // mile took on_mountain.	C. MAPPING REQUI	REMENTS					
and proposed conditions 1%-annual-chance floodplain (for approximate Zone A revisions) or the boundaries of the 1%-and 0.2%-annual-chance floodplains and regulatory floodway (for detailed Zone AE, AO, and AH revisions); location and alignment of all cross sections with stationing control indicated; stream, road, and other alignments (e.g. dams, levees, etc.); current community easements and boundaries; boundaries of the requester's property; certification of a registered professional engineer registered in the subject State; location and description of reference marks; and the referenced verticle datum (NGVD, NAVD, etc.).  Note that the boundaries of the existing or proposed conditions floodplains and regulatory floodway to be shown on the revised FIRM and/or FBFM must tie-in with the effective floodplain and regulatory floodway boundaries. Please attach a copy of the effective FIRM and/or FBFM, annotated to show the boundaries of the revised 1%-and 0.2%-annual-chance floodplains and regulatory floodway that tie-in with the boundaries of the effective 1%-and 0.2%-annual-chance floodplain and regulatory floodway at the upstream and downstream limits of the area of revison.							
D.	COMMON REGULATORY	REQUIREMENTS					
1. For CLOMR Requests, do Base Flood Elevation	ons (BFEs) Increase?		Yes	No			
For CLOMR requests, if either of the following is true, please submit evidence of compliance with Section 65.12 of the NFIP regulations:  * The proposed project encroaches upon a regulatory floodway and would result in increases above 0.00 foot.  * The proposed project encroaches upon a SFHA with BFEs established and would result in increases above 1.00 foot.							
2. Does the request involve the placement of pro	posed placement of fill?		Yes	No			
If Yes, the community must acknowledge that the area to be removed from the special flood hazard area, to include any structures or proposed structures, meets (will meet) all of the standards of the local floodplain ordinances, and is (will be) reasonably safe from flooding in accordance with NFIP regulation 44 CFR 65.2(c). Please see the MT-2instructions for more information.							
3. For LOMR requests, is the regulatoryfloodway	being revised?		Yes	No			
If Yes, attach evidence of regulatory floodway revised notification. As per paragraph 65.7(b)(1) of the NFIP regulations, notification is required for requests involving revisions to the regulatory floodway. (Not required for revisions to approximate 1%-annual-chance floodplains (studied Zone A designation) unless a regulatory floodway is being added. Elements and examles of regulatory floodway revision notification can be found in the MT-2 Form 2 instructions.)							
4. For LOMR requests, does this request require p	Yes	No					
If Yes, please attach proof of property owner notification and acceptance (if available). Elements of and examples of property owner notification can be found in the MT-2 form 2 instructions.							

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