# Faster CLOMR's and LOMR's

Improving your times

With FEMA Map Changes

# **CLOMR/LOMR Model Sequence**



- Approved Models
  - <u>https://www.fema.gov/numerical-models-meeting-minimum-requirements-national-flood-insurance-program</u>
- FEMA Engineering Library
  - <u>https://www.fema.gov/engineering-library</u>
  - <u>https://www.fema.gov/how-order-technical-administrative-support-data</u>
- Hydraulic Models Required
  - Duplicate Effective
  - Corrected Effective
  - Pre-project
  - Post-project
- Digital format: Executable (Make Sure They Run!)

- Effective Hydraulic Model
  - The hydraulic analysis used in the effective FIS or LOMR
- Duplicate Effective Hydraulic Model
  - A copy of the effective model reproduced on the requestors computer (Use Effective Discharges)
  - Should not be modified unless required to allow model to run
    - E.g. adding distance from upstream XS to bridge
  - If the effective model is available:
    - Should match within 0.1 foot at all locations
  - If the effective model is not available:
    - New model calibrated to reproduce the FIS profile within 0.5 ft

- Corrected Effective Model
  - Corrects errors in the duplicate effective
  - Adds cross sections
  - More detailed historic topography
  - May include new hydrology
  - Must NOT reflect man-made changes since the date of the effective model
- Pre-Project Conditions Model (Avoid "Existing")
  - Modified Duplicate or Corrected Effective model
  - Includes any modifications since the date of the Effective
  - New hydrology if revised
  - If no modifications since the effective: The Duplicate Effective or Corrected Effective = the Pre-Project Conditions
- Post-Project Conditions Model
  - Modified version of the Pre-Project Conditions model
  - Includes modifications to reflect the project

- Why all the models?
  - Isolate Changes
  - Identify Corrections
  - Evaluate Comparisons
  - Potential Violations
- Effective FIS data vs. Duplicate Effective
  - Should match within 0.1 foot at all locations
    - 0.5 ft if effective model is not available
  - Ensures:
    - The correct model is being used
    - The data was transferred correctly to the requestor's equipment
    - Revised data integrated into effective

- Duplicate/Corrected Effective vs. Pre-Project
  - How do they compare?
  - Are there any potential violations?
- Existing vs. Post-Project
  - What are the incremental impacts of the project?
- Effective vs. Post-Project
  - Impact on the FIRM and FIS
  - Adverse impact notification

