



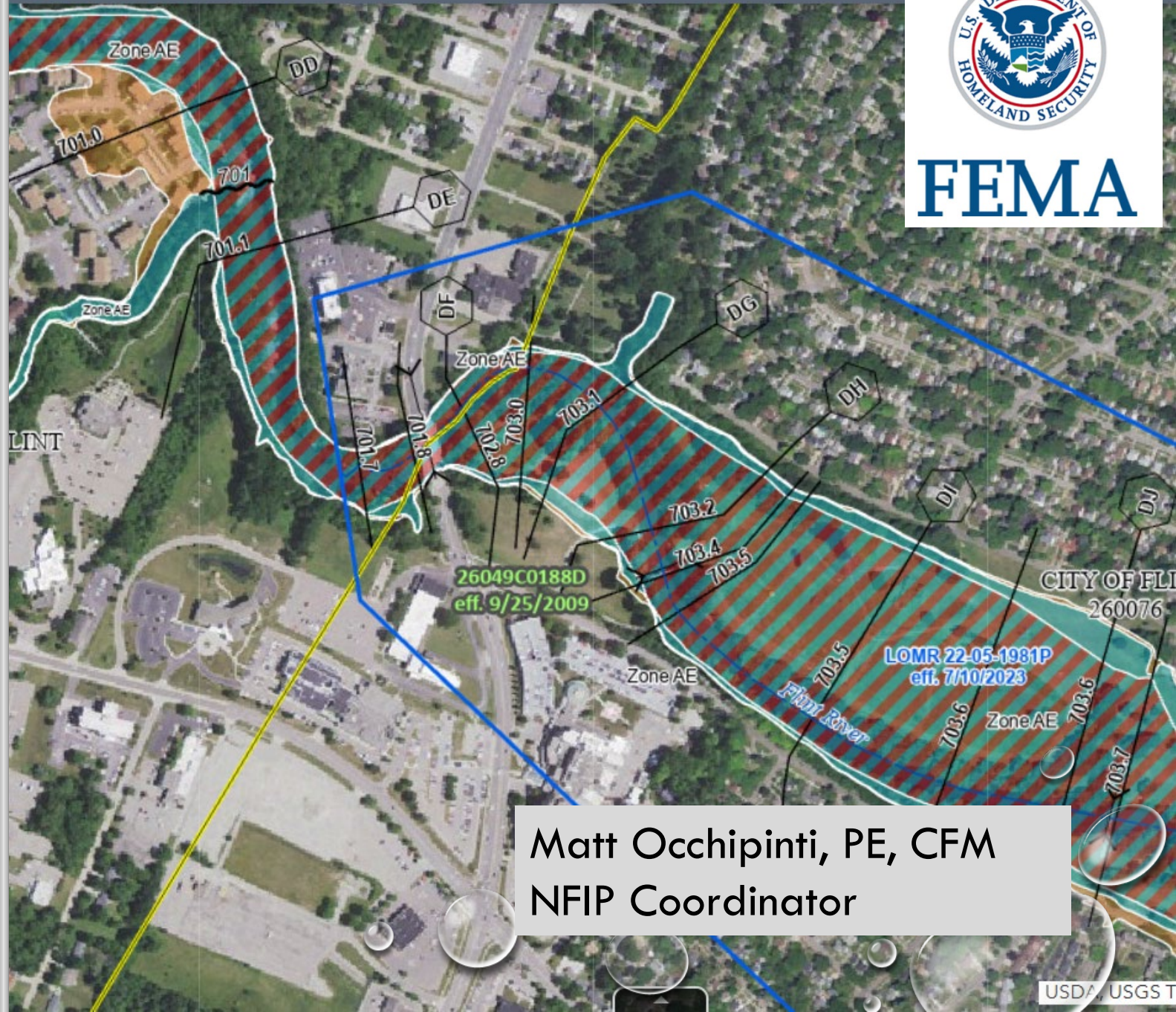
EGLE & FEMA FP REQUIREMENTS & CLOMRs and LOMRs

ayer (NFHL) Viewer

with Web AppBuilder for ArcGIS

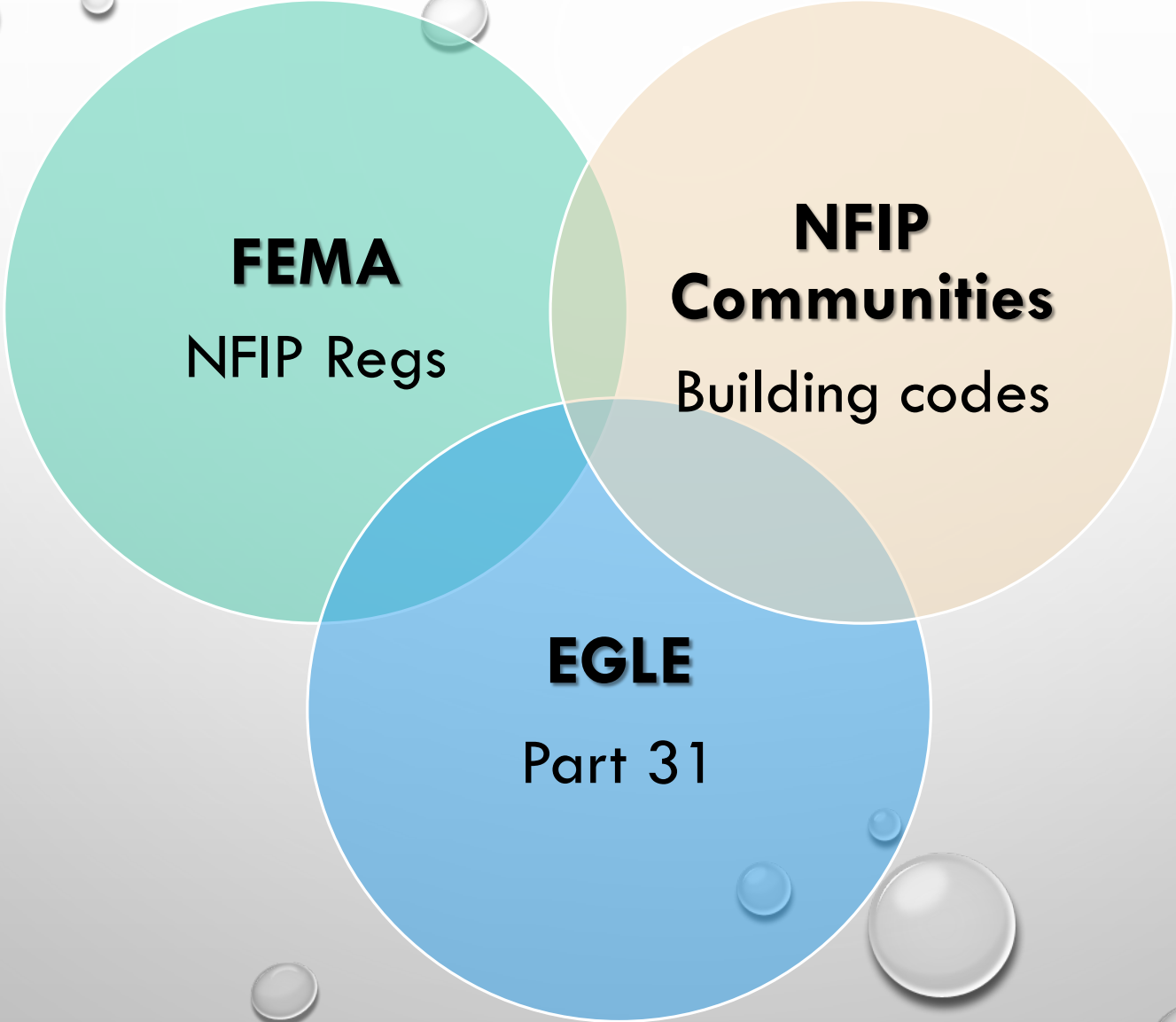


FEMA



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NFIP Coordinator

EGLE IS THE STATE NFIP COORDINATING AGENCY



FEMA
NFIP Regs

**NFIP
Communities**
Building codes

EGLE
Part 31

STATE COORDINATING AGENCY [44CFR60.25](#)

- Assist communities in joining and maintaining participation in the NFIP:
 - Develop floodplain ordinance that meets NFIP minimums;
 - Interpretation and enforcement of floodplain requirements;
 - Audit communities' enforcement of their floodplain regulations
- Provide NFIP information to communities and the public;
- Assure coordination and consistency of flood plain management activities with other State, areawide, and local enforcement agencies;



STATE FLOODPLAIN REQUIREMENTS

- Part 31 -assure that the flood carrying capacity of a watercourse is not harmfully obstructed.
 - EGLE staff must determine if a project constitutes a “harmful interference”.
- “Harmful interference” means causing an increased stage or change in direction of flow of a river or stream that causes, or is likely to cause, any of the following:
 - damage to property;
 - a threat to life;
 - a threat of personal injury;
 - pollution, impairment, or destruction of water or other natural resources.

NFIP REGULATIONS



FEMA

NFIP regs are not the same as Part 31.

But they affect Part 31 reviews in situations where a project causes increases in the BFE in FEMA mapped floodplains.

The state of Michigan is an NFIP community under 44CFR.

NFIP REGULATIONS

44 CFR 60.3(a)-(e)

60.3(e) VE Zones
FIS, BFE, plus Coastal
(No Floodway)

60.3(d) AE Zones
FIS, BFE, plus Floodway
Detailed studies

60.3(c) AE Zones
FIS and BFE
Detailed studies with BFEs

60.3(b) Approximate Zone A
Flood Hazard Boundary Map (FHBM)
Identifies SFHA but has minimal accuracy – no detailed study

60.3(a) No Flood Map

NOTE: with no maps, there
are no Special Flood Hazard
Areas (SFHAs)



FEMA

Projects altering the FEMA mapped floodplain or BFE may need a LOMR and/or CLOMR

If a CLOMR is needed, EGLE must require the CLOMR before it can issue a Part 31 permit.

FEMA CLOMR vs LOMR

LETTER OF MAP REVISION (LOMR)

A LOMR is an **official revision** of a current FEMA flood insurance rate map (FIRM) which reflects changes in flood zones, floodplain areas, floodways and flood elevations.

CONDITIONAL LETTER OF MAP REVISION (CLOMR)

FEMA's comments on whether a proposed project, if built as proposed, would justify a map revision. **Does NOT change the FIRM.**

-Required for projects that increase the BFE.

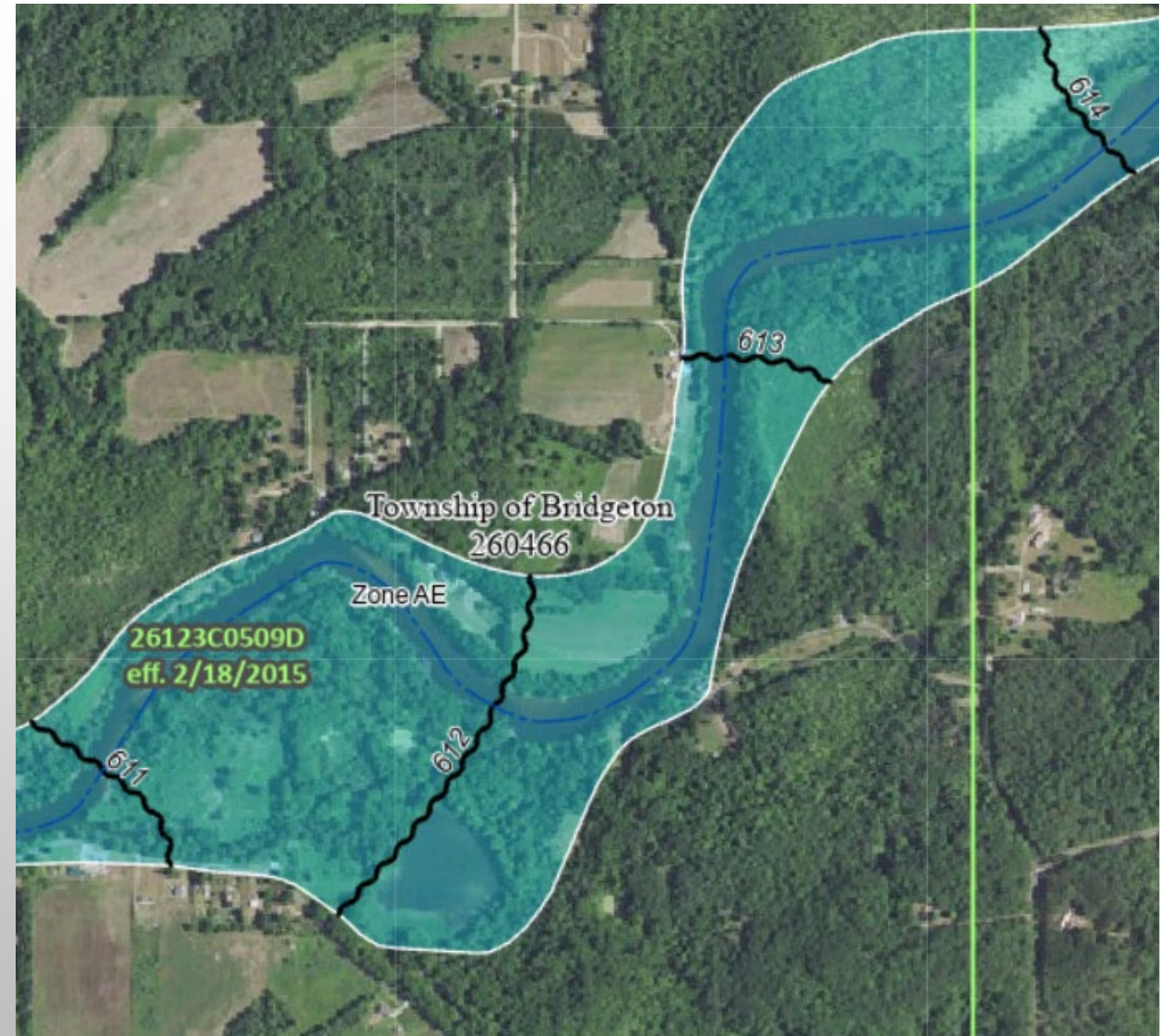


ZONE A (NO PUBLISHED BFE'S)

- CLOMRs and LOMRs NOT required.
- Can submit LOMRs to change the graphical extent of the SFHA.

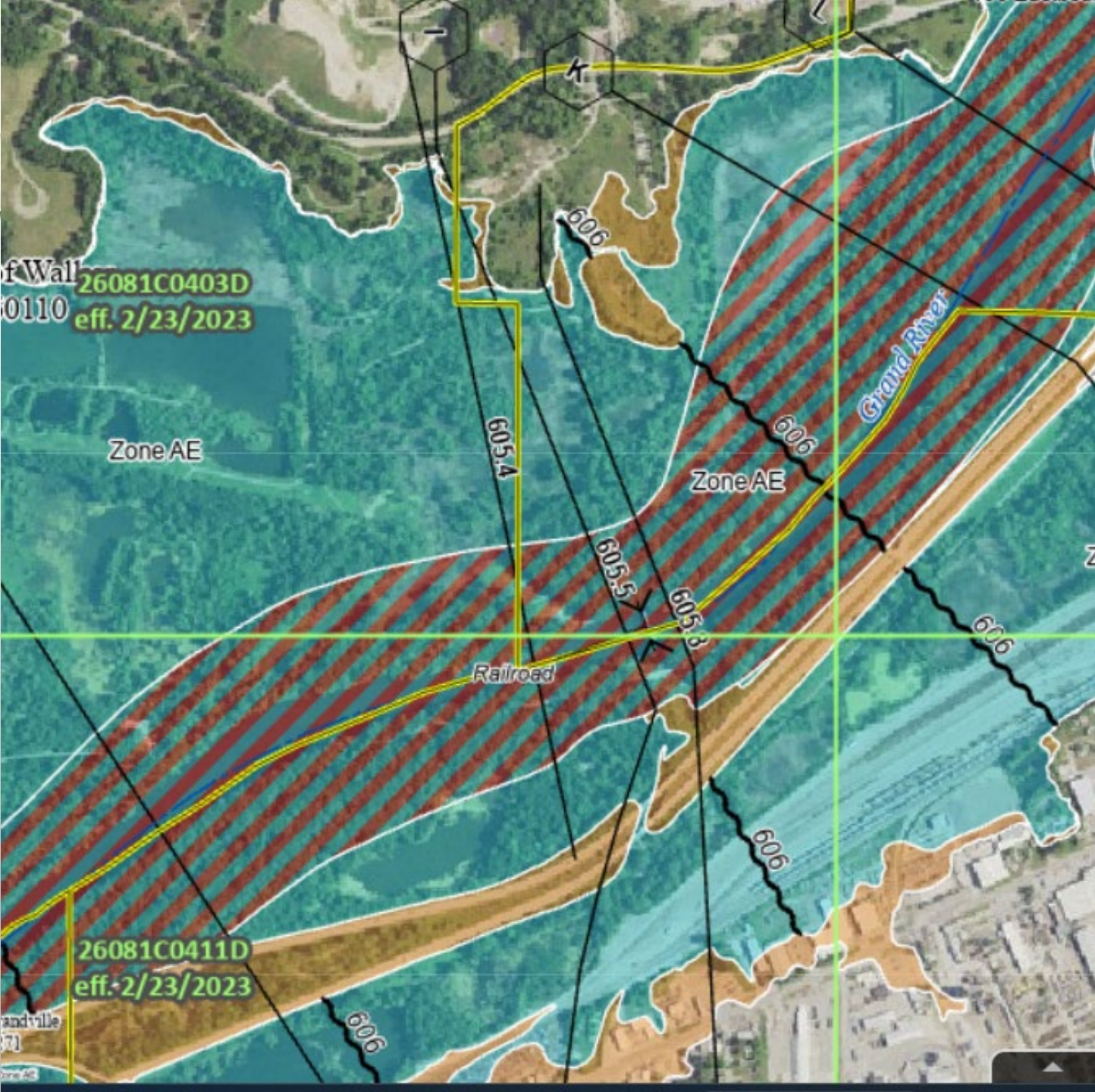
ZONE AE (Published BFEs, No Floodway)

- A CLOMR is required if a proposed project causes an increase greater than 1 ft (existing vs. Proposed). A LOMR would also be required as a condition of the permit to officially modify the FIRMs upon completion of the project.
- If the project causes a decrease greater than 1 foot (existing vs. Proposed), no CLOMR is required. A LOMR is required at completion of the project.



(44 CFR part 65.12)

ZONE AE w/ MAPPED FLOODWAY



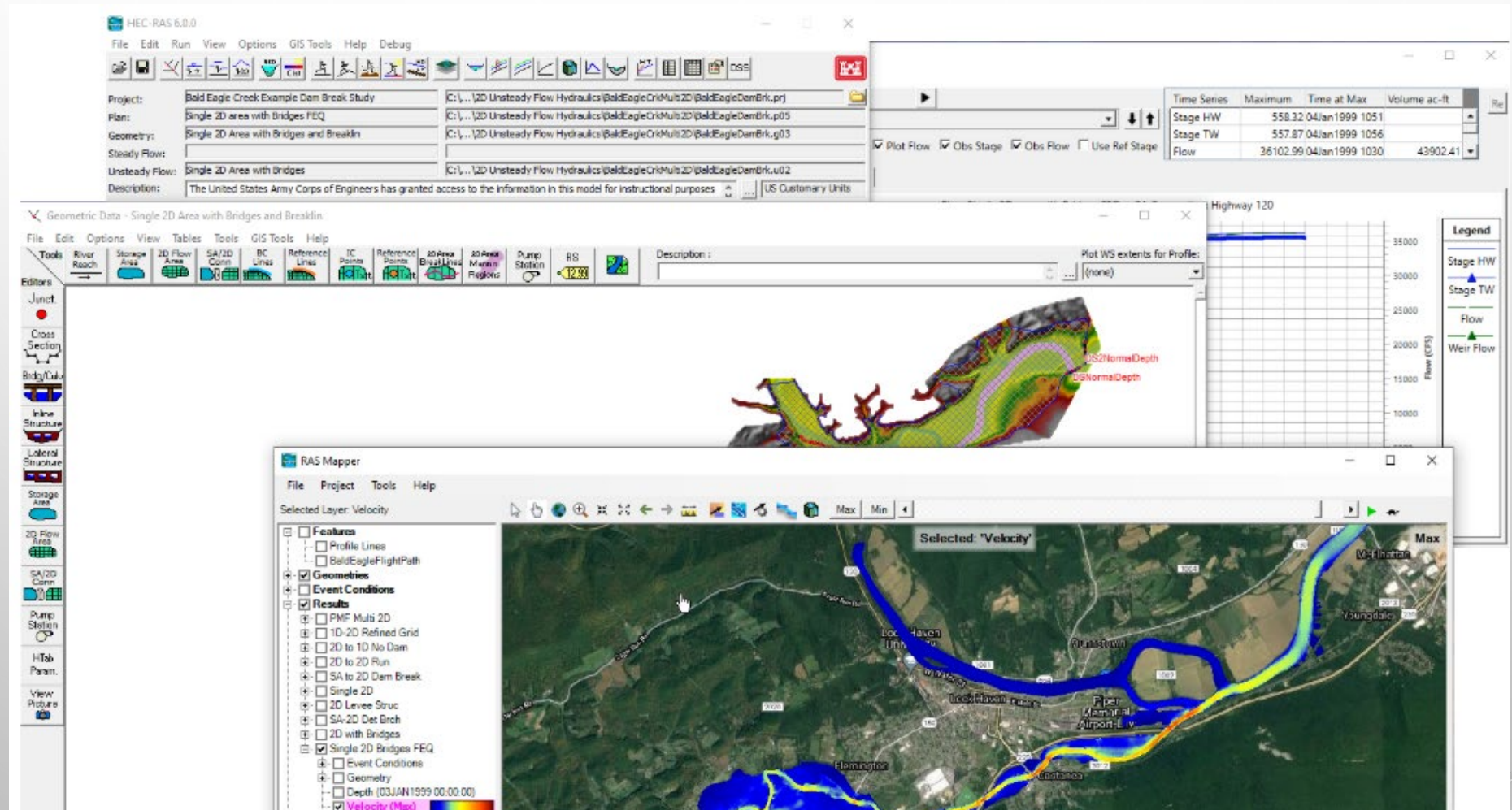
A CLOMR is required if a project is going to cause ANY increase in WSEL (existing vs. proposed). A LOMR would also be required as a condition of the permit to officially modify the FIRMs upon completion of the project.

-Part 31 permit could not be issued until CLOMR is obtained.

If the project causes a decrease of 0.1 feet or greater, no CLOMR is required. However, a LOMR is required upon completion of the project.

(44 CFR Part 65.12)

MODELING CONSIDERATIONS

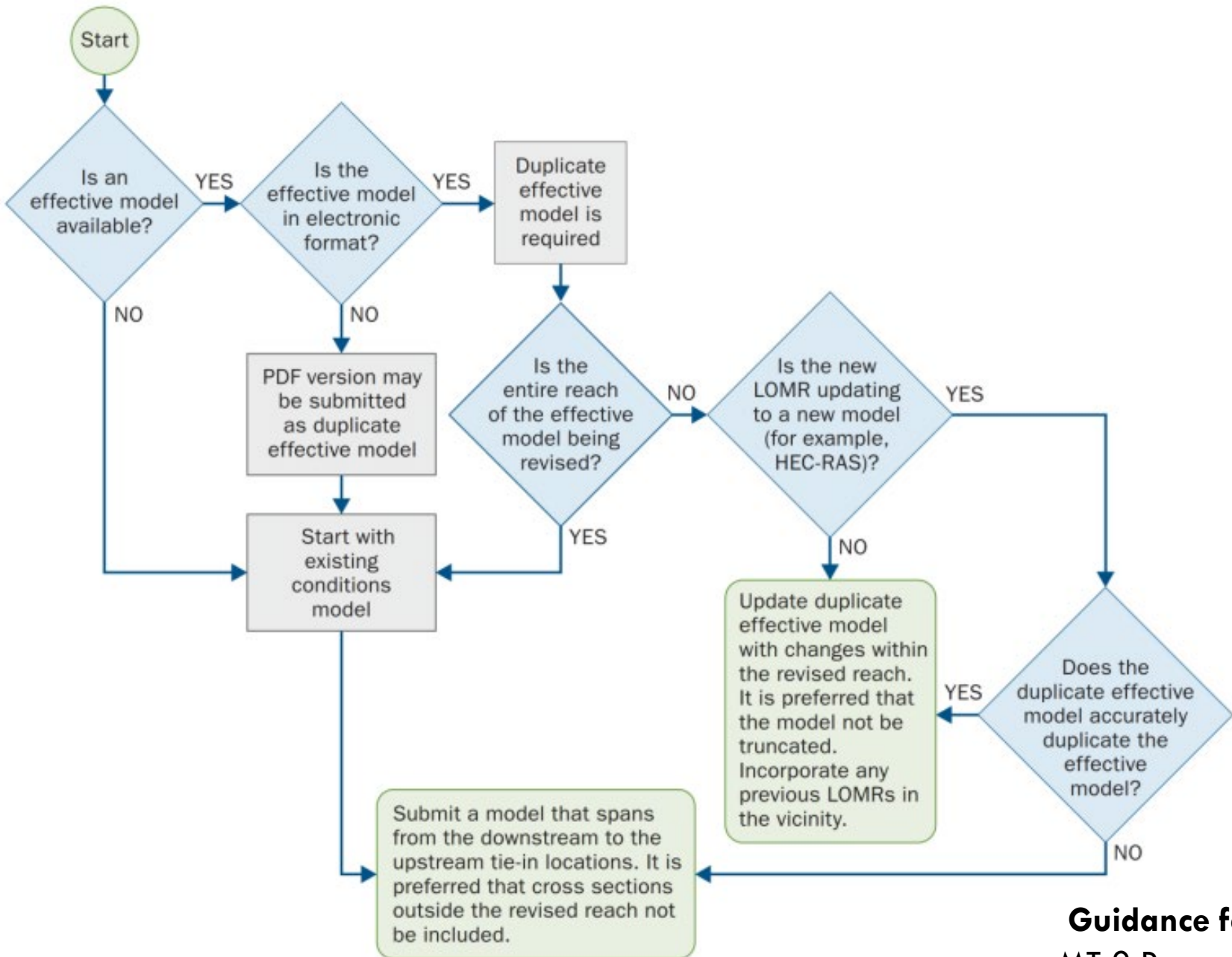


HEC-RAS RUN MODELS

- **DUPLICATE EFFECTIVE MODEL (DEM)** - Copy of the RAS model used in the effective FIS, referred to as the effective model. The effective model should be reproduced on the requester's equipment to create the DEM. [*Paper scans may not have to be converted to digital.](#)
- **CORRECTED EFFECTIVE MODEL (CEM)** - Corrects any errors in the DEM, adds additional XS to the DEM, incorporates more detailed topo. The CEM must not reflect any manmade changes that have occurred since the date of the effective published study.
- **EXISTING/ PRE-PROJECT MODEL** - reflects any changes that have occurred since the date of the effective model, but prior to the construction of the project. If no changes have occurred, this model would be the CEM. This model may be needed to support conclusions about the actual impacts of the project.
- **PROPOSED MODEL** – Proposed project conditions. Should not include additional changes outside the project reach. [See FEMA Guidance document 106 for “Flood Risk Analysis and Mapping, MT-2 Requests”](#)

DUPLICATE EFFECTIVE MODEL (DEM)

- Copy of the effective FIS HEC-RAS model, reproduced on requestor's equipment to ensure the effective model's input data have been transferred correctly.
- Required for all LOMRs so it can be compared to the revised modeling.
- If the effective model is being updated to produce the revised conditions modeling, run the revised conditions modeling using the same model version as the effective.
- If an effective HEC-2 model is converted to HEC-RAS, this is considered a DEM.
- If the effective model is not available, or only in PDF, then a DEM may not be required. But it should be used as a reference for cross section placement and BFE comparisons. Documentation from the engineering library should be included with the MT-2 submittal.



NEED FOR DEM

**Guidance for Flood Risk Analysis and Mapping
MT-2 Requests**

EXAMPLE 1

ZONE AE W/OUT FLOODWAY

- EFFECTIVE BFE = 100
- DUPLICATE EFFECTIVE BFE = 103
- CORRECTED EFFECTIVE BFE = 105
- EXISTING/ PRE-PROJECT = 105
- PROPOSED PROJECT = 104
- No CLOMR needed (no rise), but LOMR needed after project to update the FIRM. The LOMR will be a permit condition.

ZONE AE WITH FLOODWAY

- EFFECTIVE BFE = 100.0
- DUPLICATE EFFECTIVE BFE = 103.00
- CORRECTED EFFECTIVE BFE = 105.00
- EXISTING/ PRE-PROJECT = 105.00
- PROPOSED PROJECT = 104.00
- No CLOMR needed (no rise), but LOMR needed after project to update the FIRM. The LOMR will be a permit condition.

EXAMPLE 2

ZONE AE W/OUT FLOODWAY

- EFFECTIVE BFE = 100
- DUPLICATE EFFECTIVE BFE = 100
- CORRECTED EFFECTIVE BFE = 98
- EXISTING/ PRE-PROJECT = 98
- PROPOSED PROJECT = 99
- CLOMR and LOMR required because of a rise > 1 ft (even though post project conditions are below effective BFE).

ZONE AE WITH FLOODWAY

- EFFECTIVE BFE = 100.0
- DUPLICATE EFFECTIVE BFE = 100.00
- CORRECTED EFFECTIVE BFE = 98.00
- EXISTING/ PRE-PROJECT = 98.00
- PROPOSED PROJECT = 98.21
- CLOMR and LOMR required because of a rise > 0.00 ft (even though post project conditions are below effective BFE).

Compliance with NFIP Reg. 65.12 required:

Evaluation of alternatives.

Individual property owner notifications regarding the increase in proposed conditions vs. existing conditions BFEs.

No structure impacted certification by the BFE increases.

EXAMPLE 3

- EFFECTIVE BFE = 100
- DUPLICATE EFFECTIVE BFE = 100
- CORRECTED EFFECTIVE BFE = 102
- EXISTING/ PRE-PROJECT = 104
- PROPOSED PROJECT = 104
- No CLOMR required (no rise), but LOMR required after project (change in BFE).
- Also, possible NFIP violation not related to project, as this would seem to indicate post-firm structures were added that increased the BFE at some point in the past. Would need to check the pre-project model to see if any post-firm structures were included without prior LOMRs.
 - FEMA may suspend processing CLOMR/ LOMR until violations have been resolved.

EXAMPLE 4

- EFFECTIVE BFE = 100
- DUPLICATE EFFECTIVE BFE = 103
- CORRECTED EFFECTIVE BFE = 105
- EXISTING/ PRE-PROJECT = 102
- PROPOSED PROJECT = 101
- No CLOMR needed but LOMR needed after project.

ADDITIONAL INFO FOR MT-2 SUBMITTALS

- Pre- submittal meetings with FEMA are available.
- Projects altering the boundaries of a floodway but not causing increases,
 - ❖ No CLOMR needed, but require a LOMR.
- An applicant is not required to fix existing mapping errors or outdated information that were not caused by them. They can if they choose to. If fixes result in changes to the BFE, a LOMR would be required.
- If a duplicate effective model (DEM) differs from the effective FIS/ FIRM, this is acceptable and does not trigger a CLOMR or LOMR.
- CLOMR/ LOMR models need to extend far enough to tie-in with the remaining effective FIRM model within 0.5 feet. This can be waived by FEMA in extenuating circumstances.

REFERENCES

- MT-2 Application Forms And Instructions
- MT-2 Requests, Guidance Doc No. 106
- General Hydrologic Considerations, Guidance Doc No. 71
- General Hydraulics Considerations, Guidance Doc No. 52
- Floodway Analysis And Mapping, Guidance Doc No. 79
- FEMA Flood Map Service Center (MSC)
- Guidance For FEMA's Risk Mapping, Assessment And Planning



Guidance for Flood Risk Analysis and Mapping

MT-2 Requests

November 2023



FEMA

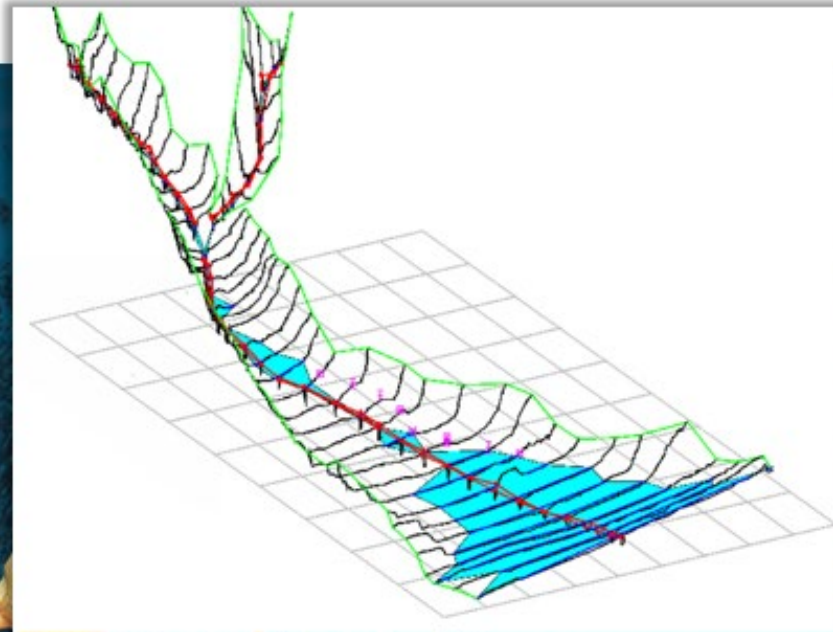
Guidance doc 106



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

Hydraulic-Report-Guidelines

9



Working on Revisions to Hydraulic
Report Guidelines



QUESTIONS?

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