Guidance for Flood Risk Analysis and Mapping

Levee Seclusion

November 2014



This guidance document supports effective and efficient implementation of flood risk analysis and mapping standards codified in the Federal Insurance and Mitigation Administration Policy FP 204-07801.

For more information, please visit the Federal Emergency Management Agency (FEMA) Guidelines and Standards for Flood Risk Analysis and Mapping webpage (http://www.fema.gov/guidelines-and-standards-flood-risk-analysis-and-mapping), which explains the policy, related guidance, technical references and other information about the guidelines and standards process.

Nothing in this guidance document is mandatory other than standards codified separately in the aforementioned policy. Alternate approaches that comply with FEMA standards that effectively and efficiently support program objectives are also acceptable.

Document History

Affected Section or Subsection	Date	Description
First Publication	November 2014	Initial version of new guidance that was previously available as a draft Best Practice document posted to the FEMA Knowledge Sharing Site.

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1.0 Overview

Many of FEMA's flood risk studies for areas with non-accredited levee systems have been delayed while an updated levee analysis and mapping approach was developed and implemented. FEMA Headquarters (HQ) and Regional Office staff are working to move these delayed projects forward while ensuring that all non-accredited levee systems are studied using the updated analysis and mapping approach rather than the previous "without levee" analysis. The option of seclusion mapping was developed to prevent projects from missing programmatic goals before the updated levee analysis and mapping approach could be applied. Seclusion mapping is a temporary solution to allow those studies to release updated flood hazard information for areas not impacted by non-accredited levee systems. This is accomplished by secluding the area impacted by a non-accredited levee system and showing previously effective hazard information for this area.

Seclusion mapping only applies to studies that have been delayed due to the development of the updated levee analysis and mapping approach for which other mapping options are not available. Other options include prioritization of the study (to apply the updated approach within the required timeframe), change requests, obtaining "natural valley" letters from the community when additional procedures are not likely to affect the depiction of risk or keeping expired Provisionally Accredited Levee (PAL) notes rather than changing the depiction of risk. Flood Insurance Studies and Flood Insurance Rate Maps (hereafter referred to as "studies") that are considered to have been delayed due to the development of the updated levee analysis and mapping approach are those that obtained funding prior to the July 2013 release of the Levee Analysis and Mapping guidance, are still active and are unable to release updated hazard information within programmatic measures due to non-accredited levees that require the updated approach.

This document offers recommendations for several issues that were identified during ongoing projects where seclusion mapping was applied. Acknowledging that not all potential issues could be addressed in a single document, future contentious issues and best practices will be vetted and shared via the Flood Control Structure Integrated Program Team (FCS IPT) and posted to FEMA's Knowledge Sharing Site (KSS). The FCS IPT offers a monthly venue to discuss status, best practices and barriers to ongoing projects with a collection of FEMA Subject Matter Experts (SMEs) from FEMA HQ and the Regional Offices, as well as Mapping Partners. To bring a topic to this monthly meeting, please contact David Bascom (david.bascom@fema.dhs.gov).

1.1 Seclusion Mapping Communication

The decision to seclude an area should be reached through coordination between FEMA HQ and the Regional Office that is managing the work. Seclusion mapping is applicable to only a limited number of FEMA flood risk studies; therefore, project teams must use care to communicate when seclusion mapping is an appropriate action when presenting information to communities. The term "seclusion mapping" should only be presented when appropriate, with the applicable limitations and consequences clearly communicated. Communities may not initiate seclusion mapping because the decision to apply seclusion mapping is a decision for the FEMA Project Team. Accordingly, the project team may determine when to distribute the Seclusion Mapping factsheet and when to direct the public to this guidance document only when the project team has determined that seclusion mapping is a viable option for the mapping project. The option of

seclusion mapping should not be presented in public forums or mentioned in documents that are provided to community officials and the public unless FEMA HQ and the Regional Office have decided it is appropriate.

If seclusion mapping is to be applied to a study, the following limitations and consequences should be considered when drafting communications and presentations:

- Seclusion mapping is applicable to studies placed on hold during the development and implementation of the updated levee analysis and mapping procedures.
- Seclusion mapping is a program management solution, not a technical solution, and it will
 only be applied to areas that will be affected by the updated levee analysis and mapping
 procedures.
- FEMA intends to remap these areas and will prioritize studies accordingly, as resources and commitments allow.
- Flood hazards will not be updated immediately within secluded areas; therefore, flood insurance and mitigation requirements will remain the same until a revised study applying the updated levee analysis and mapping procedures revises the flood hazard data and becomes effective.
- The risk within secluded areas should be communicated via community engagement and the use of available non-regulatory products.

To aid with communication of the limited applicability, limitations in mapping and consequences of proceeding with seclusion mapping, a <u>Levee Seclusion Mapping Fact Sheet</u>¹ is available. If seclusion mapping is applied to a study, the following is the recommended public facing explanation of the secluded areas on the FIRM panels:

The subject Flood Insurance Rate Map (FIRM) panel contains an area that has not been demonstrated by the community or levee owner(s) to meet the requirements in the National Flood Insurance Program regulations (44 CFR 65.10²) related to a levee system's capacity to provide 1-percent-annual-chance flood protection. FEMA has implemented updated levee analysis and mapping procedures for areas that have not been demonstrated to meet the requirements of 44 CFR 65.10. Until FEMA is able to initiate a project employing the new procedures to identify updated flood hazards associated with this levee system, the current effective flood hazard information for this area will be used "as-is" in the ongoing study. This is an interim measure until the updated levee analysis and mapping procedures are executed and used to update the flood hazard information for this area on a future revised FIRM. Taking this action allows FEMA to release revised flood hazard information for areas in the community that are not affected by the levee system.

Once FEMA initiates a flood risk study that applies the updated levee analysis and mapping procedures, the flood hazard information shown on the FIRM and in the Flood Insurance Study (FIS) report within the subject area could be significantly revised and result in

¹ The Fact Sheet can be found at: http://www.fema.gov/final-levee-analysis-and-mapping-approach

² A copy of the 44 Code of Federal Regulations (CFR) 65.10 can be found at: http://www.ecfr.gov

changes to floodplain boundary delineations, 1-percent-annual-chance flood elevations and/or flood hazard zone designations.

To document community engagement and understanding of the limitations and consequences of seclusion mapping, a Seclusion Acceptance Letter (see Appendix A) is recommended to be signed by the community. This letter should explain that some panels contain unrevised flood hazard data in the vicinity of levees that are being re-analyzed and that those areas will be remapped as soon as possible. If a schedule for the remapping is known, the letter should indicate this; otherwise it will state that that the time required for FEMA to apply the updated levee analysis and mapping to these areas is not yet certain but communities can be assured that the use of seclusion mapping will be factored into prioritization of future restudies. Additionally, if the community has updated hazard information, they can submit a Letter of Map Revision (LOMR) request to apply the updated levee analysis and mapping approach.

1.2 Use of "Seclusion" Nomenclature

The use of the term "seclusion" should be used sparingly due to the limited applicability. When possible, it should not appear in printed products provided to external stakeholders. The area that is being secluded can be referred to as *retaining the flood hazard information from the current effective FIRM* (if the seclusion FIRM has not yet been published) or *as retaining the flood hazard information from the previous effective FIRM* (if the seclusion FIRM has been published), pending the completion of updated levee analysis and mapping procedures.

2.0 Seclusion Selection Protocol

Several considerations must be taken into account to determine whether seclusion mapping is appropriate for a specific area. This section of the document introduces the tools that are available to aid and document the decision to apply seclusion mapping appropriately. This information will

be useful to Regional Offices when prioritizing projects, as it provides a relatively objective means to rank projects. These results may also inform conversations with communities and stakeholders that are eager to have new projects initiated for their area.

2.1 Seclusion Decision Worksheet

Several considerations must be weighed when assessing the potential application of seclusion to a mapping project. The Seclusion Decision Worksheet, in the form of a Microsoft Excel spreadsheet, has been created and is available on FEMA.gov at this location:

http://www.fema.gov/media-library/assets/documents/32786?id=7577

This tool prompts users to answer 17 questions and then delivers a seclusion mapping "score" and preliminary seclusion assessment. The assessment could be used to

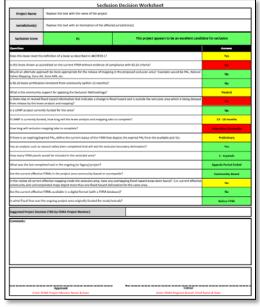


Figure 1: Seclusion Decision Worksheet

generate a score for individual levee systems or for the entire flood risk project. The tool, which is not mandatory, could assist with a decision to move forward with seclusion as a mapping option and will also enable prioritization of seclusion mapping projects when more than one project is being considered. This tool is not intended to provide definitive or absolute answers. It is intended to motivate conversation(s) and provide information that enables an informed decision to be made regarding the use of seclusion as a mapping option.

If Microsoft Excel is not available or the link above cannot be accessed, the score may also be manually generated by using the questions, scoring criteria and blank form provided in Appendix B of this guidance document. If the document is generated, it should be stored on the MIP in the Technical Support Data Notebook (TSDN) folder.

2.2 Expired Provisionally Accredited Levee Designations

When a potential seclusion mapping project has already been subject to the PAL process and the PAL designation either is expiring or has already expired, FEMA HQ has expressed the preference to use the expired PAL note rather than seclusion mapping. The FEMA Regional Office has the discretion to vet the use of seclusion mapping with the FCS IPT in advance of preparing the FIRM. The two choices are to leave the expired PAL note on the FIRM and not use seclusion or replace the PAL note with a seclusion note and map a seclusion boundary.

3.0 Flood Insurance Rate Map

This section provides guidance on the following seclusion mapping elements:

- Determining the proposed location of the seclusion boundary;
- Vetting, if needed, the proposed location of the seclusion boundary with appropriate FEMA SMEs via the FCS IPT;
- Portraying the seclusion boundary (cartographic specifications)
- Adding a FIRM Legend addition on panels containing a seclusion boundary and abbreviated map note; and
- Using seclusion map notes.

3.1 Determining the Proposed Seclusion Boundary Location

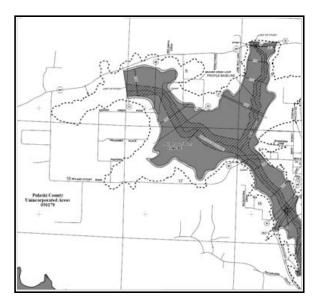
In general, a natural valley analysis will enable users to locate a proposed seclusion boundary, although several other seclusion boundary delineation options are available depending on the circumstances. The options discussed in this subsection are in order of preference, depending on the available information, from highest to lowest. The Mapping Partner can vet the selected seclusion boundary location with levee SMEs via the FCS IPT if the placement is contentious or would benefit from broader input.

Mapping Partners should be aware of two general rules regarding the seclusion boundary location associated with structures and floodplains, as follows:

- Buildings: Ensure that the seclusion boundary does not bisect any residential or commercial structures. This can be accomplished by following roads, community boundaries, non-developed areas, etc.
- **Floodplains:** While it is recognized that in some cases where a seclusion boundary will need to be located within an existing floodplain, whenever possible, the boundary should not bisect existing floodplains.

3.1.1 Use of Natural Valley Analysis

The seclusion boundary may be based on a generalized location of the natural valley extent if an updated study of the flooding source is available and a natural valley analysis has been run. The 1-percent-annual-chance flood elevation derived from the natural valley analysis would be intersected with terrain data and then generalized and adjusted using engineering judgment. The intent is not to provide a highly detailed seclusion boundary that would match the shape of a natural valley analysis floodplain boundary but to use the natural valley analysis as the basis of a more general boundary with a larger buffered extent. Figure 2 demonstrates the natural valley location (on the left) and the resulting location of the generalized/buffered seclusion boundary (on the right).



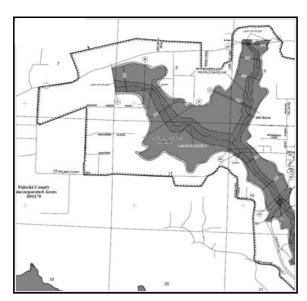


Figure 2: Natural Valley Based Seclusion Boundary

3.1.2 Use of Existing/Preliminary Floodplain Boundary

If an updated natural valley analysis is not available, the existing floodplain boundary may form the basis for the location of the seclusion boundary. The chosen approach would differ depending on whether or not the levee system is shown as providing 1-percent-annual-chance flood protection.

Levee System Shown as Providing 1-Percent-Annual-Chance Flood Protection

There are two options to be considered when using existing floodplain data to place the seclusion boundary.

 Option 1: In the absence of a natural valley analysis, the current residual risk zone (shaded Zone X) shown on the landward side of the levee system would be generalized

and buffered out in a fashion similar to using a natural valley analysis. The boundary would be generalized using engineering judgment where the residual risk zone (shaded Zone X) boundary is currently mapped.

Option 2: The extent of the currently mapped residual risk zone may justify performing an analysis to determine the extent of the floodplain on the landward side of the levee system if flood elevations from the river side of the levee system were extended until they intersected terrain on the landward side of the levee system. This would also require some generalization and engineering judgment, similar to the use of a natural valley analysis or a generalized extent of the residual risk zone.

• Levee System Not Shown as Providing 1-Percent-Annual-Chance Flood Protection

If the levee is not shown as providing 1-percent-annual-chance flood protection, the seclusion boundary may be placed using the floodplain extent and engineering judgment.

3.1.3 Use of "Leveed Area" from National Levee Database

In the absence of a natural valley analysis, residual risk zone analysis or existing levee failure analysis, the U.S. Army Corps of Engineers (USACE) National Levee Database (NLD) could be used as the starting point for establishing the seclusion boundary location. If this option is chosen, the "Leveed Area" boundary from the database may be generalized and buffered, similar to the natural valley analysis. The "Leveed Area" is typically based on extending the top-of-levee crest elevation to a point where it intersects terrain. The USACE "Leveed Area" extent may be accessed through http://geo.usace.army.mil/nld/index.html. Mapping Partners must validate this information from the USACE to ensure the accuracy of the boundary.

3.1.4 Use of Top of Levee Elevation Data

When none of the options listed above are available, the levee crest elevation may be projected until it intersects terrain of similar height. Engineering judgment similar to the previous options should be used. This option should only be used if the secluded area is not too extensive (e.g. more than a mile) due to flat terrain on the landward side of the levee system.

3.1.5 Project-Specific Decision

In the absence of all other options, the Mapping Partner should work with the FEMA Regional Office to derive an acceptable solution for placing the seclusion boundary. This could include an approximate cross section analysis.

3.2 Vetting the Proposed Seclusion Boundary Location

When the Region or Project Team deems escalation of the seclusion boundary placement appropriate, seclusion boundary locations can be vetted through the monthly FCS IPT. If a seclusion boundary will be vetted through the FCS IPT, the Mapping Partner should prepare and submit the Levee Project Plan Assessment form along with screen shots (or equivalent images) to David Bascom to be presented during the next monthly FCS IPT meeting. The Levee Project Plan Assessment form should include a description of the proposed approach for the seclusion boundary placement and any associated issues affecting the mapping. This information will be

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presented and discussed during the next FCS IPT meeting and the outcome of the discussion will be recorded as a future best practice. Subsequent mapping can use previous best practices and discussions to proceed without the need to present a topic that has already been discussed and vetted. The blank Levee Project Plan Assessment form is included in Appendix C along with a completed form with sample data.

For unusual situations and other mapping issues, such as handling non-floodprone communities or secluding the river side of a levee system, the Mapping Partner should refer to Subsection 3.7 of this guidance document and/or discuss the situation with the FCS IPT.

3.3 Cartographic Specifications for the Seclusion Boundary

Table 2 provides cartographic specifications for the seclusion boundary. Note that the directional triangles should face inward toward the secluded area. The hierarchy for line printing is detailed in Subsection 3.7.7.

Map Symbol	Description and Specifications		
	.039" Directional triangle height		
	.08"Directional triangle width		
****	8 Directional triangles per line inch		
	.028" Offset between triangles and line		
	.033" Line weight		

Table 1: FIRM Cartographic Specifications

3.4 FIRM Seclusion Legend

Whenever a seclusion boundary is FIRM shown on а panel. recommended that the levee seclusion legend addition, shown in Figure 3, be placed directly below the Notice to User section on the FIRM panel. This legend addition will support an abbreviated seclusion map note so that all secluded areas can be properly identified and labeled. Customized explanatory notes, as explained in Subsection 3.4.1, can be added to the legend addition to clarify what is shown on the FIRM panel.

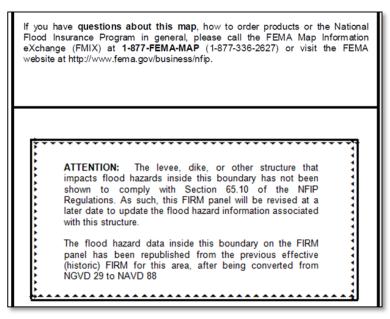


Figure 3: Levee Seclusion Legend

3.4.1 FIRM Seclusion Legend Variables

When the FIRM seclusion legend is used, it may be customized with an additional sentence, as needed, to meet the specific seclusion mapping needs. Figure 4 shows two such examples.

ATTENTION: The levee, dike, or other structure that impacts flood hazards inside this boundary has not been shown to comply with Section 65.10 of the NFIP Regulations. As such, this FIRM panel will be revised at a later date to update the flood hazard information associated with this structure.

The flood hazard data inside this boundary on the FIRM panel has been republished from the previous effective (historic) FIRM for this area, after being converted from NGVD 29 to NAVD 88

Please note that on this panel, the Town of Campti and the Village of Powhatan are excluded from this republished information.

ATTENTION: The levee, dike, or other structure that impacts flood hazards inside this boundary has not been shown to comply with Section 65.10 of the NFIP Regulations. As such, this FIRM panel will be revised at a later date to update the flood hazard information associated with this structure.

The flood hazard data inside this boundary on the FIRM panel has been re-published from the previous effective (historic) FIRM for this area, after being converted from NGVD 29 to NAVD 88.

Please note that on this panel, the extent of the Zone D flood hazard area is also coincident with this boundary.

Figure 4: Custom Seclusion Legend Notes

3.5 Seclusion Map Notes

Table 3 provides FIRM notes to use for two different seclusion scenarios. In some cases, adding an extensive note to the FIRMs may cause it to become illegible. Using Scenario 1, as shown in Table 3, should reduce the map clutter because the note is abbreviated in favor of the description in the seclusion legend, as described in Subsection 3.4.

Table 2: Levee Seclusion Map Notes

Scenario	Map Note (Font = Arial 10)
 Scenario 1 Seclusion boundary appears on the FIRM panel. The seclusion legend is included. Note will be placed as many times as needed depending on how many discrete seclusion areas are shown on the FIRM panel. 	See Notes to User for information about this boundary.
Scenario 2 • Entire panel is secluded (regardless of whether the levee/structure is shown or the seclusion boundary is shown. • The seclusion legend is not included. The datum conversion variable is shown in italics in the map note.	The flood hazard data on this FIRM panel is affected by a levee, dike or other structure that has not been shown to comply with Section 65.10 of the NFIP Regulations. As such, this FIRM panel will be revised at a later date to update the flood hazard information associated with this structure. The flood hazard data shown on this map has been re-published from the previous effective (historic) FIRM for this area [after being converted from NGVD29 to NAVD88].

When the levee seclusion legend is added to the FIRM, it will result in a truncated levee seclusion map note, as detailed in Figure 5 and in Scenario 1 in Table 3.

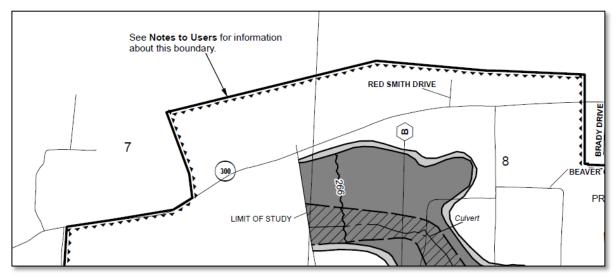


Figure 5: Abbreviated Seclusion Map Note when Seclusion Legend is used

3.6 FIRM Index

The only FIRM Index consideration is for unprinted panels containing secluded areas. The only time a secluded area would exist on an unprinted FIRM panel is if the entire panel was included in the secluded area <u>and</u> the entire effective FIRM panel is unshaded Zone X. Otherwise, the panel must be printed. If a panel meets this criterion, it will carry the custom Panel Not Printed note shown below.

PANEL NOT PRINTED – [reason]: This panel is on the landward side of a levee that has not been demonstrated by the community or levee owner to meet the requirements of Section 65.10 of the NFIP Regulations in 44 CFR as it relates to the levee's ability to provide 1-percent-annual-chance flood protection. FEMA will revise and, if appropriate, print this FIRM panel at a later date to show updated flood hazards associated with the levee. [See <u>FIS Report Technical Reference</u> for a list of acceptable Panel Not Printed reasons]

3.7 Other Mapping Issues

Subsections 3.7.1 through 3.7.9 provide guidance on a variety of other mapping issues to be considered, ranging from how to handle other boundaries (floodplain, jurisdictional, etc.) that are coincident with the seclusion boundary to how to address datum conversions.

3.7.1 Area Not Included

Although an Area Not Included (ANI) within a secluded area would be rare, an ANI will be acceptable in some cases. It should only be used when a multi-county community has either retained its own community-based FIRM or is shown "over-edge" on the adjacent county FIRM.

This is not to be confused with an Area Not Mapped (see Subsection 3.7.4), where gaps are identified when compiling a first-time countywide FIRM.

3.7.2 Non-Floodprone Communities

Communities designated as non-floodprone (having no Special Flood Hazard Areas) that are partially or completely included within a secluded area should be added with unshaded Zone X labels.

3.7.3 Overlapping Flood Hazard Areas on First-Time Countywide FIRMs

Assembling a first-time countywide FIRM may reveal overlapping flood hazard areas between adjacent jurisdictions. When this occurs within a secluded area, the seclusion mapping option is not recommended because some change would need to be made to resolve the overlap. No change can be made to flood hazard information within a seclusion area, other than to maintain road/floodplain relationships and general fitting of the floodplain data to the new base map. If overlaps are identified, the Mapping Partner should consult the FEMA Project Engineer and/or present the situation to the FCS IPT.

3.7.4 Gaps in Flood Hazard Areas on First-Time Countywide FIRMs

Where gaps in flood hazard information exist due to a gap in spatial coverage between two adjacent communities during the assembly of a first-time countywide FIRM, the void should be bounded with a solid boundary (with the same graphic specification as the ANI boundary) and labeled as "Area Not Mapped" until a new project can be initiated to apply the updated levee analysis and mapping procedures. In the FIRM database, the "Area Not Mapped" polygon will be included in s_fld_haz_ar with a domain value of "NP" in the FLD_ZONE field.

3.7.5 Maintaining Floodplain Relationships When a New Base Map Is Used

It is important that the Mapping Partner first make every effort to ensure that the existing floodplain

data is properly georeferenced to minimize the introduction of spatial errors. However, good georeferencing will not eliminate the incidence of effective floodplain data that does not appear to be compatible with the new base map.

When the secluded area is leveraging a new base map, existing floodplain data may need minor adjustments to ensure that floodplain relationships to controlling features are maintained.

For example, where it is clear that the floodplain was intended to stop at a road or to follow a pond shoreline, minor adjustments may be made to the floodplain boundary to preserve the original mapping intent. Significant adjustments, such as the difference between floodplain boundaries and pond shorelines shown in Figure 6, should be avoided. All

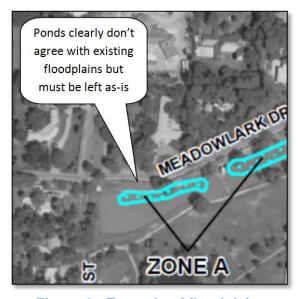


Figure 6: Example of floodplain boundary that should not be adjusted

adjustments to floodplain boundaries should be documented with the FEMA Project Officer and the FCS IPT as a best practice. All adjustments should also be documented in the TSDN for future consideration. In general, the Mapping Partner should avoid any significant modifications to floodplain boundaries for the purpose of fitting the floodplain data to a different base map. Minor adjustments to keep the floodplain boundary aligned with outstanding features and to correct georeferencing issues would be considered acceptable.

As a general rule, the mapping should not add or remove a structure from the floodplain when a new base map is used. If it is determined that the new base information is incompatible with the existing floodplain data, the Mapping Partner should consult the FCS IPT to determine a path forward.

If a floodplain stops at a corporate limit and does not carry over into the adjacent community, the Mapping Partner will need to truncate the floodplain at the corporate limits. If the corporate limits have changed between publications of the FIRM, the Mapping Partner will need to handle each case separately and will often be required to place a Limit of Study label at the former corporate limits.

3.7.6 Effecting a Vertical Datum Conversion Within a Secluded Area

When the effective FIRM for an area that is secluded is referenced to the National Geodetic Vertical Datum of 1929 but the new countywide is referenced to the North American Vertical Datum of 1988, the Mapping Partner should convert the Base Flood Elevations (BFEs) within the secluded area should to NAVD88 using accepted FEMA guidance for the conversion. When this occurs, the Mapping Partner will need to ensure that the seclusion map note indicates that a vertical datum conversion was conducted.

3.7.7 Other Boundaries that are Coincident with the Seclusion Boundary

The order of priority on the printed FIRM for seclusion boundaries that are coincident with other boundaries, along with appropriate map note considerations, is as follows:

First Priority: Political boundary

Second Priority: Seclusion boundary

Third Priority: All other boundaries, including flood zone boundaries

If it appears that the seclusion boundary cannot be differentiated from another boundary (such as Zone D), it is advisable that the Mapping Partner label the other boundary on an as-needed basis.

3.7.8 Secluding the Unprotected (River Side) of the Levee System

Some situations will arise when the unprotected (river) side of the levee system would be secluded. This occurs when there is planned overtopping of the levee or if it is determined that the levee analysis and mapping procedures <u>would</u> change the river side floodplain, regulatory floodway or BFEs. Situations such as this should be discussed with the FEMA Project Officer and the FCS IPT before the Mapping Partner proceeds with seclusion mapping. See Subsection 3.2 for more information on vetting the proposed seclusion boundary with the FCS IPT.

3.7.9 Coastal Issues

No specific coastal issues were identified at the time this document was written. For a coastal flood risk study in which seclusion mapping is being considered, the Mapping Partner should hold a discussion with the FEMA Project Engineer and FCS IPT and possibly, the Coastal IPT, to make sure that all scenarios in this document still apply.

4.0 FIRM Database Considerations

The Mapping Partner should add the seclusion boundary to the S_FLD_HAZ_LN and S_FLD_HAZ_AR feature classes. The seclusion boundary should also comply with the following guidance, depending on which set of specifications is being used for the FIRM and FIS report updates:

- 2003 Specifications: The seclusion boundary will be classified as "Source Boundary"
- 2013 Specifications: The seclusion boundary will be classified as "Other Boundary"

There is no special seclusion zone domain for the fld_haz_ar layer. The Mapping Partner should use source citations to identify which features are secluded. The source citation used in the metadata should refer to the effective information.

4.1 National Flood Hazard Layer (NFHL) Considerations

The seclusion boundary will not translate to the NFHL. Therefore, no NFHL considerations have been established for seclusion boundaries.

5.0 Flood Insurance Study Report

Appendix D provides text to be inserted into the 2003 and 2013 format FIS report when seclusion mapping is applied to a FIRM. Any changes to this language should be coordinated with the FCS IPT.

6.0 FIS and FIRM Transmittal and Notification Templates

Seclusion mapping must be communicated appropriately when developing correspondence documents. This section provides guidance on standardized correspondence for projects that include secluded areas. Each FEMA Regional Office may want to omit or add particular information to the transmittals and notice; however, alterations to the content of the provided templates (other than dates, locations, etc.) should be coordinated with FEMA HQ to ensure consistent messaging about seclusion mapping nationwide. Appendix E of this document provides templates for the following transmittals and notices:

- Preliminary or Revised Preliminary Transmittal: This is used for FIRMs that have secluded areas and can be used for either the Preliminary or Revised Preliminary FIRM showing secluded areas.
- **30-Day Comment Period Transmittal:** This is used for formal notification of an additional 30-day comment period following notification in a local newspaper for FIRMs with secluded areas. This will only be utilized if required by the FEMA Region.

• **30-Day Comment Period Newspaper Notice:** This is used in conjunction with the 30-day Comment Period Transmittal for public notification of the additional 30-day comment period for FIRMs with secluded areas. This will only be utilized if required by the FEMA Region.

Issuing a Revised Preliminary FIRM and FIS report for projects that include seclusion can result in changes in the previously published *Federal Register* Proposed Rule or Flood Hazard Determination Notice. This requires close coordination with FEMA HQ to determine how to best resolve the issue before moving forward with finalizing the FIRM and FIS report. The *Federal Register* Withdrawal and Correction Notice examples discussed below were developed as a result of a Revised Preliminary FIRM and FIS report being issued for projects that include seclusion and have been approved by FEMA HQ. A link to that *Federal Register* is shown below:

http://www.gpo.gov/fdsys/pkg/FR-2014-04-29/pdf/2014-09746.pdf

- Withdrawal Notice-1: This notice will be prepared if the Revised Preliminary FIRM and FIS report incorporates new or revised flood hazard data on the previously published Federal Register Proposed Rule outside the secluded area. This falls under the typical protocols of FEMA's Expanded Appeals Process (EAP) i.e. a Revised Preliminary that is not a result of incorporating revisions based on a legitimate appeal and requires withdrawal of the previously published Federal Register Proposed Rule and new due process under the EAP. An example for Doña Ana County, New Mexico and Incorporated Areas Federal Register may be accessed at the web address shown above.
- Withdrawal Notice-2: This notice will be prepared when all previously published proposed BFEs for all communities included on a given FIRM are being reverted to those on the effective FIRM. No additional appeal period will be required, as long as no additional changes are made due to information being reverted to the effective. An example for Natchitoches Parish, Louisiana and Incorporated Areas may also be accessed at the Federal Register web address shown above.
- Correction Notice: This notice will be prepared when the flood hazard information for only some flooding sources is being reverted to the information shown on the effective FIRM and no further changes apply to the remaining previously published BFEs/locations; no additional appeal period will be required. This Correction Notice must be published before moving forward with the Letter of Final Determination. An example for Pulaski County, Arkansas and Incorporated Areas may also be accessed at the Federal Register web address shown above.

7.0 Letters of Map Change

Subsections 7.1 and 7.2 provide guidance associated with MT-1 and MT-2 determinations, respectively.

7.1 MT-1 Procedures

MT-1 determinations should be issued within secluded areas. The determination will be based on the flood hazard zones shown on the effective FIRM panels and the BFEs listed in the FIS report, even when updated flood hazard information is available as non-regulatory products. The wording below should be inserted within the second Legal Description box available in the Mapping Information Platform (MIP) when the levee system is shown to be accredited within the secluded area. No additional considerations are required if the secluded levee system is not shown to be accredited. To underscore that the effective flood hazard information has been republished from the previous effective (Historic) FIRM, the date of the flood hazards shown in the secluded area should be listed where indicated in the wording below. Other Additional Considerations paragraphs will also be included, when appropriate.

Secluded Area MT-1 Removal:

The subject property is located on the effective FIRM in an area, republished from the [insert previous FIRM date(s)] FIRM, showing protection from the 1-percent-annual-chance flood (base flood) by a levee system or other flood protection system that does not have the necessary supporting data and/or documentation to comply with Section 65.10 of the NFIP regulations. Areas landward of levee systems are subject to possible structure failure or overtopping, a risk that applies to the subject property. Levees reduce the risk of flooding but they do not eliminate it. FEMA strongly encourages citizens living and working behind levees to understand their flood risk and take actions to reduce the risk to their families, businesses and property. Such actions may include the voluntary purchase of flood insurance. Because most homeowner's insurance policies do not cover damage from floods, FEMA offers federally backed flood insurance through the NFIP.

This **[LOMA/LOMR-F]** determination is based on the flood hazard data presently available, republished from the historic FIRM. This determination will be superseded when the flood hazard information for this area is revised through the issuance of a new FIRM for your community. The requirement for the mandatory purchase of flood insurance will then be based on the updated flood hazard information.

Secluded Area MT-1 Non-Removal:

The subject property is located on the effective FIRM in an area, republished from the [insert previous FIRM date(s)] FIRM, landward of a levee system or other flood protection system that does not have the necessary supporting data and/or documentation to comply with Section 65.10 of the NFIP regulations. Areas landward of levee systems are subject to possible structure failure or overtopping, a risk that applies to the subject property. This [LOMA/LOMR-F] determination is based on the flood hazard data presently available, republished from the historic FIRM. This determination will be superseded when the flood hazard information for this area is revised through issuance of a new FIRM for your community. The requirement for the mandatory purchase of flood insurance will then be based on the updated flood hazard information.

7.2 MT-2 Procedures

Any Letter of Map Revision (LOMR) or Conditional Letter of Map Revision (CLOMR) request should cover the entire secluded area. MT-2 requests for portions of secluded areas should be

vetted through the FCS IPT. For processing MT-2 applications for secluded areas, refer to procedures for processing LOMRs and CLOMRs using updated levee analysis and mapping procedures via the MT-2 process. LOMR requests to accredit the entire levee system will be processed using the standard procedures.

8.0 Sharing of Best Available Data within a Secluded Area

In certain cases, FEMA may be aware of updated flood hazard or risk information inside the secluded area and may determine that it is appropriate to share this information as best available data. This data would be considered intermediate until the updated levee analyses and mapping procedures are executed. Subsections 8.1 through 8.5 offer suggestions on how to communicate best available flood hazard and flood risk information within a secluded area.

8.1 Identification of Data and Products that May Be Shared

When deciding to apply seclusion mapping to a project, special consideration should be given to whether new flood hazard/risk data are available in the secluded area. These data could include any of the following:

- Existing data from another agency that has passed the minimum standards for use in sound floodplain management but not those for regulatory flood elevation (insurance) purposes;
- Draft flood hazard data developed for a FIRM revision that was put on hold, which were not
 incorporated into the FIRM due to the updated levee analysis and mapping procedures and
 are for an area now subject to seclusion;
- Preliminary flood hazard data developed for a FIRM revision that was sent out for preliminary review but was subsequently put on hold for the updated levee analysis and mapping procedures;
- Non-regulatory flood risk data and products (i.e., Changes Since Last FIRM, Areas of Mitigation Interest, Depth & Analysis grids; Hazus flood loss data, Flood Risk Report, Flood Risk Map, Flood Risk Database) based on effective FIRM and FIS report data; and
- Non-regulatory flood risk data and products based on an in-development or preliminary FIS and FIRM.

If new data are available, the FEMA Project Officer will need to determine if the data should be provided to communities. Some considerations could include: (a) whether the new data shows a higher hazard/risk, (b) if it is anticipated the new data will be similar to what will be shown after subsequent map revisions or (c) is the new data is considered more accurate.

8.2 Initial Messaging and Concurrence for Sharing of Best Available Data

A representative of the project team should discuss the best available flood hazard and/or flood risk data with the affected community. This discussion should occur when seclusion mapping is first communicated to the community and during each subsequent seclusion discussion. The project team should ensure that the community understands that the best available data have not

gone through public review and are not to be considered regulatory, and that this data may not be used when the updated levee analysis and mapping procedures are applied. The FEMA Regional Office may also determine, if it is appropriate, to discuss the methodology for the release of best available data with the affected communities.

8.3 Methodology for Sharing Best Available Data

Depending on the situation, different methods for risk/hazard communication may apply:

- Work Maps If delineations of the new flood hazards are available, the FEMA Regional
 Office may elect to provide work maps to the community. The community can then use the
 work maps as best available data until the subject area is restudied.
- Non Regulatory Products Communities may benefit from additional information to communicate risk and mitigate hazards in secluded areas until the updated levee analysis and mapping procedures are executed. The FEMA Regional Office may elect to produce and release non-regulatory products for these locations.

8.4 Protocol and Additional Messaging for Sharing Best Available Data

In all options, additional communication with community leaders is needed to discuss the results and options for disseminating best available flood hazard/risk data to homeowners and other community stakeholders. It is recommended that the new data be discussed during the Flood Risk Review Meeting, along with the regulatory information being provided. The following is offered as guidance for messaging at the Flood Risk Review Meeting:

- Discuss any specifics regarding the origin of the data. Discuss whether the data are based on preliminary, draft, effective or unmapped best available data and how the data relate to seclusion data.
- Inform attendees that data in the secluded area is considered the best available at this time, is not regulatory and may or may not be used during future mapping activities.
- Discuss the timeline and procedures for applying the levee analysis and mapping procedures and how they will affect this particular study. Some considerations are as follows:
 - Impacts from different levee analysis and mapping scenarios.
 - Impacts from internal drainage.
- Discuss the use of the data as best available data and describe how the data can be used to
 develop higher standards and to disseminate risk information. Clarify that the data should not
 be used for permitting, as the flood hazard data will be revised in the future. Relay that
 minimum NFIP standards are based on the effective FIRM but the effective FIRM will change
 once the updated levee analysis and mapping procedures are applied for the subject area.
- State that the data have not been subject to the statutory due-process requirements and thus
 are being provided only to encourage sound floodplain management that leverages the
 unofficial best available data. Clarify that the best available data cannot and should not be
 used for flood insurance premium rating purposes.
- The following message should accompany all data, at a minimum:

The data contained herein should be used as best available data in the coverage area. These data will be revised in an upcoming reanalysis of the subject area; therefore, while these data can be used for sound floodplain management purposes, it is not advisable to use the data for permitting.

8.5 Disaster Data Requirements and Considerations

Additional consideration and discussion will be needed if a disaster situation is encountered. To assist stakeholders with recovery and create a more resilient community, FEMA must provide them with access to the best available data that defines their hazard exposure and risk. This could be data mentioned above or new data created following the disaster. However, the data provided to the community should not be limited to what is currently shown in the secluded area.

9.0 Coordinated Needs Management System (CNMS) Considerations

To reflect the fact that FEMA intends to restudy the secluded area, the flooding source along levee systems where the seclusion mapping option has been applied should be noted in CNMS with a Validation Status of 'UNVERIFIED' and a Status Type of 'TO BE STUDIED.' For riverine flooding sources, Critical Element C3 - Model methodology no longer appropriate based on Guidelines and Standards should be marked as failing in the CNMS database and it should be noted that the study includes a secluded levee and that the area needs to be restudied using the new procedures for non-accredited levees.

10.0 Future Considerations

Seclusion mapping has been developed to address program management challenges created by the studies with levee systems that were delayed while the updated levee analysis and mapping procedures were developed. This program management solution affects mapping, the prioritization of future studies and outreach while setting a precedent that, if not carefully monitored and messaged, may increase FEMA's programmatic risk. To address the potentially lasting impacts, seclusion mapping is only available for use in studies that were directly impacted by the development of the updated levee analysis and mapping procedures and that do not have a more appropriate option with which to proceed.

No one solution can address all mapping challenges associated with seclusion mapping, nor can one set of guidance apply to every situation. Rather, mapping solutions will need to be addressed on a case-by-case basis through close coordination between FEMA HQ, FEMA Regional Offices and Mapping Partners via the FCS IPT. This coordination will ensure that FEMA HQ is aware of and has input into how and where seclusion mapping is applied and can keep a record of best practices as they are developed.

FEMA HQ will also need to identify and provide guidance to assist FEMA Regional Offices in prioritizing areas that have been secluded to ensure that the flood hazard information is updated in a timely manner. Information within the FIS report and notes to users on the FIRM panels explicitly state that secluded areas will be subject to remapping; however, no set timeframe has been established. Communication and management of public expectations will be vital to ensure that the technical credibility of the FIRMs is not called into question. Outreach efforts may also require

set language to explain that seclusion mapping does not apply to other areas or situations. The public may perceive that seclusion mapping is a venue to delay or stop changes to the depiction of flood hazards, regardless of the actual risk. FEMA must communicate with affected communities regarding the decision to apply seclusion mapping but not present it as an option that communities can request for future studies.

The publication of FIRM panels with previously effective hazards when FEMA has updated information creates a programmatic risk. If a Special Flood Hazard Area is underrepresented, communities and property owners may not have a complete picture of their risk. While available information may be shared with the community, it may not be used to inform construction standards or to identify property owners who should consider flood insurance. These issues must be addressed with any communication plans created for seclusion mapping.

The precedent set by seclusion mapping is a necessary program management solution that will require FEMA HQ to closely monitor the mapping, communication and prioritization of studies. The procedures within this guidance offer a framework to ensure consistent messaging and application of seclusion mapping while managing the risk to the program. This framework will be reinforced and developed based on best practices moving forward, as directed by FEMA HQ and vetted through the FCS IPT. FEMA must acknowledge and prepare for the challenges, advantages and potentially lasting effects of seclusion mapping.

Guidance for Flood Risk Analysis and Mapping

Levee Seclusion – Appendix A

Seclusion Acceptance Letter Template

November 2014



<FEMA Project Monitor Name>

<FEMA – Region 6 Offices>

< Mitigation Division - Risk Analysis Branch>

<Address Line One>

<Address Line Two>

Dear <FEMA Project Monitor Name>,

We are aware that the Federal Emergency Management Agency (FEMA) has been working on updated Flood Insurance Rate Maps (FIRM) for <Enter Project Name>. The flood risk project and FIRM update were placed on hold in 2011 for the preparation of FEMA's revised levee analysis and mapping approach. We understand that the <Enter Levee System(s) Name> does not meet the requirements outlined in the Title 44, Code of Federal Regulations, Section 65.10 (44CFR65.10), and therefore it is considered a non-accredited levee system(s) at this time.

It is our understanding that using the Seclusion Mapping Process, flood risk in the vicinity of the non-accredited levee systems will include:

- A boundary will be added to the FIRMs to depict the area secluded from the FIRM update
- A depiction of flood risk based on the information shown on the current effective FIRM <Enter Panel Number(s) and Map Date(s) for clarity>
- A note will be added inside the seclusion boundary stating that the levee system does not currently meet the requirements outlined in 44CFR65.10.

We understand that the areas in the vicinity of the non-accredited levee systems will not be mapped differently from the current effective FIRM for our community.

<Community - Add information about on-going certification efforts, if applicable>

Community - Add information about on-going construction activities in the vicinity of the levee, if applicable>

By utilizing the Seclusion Mapping Process to move our FIRM update forward, we understand:

- This process will result in updated set of FIRM panels for the community
- The resultant FIRMs will require community adoption prior to the effective date
- FEMA will return to analyze the flood risk in the vicinity of the non-accredited levee systems using the updated levee analysis and mapping procedures in the future through another FIRM update.
- FEMA will engage with the community leaders and levee owners to collect local input to inform a future FIRM update of the data in the vicinity of the seclusion boundary.

We ask that FEMA proceed with the FIRM update to allow our community the use of the best available flood risk information throughout the remainder of the project area.

If you need additional information or assistance, please contact <community representative name> at phone number and/or email>.

Sincerely,

Community Representatives>

Guidance for Flood Risk Analysis and Mapping

Levee Seclusion – Appendix B Seclusion Decision Form

November 2014



The following are instructions for filling out the Levee Seclusion Decision form for those who cannot access or use the Microsoft Excel file which automates the calculation.

- **Step 1:** Fill out the Project Name and affected jurisdictions in the space provided.
- <u>Step 2:</u> Provide a score for each of the 17 questions based on the information in the scoring column. Red numbers represent negative values and black numbers represent positive values. Remove the choices in each cell as the values are added.
- **Step 3:** Tally the score and note it in the "Total Score" field toward the bottom of the form.
- Review your results to determine if the project is a good candidate for the application of the Levee Seclusion Methodology seclusion mapping option. As a general guide, values less than 0 are not good candidates for seclusion mapping, values from 1 to 50 are moderate candidates for seclusion mapping, and values greater than 50 are good candidates for seclusion mapping.
- <u>Step 5:</u> Add comments to clarify the values given and identify any additional considerations not covered by the scoring, as needed, at the bottom of the form.
- **Step 6:** Indicate the recommended project decision at the bottom of the form in the space provided.
- **Step 7:** Print the form and collect required signatures for Regional approval.
- **Step 8:** Scan the signed form and include it in project paperwork for future reference.

The following pages include a template and a scoring guide for those who cannot access the Excel tool or who are unable to use Excel.

Project Name			
Jurisdiction(s)			
Question			Score
Does this levee meet the definition of	a levee as described	d in 44CFR 59.1?	
Has this levee been shown as accred compliance with 44CFR 65.10 criteria	?		
Would an alternate approach be more seclusion area? Examples would be			
Is 44CFR 65.10 levee certification imr	ninent from commur	nity (within 12 months)?	
What is the community support for ap option?		5	
		that indicates a change in flood hazard rom release by the levee analysis and	
Has a LAMP pilot project currently be	en funded for this ar	ea?	
If a LAMP pilot project has been funde complete?	ed, how long will the	levee analysis and mapping take to	
How long will seclusion mapping take	to complete?		
the expired PAL and provide a score I	pased on that descri	•	
Has an analysis such as natural valley boundary?	y been completed th	at will aid in determining the seclusion	
How many FIRM panels would be incl	uded in the seclude	d area?	
What was the last completed task in the	ne ongoing (or legac	ey) project?	
Are the current effective FIRMs in the	project area commu	unity-based or countywide?	
For first time countywide FIRMs, were compiling the data from adjacent juris		pping flood hazard data found when	
Are the current effective FIRMs in a d	igital format (with a F	FIRM database)?	
In what Fiscal Year was the ongoing p	project area originally	y funded for study/restudy?	
		Total Score	
Recommended Project Decision (TBD by FEMA Project Engineer):		ve project forward using Seclusion move project forward using Seclusion Other - See Comments Below	
Comments:			
Approved	En vin en Neve e	Concur	Dun : '
Replace this text with FEMA Project Engineer Name & Replace this text with FEMA Replac			Branch

Seclusion Decision Tool Scoring Guide

Question	Scoring
Does this levee meet the definition of a levee as described in 44CFR 59.1?	Yes = 1 No = (100)
Has this levee been shown as accredited on the current effective FIRM without evidence of compliance with 44CFR 65.10 criteria?	Yes = 10 No = (10)
Would an alternate approach be more appropriate for the release of mapping in the proposed seclusion area? Examples would be PAL, Natural Valley Mapping, Zone AR, Zone A99, etc.	Yes = (50) No = 5
Is 44CFR 65.10 levee certification imminent from community (within 12 months)?	Yes = (50) No = 5
What is the community support for applying the seclusion mapping Seclusion Methodology option?	Supporting = 10 Neutral = 0 Opposing = (20)
Is there new or revised flood hazard information available that indicates a change in flood hazard and is outside the seclusion area which is being delayed from release by the levee analysis and mapping?	Yes = 20 No = (20)
Has a LAMP pilot project currently been funded for this area?	Yes = (20) No = 10
If a LAMP pilot project has been funded, how long will the levee analysis and mapping effort take to complete?	6 – 12 Months = (10) 13 – 18 Months = 5 19+ Months = 10 N/A = 0
How long will seclusion mapping take to complete?	6 – 12 Months = 10 13 – 18 Months = 0 19+ Months = (10) N/A = 0
If there is an expiring/expired PAL designation, define the current status of the FIRM that depicts the expired PAL from the available pick list.	Mapping has not started = 20 Preliminary = 5 Effective = (10) N/A - No Expired PAL = 0

Question	Scoring
Has an analysis such as natural valley been completed that will aid in determining the seclusion boundary delineation?	Yes = 10 No = 1
How many FIRM panels would be included in the secluded area?	1 – 4 Panels = 5 5 – 10 Panels = 3 11+ Panels = 1
What was the last completed task in the ongoing (or legacy) project?	Discovery Complete = (10) Engineering Analysis Complete = 5 Draft Maps Created = 7 Preliminary FIRM Created = 9 Preliminary FIRM Released = 11 Appeals Period Initiated = 13 Appeals Period Ended = 15 Appeals Resolved = 17 N/A = 0
Are the current effective FIRMs in the project area community-based or countywide?	Community-Based = 10 Countywide = 0
For first time countywide FIRMs, were any areas of overlapping flood hazard data found when compiling the data from adjacent jurisdictions?	Yes = (20) No = 0
Are the current effective FIRMs in a digital format (with a FIRM database)?	Yes = 0 No = 20
In what Fiscal Year was the ongoing project area originally funded for study/restudy?	Before FY04 = 10 Between FY04 and FY08 = 5 Between FY09 and FY11 = 3 FY12 or FY13 = 1 FY14 or After = (10) Unfunded = (50)

Guidance for Flood Risk Analysis and Mapping

Levee Seclusion – Appendix C

Levee Project Plan Assessment Form

November 2014



The following two pages provide a template for filling out the Levee Project Plan Assessment form as well as a prototype sample filled out for reference.

	Levee Project Plan Assessment						
Project Pl	Project Plan Low Risk Project Plan High Risk						
Modificati	on Recommend	ded		Modification N	Not Reco	mmended	
Date				HQ Reviewer			
	HQ Pro	gram Lead	Evaluat	ion and Reco	mmenda	ation	
Per applical	ble Agency and Prog	gram requireme		commendation is be itions	eing made v	with respect to the	following
			Review	Details			
Task Orde	er / Grant #			Project Name			
Region				Grantee			
Year Initia	nted			Recommenda Request Date			
Documen Reviewed		I Grant Evniration					
		Ва	ckgroun	d on Delay			
		F	Propose	d Change			
		E	Balance	of Funds			
Risk Assessment (Schedule, Budget / Fund, Contractual, Quality)							

	Sample Levee Project Plan Assessment				
Projec	ct Plan Low Risk		Project Plan High Risk		
Modification Recommended Modific		Modification I	Not Recommended		
Date	June 20, 2014		HQ Reviewer	FEMA SME	

HQ Program Lead Evaluation and Recommendation

Per applicable Agency and Program requirements, this recommendation is being made with respect to the following conditions:

- The Period of Performance (PoP) may only be extended to Sept 30, 2015.
- All funds must be spent by Sept 30, 2015.

The Program recognizes that the original scope cannot be delivered by Sept 30, 2015. The modified schedule proposed by the Cooperative Technical Partner (CTP) is consistent with the Program's goals and objectives. The CTP is able to accomplish the modified schedule by the new expiration date (Sept 30, 2015).

Review Details						
Task Order / Grant #	EMD-200X-GR- 0000	Project Name	Flood County, USA FY## REG (case 10-00-0001S)			
Region	IV	Grantee	State DNR			
Year Initiated	2010	Recommendation Request Date	June 16, 2014			
Documentation Reviewed Date	June 20, 2014	Current Contract / Grant Expiration Date	September 18, 2014			

Background on Delay

Per the April 2011 memo regarding levee analysis and mapping, this project was placed on hold. The original scope of work includes flood hazard data development culminating in an updated effective countywide flood map for Flood County, USA. Under current Program conditions, the remaining original scope cannot be accomplished by the end of the period of performance. For additional information, see attached request from CTP.

Proposed Change

The CTP proposes modifying the schedule and deliverables to complete a partial countywide which allows FEMA to move forward with updating flood hazard data/maps for the areas unaffected by levees. The final deliverable will include issuing preliminary FIS and FIRM panels in partial countywide format and preparing draft Flood Hazard Determination notifications. The final due date coincides with the proposed grant end date of Sept 30, 2015. For additional information, see attached request from CTP.

Balance of Funds

State Department of Natural Resources (DNR)	. \$5.05
Production and Technical Services (PTS)	. \$5.05
Total	. \$10.10

All funds are code 44. The proposed change will be completed with no cost increase. The balance of funds is sufficient to complete the project.

Risk Assessment (Schedule, Budget / Fund, Contractual, Quality)

The proposed schedule extends beyond the Performance Period for the Cooperative Agreement. FEMA's Project Officer will work with ST DNR and FEMA's Grants Management Business Branch to extend the Performance Period. This will occur approximately 90 days before expiration.

Guidance for Flood Risk Analysis and Mapping

Levee Seclusion – Appendix D

FIS Report Seclusion Paragraphs and other Relevant Information

November 2014

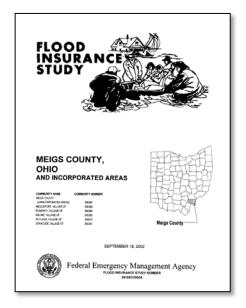


2002 FIS Report Format Levee Seclusion Paragraphs and Notes

When processing an FIS report in the 2002 FIS Report format, the following paragraphs below are to be included and associated variables, are shown highlighted in yellow, should be updated as appropriate; the remainder of the notes are intended to be used as-is.

Notes to Flood Insurance Study Users

ATTENTION: On FIRM panel[s] [insert FIRM panels number(s)], the [insert flooding source or levee name] levee[s] [has/have] not been demonstrated by the community or levee owner(s) to meet the requirements of Section 65.10 of the NFIP regulations in 44 CFR as it relates to the levee's capacity to provide 1-percent- annual chance flood protection. The subject areas are identified on FIRM panels (with notes and bounding lines) and in the FIS



report as potential areas of flood hazard data changes based on further review.

FEMA has updated the levee analysis and mapping procedures for non-accredited levees. Until such time as FEMA is able to initiate a new flood risk project to apply the new procedures, the flood hazard information on the aforementioned FIRM panel(s) that are affected by the [insert flooding source or levee name] levee[s] is [are] being added as a snapshot of the prior previously effective information presented on the FIRMs and FIS reports dated [insert FIS /FIRM date(s)]. As indicated above, it is expected that affected flood hazard data within the subject area could be significantly revised. This may result in floodplain boundary changes, 1-percent- annual -chance flood elevation changes, and/or changes to flood hazard zone designations.

The effective FIRM panels (and the FIS report) will again be revised at a later date to update the flood hazard information associated with the [insert flooding source or levee name] levee[s] when FEMA is able to initiate and complete a new flood risk project to apply the updated levee analysis and mapping procedures.

Section 1.1 Purpose of Study

Please also note that FEMA has identified one or more levees in this jurisdiction that have not been demonstrated by the community or levee owner(s) to meet the requirements of 44 CFR Section 65.10 of the NFIP regulations (44CFR65.10) as it relates to the levee's capacity to provide 1-percent annual-chance flood protection. As such, temporary actions are being taken until such time as FEMA is able to initiate a new flood risk project to apply new levee analysis and mapping procedures. Please refer to the Notice to Flood Insurance Study Users page at the front of this FIS report for more information.

Section 2.4 Flood Protection Measures

Within this jurisdiction, there are one or more levees that have not been demonstrated by the communities or levee owner(s)to meet the requirements of 44 CFR Part 65.10 of the NFIP regulations as it relates to the levee's capacity to provide 1-percent- annual -chance flood protection. Please refer to the Notice to Flood Insurance Study Users page at the front of this FIS report for more information.

Section 3.0 Engineering Methods

Note: Within this jurisdiction there are one or more levees that have not been demonstrated by the community or levee owner to meet the requirements of 44CFR 65.10 as it relates to the levee's capacity to provide 1-percent- annual -chance flood protection. Please refer to the Notice to Flood Insurance Study Users page at the front of this FIS report for more information.

Section 4.1 Floodplain Boundaries

Within this jurisdiction there are one or more levees that have not been demonstrated by the community or levee owner(s) to meet the requirements of 44CFR Part 65.10 of the NFIP regulations as it relates to the levee's capacity to provide 1 percent annual chance flood protection. As such, the floodplain boundaries in this area were taken directly from the previously effective FIRM and are subject to change. Please refer to the Notice to Flood Insurance Study Users page at the front of this FIS report for more information on how this may affect the floodplain boundaries shown on the FIRM.

Section 6.0 Flood Insurance Rate Map

Within this jurisdiction there are one or more levees that have not been demonstrated by the community or levee owner(s) to meet the requirements of 44CFR Part 65.10 of the NFIP regulations as it relates to the levee's capacity to provide 1 annual chance flood protection. Please refer to the Notice to Flood Insurance Study Users page at the front of this FIS report for more information on how this may affect the FIRM.

Flood Profile Note

NOTE: This Flood Profile lies within an area that has not been updated on the FIRM at this time due to the presence of one or more levees that have not been demonstrated to meet the requirements of 44CFR Part 65.10 of the NFIP regulations. Please refer to the Notice to Flood Insurance Study Users page at the front of this FIS for more information.

Floodway Data Table footnote

This cross-section lies within an area that has not been updated on the FIRM at this time due to the presence of one or more levees that have not been demonstrated to meet the requirements of 44CFR Part Section 65.10 of the NFIP regulations. Please refer to the Notice to Flood Insurance Study Users page at the front of the FIS report for more information.

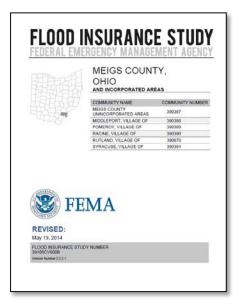
2013 FIS Report Format Levee Seclusion Paragraphs and Notes

When processing an FIS report in the 2013 FIS format, seclusion paragraphs are shown below with the variables highlighted in yellow.

SECTION 1.0 – INTRODUCTION

1.4 Considerations for Using this Flood Insurance Study Report

Previous FIS Reports and FIRMs may have included one or more levees that were accredited as reducing the risk associated with the 1-percent-annual chance flood based on the information available and the mapping standards of the NFIP at that time. For FEMA to continue to accredit the identified levee(s), the levee(s) must meet the criteria of NFIP requirements cited in the Code of Federal Regulations at, Title 44, Chapter 1, Section 65.10 (44CFR 65.10), titled



"Mapping of Areas Protected by Levee Systems." Since the status of levee(s) is subject to change at any time, the user should contact the appropriate agency for the latest information regarding the levee(s) presented in Table 9 of this FIS Report. For levees owned or operated by the U.S. Army Corps of Engineers (USACE), information may be obtained from the USACE national levee database. For all other levees, the user is encouraged to contact the appropriate local community.

Please also note that FEMA has identified one or more levees in this jurisdiction that have not been demonstrated by the community or levee owner to meet the requirements of 44CFR Part 65.10, of the NFIP regulations as it relates to the levee's capacity to provide 1percent annual chance flood protection. As such, there are temporary actions are being taken until such time as FEMA is able to initiate a new flood risk project to apply new levee analysis and mapping procedures to leveed areas. These temporary actions involve using the flood hazard data shown on the previous effective FIRM exactly as shown on that prior FIRM and identifying the area with bounding lines and special map notes. If a vertical datum conversion was executed for the county, then the Base Flood Elevations shown on the FIRM will now reflect elevations referenced to the North American Vertical Datum of 1988 (NAVD88). These levees are on FIRM panel(s) [insert FIRM panels number(s)], on the [insert flooding source or levee name] and are identified on FIRM panels as potential areas of flood hazard data changes based on further review. Please refer to Section 4.4 of this FIS report for more information.

SECTION 2.0 – FLOODPLAIN MANAGEMENT APPLICATIONS

2.1 Floodplain Boundaries

Within this jurisdiction, there are one or more levees that have not been demonstrated by the communities or levee owners to meet the requirements of 44CFR Part 65.10 of the NFIP regulations (44 CFR 65.10) as it relates to the levee's capacity to provide 1-percent- annual chance flood protection. As such, the floodplain boundaries in this area are subject to change. Please refer to Section 4.4 of this FIS for more information on how this may affect the floodplain boundaries shown on this FIRM.

TABLE 9: LEVEES

Note to Mapping Partners: Levees that have not been demonstrated to meet the requirements of 44CFR 65.10 should be properly identified in this table.

4.4 Levees

Please note that FEMA has identified levees in this jurisdiction that have not been demonstrated by the community or levee owner to meet the requirements of 44CFR Part 65.10 of the NFIP regulations as it relates to the levee's capacity to provide 1-percent-annual-chance flood protection. As such, the existing flood hazard analysis in the affected areas has been carried forward from the previously-printed effective FIRM panel(s) and the area has been clearly identified on the FIRM panel with notes and bounding lines. This has been done to inform users that a temporary mapping action has been put in place until such time as FEMA is able to initiate a new flood risk project to apply new flood hazard mapping procedures for leveed areas. These levees occur on FIRM panel(s) [insert FIRM panels number(s)], on the [insert flooding source or levee name] and are identified on the FIRM panel(s) as potential areas of flood hazard data changes based on further review. Levees and their accreditation status are listed in Table 9 of this FIS report.

TABLE 24: Floodway Data Table Footnotes

This cross-section lies within an area that has not been updated on the FIRM at this time due to the presence of levees that have not been demonstrated to meet the requirements of NFIP Regulation 44CFR 65.10. Please refer to the Section 4.4 of this FIS report for more information.

Flood Profile Note:

NOTE: This Flood Profile lies within an area that has not been updated on the FIRM at this time due to the presence of a levee that has not been demonstrated to meet the requirements of Part 65.10 of the NFIP regulations. Please refer to the Section 4.4 of this FIS report for more information.

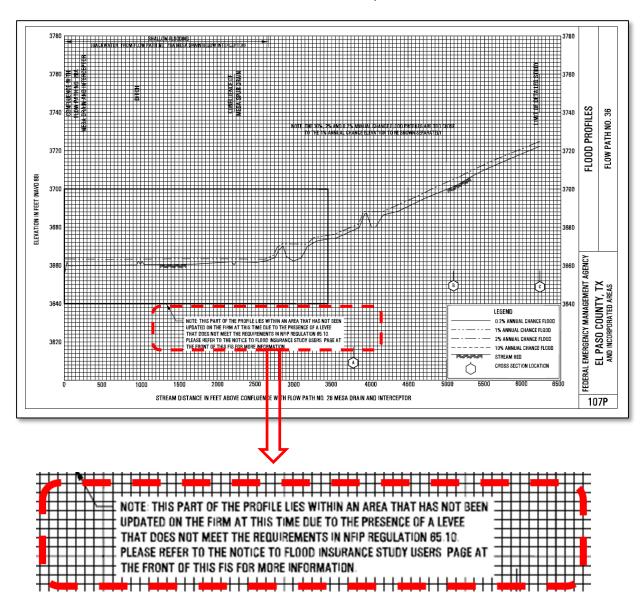
Flood Profiles and Floodway Data Tables

In some circumstances, a seclusion boundary may cover a portion or all of a flooding source that was restudied and will be shown as such on the non-secluded portion of the FIRM. It will be necessary to seclude information for these streams in this case. Additional information and notes must also be added to the FIS which are covered in other documentation. Below are three locations where data may need to be secluded, including information and examples and enlarged examples of each:

Floodway Data Table: For the Floodway Data table, a note can be used as shown in the
example below. If a flooding source is partially secluded the note can be applied to specific
cross sections. If a cross section is partially secluded, a secluded and non-secluded entry
must be shown by including the cross section twice and making a reference to the
seclusion note for the secluded version.

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION REGULATORY WITHOUT WITH				
CROSS SECTION ³	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORI	FLOODWAY FEET (NAVD 88)	FLOODWAY	INCREASE	
Arkansas River			,	,					
A	97.1	4,970	*	8.2	232.0	232.0	232.9	0.9	
В	102.98	5,355	*	8.8	236.3	236.3	237.2	0.9	
C	107.2	10,400	*	8.1	239.8	239.8	240.6	0.8	
D	113.1	3,463	*	8.0	247.5	247.5	248.4	0.9	
E	115.4	3,630	*	6.8	249.4	249.4	250.4	0.9	
F	116.4	2.600	*	8.5	250.5	250.5	251.4	0.9	
G	117.29	1,670	*	10.4	251.0	251.0	251.9	0.9	
Н	118.08	1,550	*	10.5	252.4	252.4	253.2	0.8	
I	120.76	2.033	*	8.9	256.3	256.3	256.9	0.6	
j	124.14	4.000	*	8.7	258.9	258.9	259.6	0.7	
K	135.75	6.500 ²	*	6.1	268.2	268.2	269.1	0.9	
L	138.5	3.500 ²	*	7.6	270.0	270.0	270.8	0.8	
tiver miles above confluenc	ce with Mississippi Riv	rer	,		on lies within an are				
Width extends beyond the c Data not computed	ounty boundary		l	NFIP Regulatio	nce of levees that ha n Section 65.10. Ple t of this FIS for more	ase refer to the Not			
FEDERAL EMERGENCY MANAGEMENT AGENCY PULASKI COUNTY, AR AND INCORPORATED AREAS					FLOODWAY DATA				
				ARKANSAS RIVER					
This cross section due to the prese NFIP Regulation page at the from	nce of levees n Section 65.1	that have n 10. Please n	ot been de efer to the	monstrate	d to meet the	requiremen	ıts of		

- Summary of Discharges Table: Typically, seclusion mapping should not affect the
 discharges for the secluded flooding source and therefore no seclusion mapping notation
 would be needed for the Summary of Discharges Table. If analysis supports secluding the
 discharges, coordination with the FCS IPT will be required. If appropriate, notation similar
 to that used for the Floodway Data Table can be used.
- **Flood Profile** For the Flood Profiles, a note can be used as shown in the example below. See additional guidance for acceptable notes. If a flooding source is partially secluded the note should include a thick black box around the impacted area.



Guidance for Flood Risk Analysis and Mapping

Levee Seclusion – Appendix E FIS / FIRM Transmittals and Notices

November 2014



Preliminary or Revised Preliminary Transmittal Letter Template

All variables are shown in **bold black** and are contained in brackets { } or []

All upper case **BOLD RED** text should be removed

U.S. Department of Homeland Security FEMA Region [xx] Address City, ST Zip



[Prelim or Revised Prelim Issuance Date]

[Courtesy and Name – Use "The Honorable" for all elected positions Title, Community/Org Address City, State Zip]

RE: {Revised} Preliminary Flood Insurance Rate Map (FIRM) and Flood Insurance Study (FIS) Report, [Community Name, County/Parish Name], [State], Community No. [6-digit CID], Panel{s} Affected: [list of panels (format example: 12345C0100F)]

Dear [Title, Last Name]:

[USE THE FOLLOWING PARAGRAPH FOR A PRELIM]

The Department of Homeland Security's Federal Emergency Management Agency (FEMA) is pleased to present your community with preliminary copies of the FIRM and FIS report dated [Prelim Date], for [County/Parish Name], [State] and Incorporated Areas.

[USE THE FOLLOWING PARAGRAPH FOR A REVISED PRELIM]

The Department of Homeland Security's Federal Emergency Management Agency (FEMA) recently revised a {number of} preliminary FIRM panel{s} and {revised preliminary portions of the FIS report} for [County/Parish Name], [State] and Incorporated Areas. The enclosed revised preliminary copies of the above-referenced FIRM panels and {revised preliminary portions of the FIS report / FIS report} supersede the previous information sent to your community on [Prelim Date]. The revised preliminary issuance date for these items is [Revised Prelim Date].

[INCLUDE THE FOLLOWING PARAGRAPH IF THE COMMUNITY IS UNAFFECTED BY THE REVISION]

No new flood hazard information has been presented in the revised preliminary FIRM panel{s} and FIS report for your community since the [Prelim Date] release date. Although your community is unaffected by the updated flood hazard information presented in the revised preliminary FIRM and {revised preliminary portions of the FIS report / FIS report}, your community is geographically located on one or more of the revised FIRM panels.

[INCLUDE PARAGRAPHS BELOW IN ALL LETTERS]

FEMA has implemented updated levee analysis and mapping procedures for areas that have not been demonstrated to meet the requirements in the National Flood Insurance Program (NFIP) regulations (related to a levee system's capacity to provide 1-percent-annual-chance flood protection as documented in the Code of Federal Regulations (CFR) at Title 44, Chapter 1, Part 65.10 (44 CFR 65.10).

The [Levee System(s) Name(s)] shown on the above-referenced FIRM panel{s} {is a/ are} non-accredited levee system{s}, meaning that the {levee system is / levee systems are} currently not in compliance with the levee certification requirements described in 44 CFR 65.10. The current effective flood hazard information is being retained as an interim measure until updated levee analysis and mapping procedures in the vicinity of the non-accredited levee system{s} is performed as part of a future flood hazard analysis and mapping project. [Use the next sentence to reference a single FIRM and FIS report] The flood hazard information within this area has been reverted to the information presented on the current effective FIRM and FIS report dated [Current Effective FIRM Date], for these areas. [Use the next sentence to reference multiple FIRMs and FIS reports] The flood hazard information within this area has been reverted to the information that was presented on the current effective FIRMs and FIS reports listed below.

- [Community Name], [County/Parish Name], [State], dated [Current Effective FIRM Date]
- Unincorporated Areas, [County/Parish Name], [State], dated [Current Effective FIRM Date].

Until FEMA is able to initiate a project employing the new protocols to establish updated flood hazard information associated with **{this / the}** levee**{s}**, the information as shown on the effective FIRM and FIS report for this area will not change. These areas are also clearly identified on the affected FIRM panels with an associated map note.

We are sending the enclosed {revised} preliminary copies of the affected FIRM panel{s} and {revised preliminary portions of the FIS report / FIS report} at this time to give your community an opportunity to review them. Additionally, in an effort to assist you in circulating the information, FEMA has posted digital copies of the {revised} preliminary FIRM, FIS report materials, and supporting database on the following page of the Map Service Center website: http://www.fema.gov/preliminaryfloodhazarddata. We also request that your community make hard (paper) copies of the {revised} preliminary FIRM and FIS report available for review at your community's map repository located at [Insert map repository address]. [The next 2 sentences are FEMA Region 6 specific examples. Modify as needed for each FEMA Region or omit if not applicable] Also, feel free to interact with both the current effective data and the {revised} preliminary flood hazard data through an interactive mapping tool available at: http://waps.riskmap6.com/[ST]/[County/Parish Name]. This interactive tool allows communities to review the flood risk at any known address. An instructional fact sheet for this Interactive Web Tool is available at: http://www.riskmap6.com/documents/resource/WhatisyourFloodRisk.pdf.

FEMA will remain in contact with your community and the levee owners to discuss the future study approach to determine the updated flood risk in the vicinity of the [Levee System(s) Name(s)] [if applicable insert the following] as outlined in the correspondence dated [Letter Date]. FEMA will contact your community and the levee owners once funding has been secured to perform the updated flood hazard analysis in the vicinity of the identified levee system{s}. At that time, FEMA will coordinate with community officials to define the appropriate levee analysis and mapping procedures to be used. The flood hazard information associated with {this / the} levee system{s} will be updated at that time.

[INCLUDE THE FOLLOWING IF A CCO MEETING WILL BE HELD]

We will contact you to schedule a formal Consultation Coordination Officer (CCO) Meeting to discuss the flood hazard information shown on the enclosed FIRM panels and FIS report, ordinance adoption, and other frequently asked questions and concerns. In the meantime, we encourage you to circulate the enclosed copies as widely as possible among elected officials, staff, and other individuals or organizations in the community that would have an interest in the {revised} preliminary FIRM and FIS report so that they will have the opportunity to review them thoroughly before the CCO Meeting. This review period before the CCO Meeting provides community officials and citizens in your community with an opportunity to identify changes or corrections to non-technical information (e.g. corporate limits, road names, stream names) on the {revised} preliminary FIRM panels or in the FIS report. Please submit comments (digital format such as shapefiles preferred) no later than 30 days from the date of this letter. All comments and changes received during this review period will be incorporated, as appropriate, before the FIRM and FIS report become effective. Comments may be sent to:

[Insert appropriate contact]

To assist you in this effort, we have listed the contact information of representatives who can answer your questions and respond to your concerns:

[Insert additional contacts]

[USE THE FOLLOWING PARAGRAPH ONLY FOR NON-PARTICIPATING COMMUNITIES AND COMMUNITIES WITH UNKNOWN PARTICIPATION STATUS]

According to our records, your community is not participating in the NFIP. Participation in the NFIP makes flood insurance available to residents at federally subsidized rates, thereby providing valuable financial protection against potential flood losses. Participation in the NFIP provides additional protection because it leads to local enactment of a sound floodplain management program that will ensure safe construction standards in **{Special Flood Hazard Areas / Special Flood Hazard Areas (SFHAs)}**, which are areas that will be inundated during the 1-percent-annual-chance flood. The **{enclosed}** pamphlet **{previously sent to your community}**, titled *Joining the National Flood Insurance Program*, explains the effects of non-participation in the NFIP. Additional copies of this pamphlet may be downloaded from the following page on the FEMA website: http://www.fema.gov/media-library/assets/documents/13610?id=3310.

[INCLUDE THE FOLLOWING IF NO SOMA WAS ORIGINALLY SENT AND NO SOMA WILL BE SENT WITH THIS LETTER]

To assist your community in maintaining the FIRM, we reviewed our records to determine if any previous Letters of Map Change (LOMCs) (i.e., Letters of Map Amendment, Letters of Map Revision (LOMRs)) will be superseded when the **{revised}** FIRM panel{s} become{s} effective. According to our records, no LOMCs were issued previously for the affected FIRM panel{s}.

{INCLUDE THE FOLLOWING PARAGRAPH IF A PRELIM SOMA WAS SENT BUT A REVISED SOMA WILL NOT BE SENT WITH THIS LETTER}

A copy of the preliminary Summary of Map Actions (SOMA) was originally sent to your community on **[Prelim Date]**. Since the distribution of the preliminary SOMA, no changes have been made to the SOMA and no additional Letters of Map Change (LOMCs) have been issued.

[INCLUDE THE FOLLOWING PARAGRAPH IF A SOMA WILL BE SENT WITH THIS LETTER]

To assist your community in maintaining the FIRM, the enclosed **{revised}** preliminary Summary of Map Actions (SOMA) documents previous Letter of Map Change (LOMC) actions that will be affected when the revised FIRM becomes effective. The enclosed factsheet, titled "Understanding FEMA's Summary of Map Actions and Revalidation Letter", will assist your community in the review of this SOMA.

{INCLUDE THE FOLLOWING PARAGRAPH IN ALL LETTERS}

Your community should be aware that recently approved LOMCs, specifically {Letters of Map Revision (LOMRs) / LOMRs}, may have been issued for your community. The LOMR process is dynamic, and FEMA is reviewing LOMR applications regularly. To complete production of the preliminary {and revised preliminary} FIRM panels, which includes incorporating the effects of "mappable" LOMRs issued since the last FIRM effective date, a specific cutoff date [Cutoff Date] was established. FEMA will address any approved LOMRs issued after the cutoff date when the final {Summary of Map Actions / SOMA} is distributed. If your community has concerns regarding a specific case, please submit the LOMR case number, as well as any appropriate documentation, to our FEMA Regional Office before the end of the comment period.

[INCLUDE THE FOLLOWING IF SECLUSION METHODOLOGY REMOVED UPDATED STUDY WITH BFE CHANGES INSIDE THE SECLUSION BOUNDARY – NO ADDITIONAL APPEAL PERIOD IS REQUIRED]

Because changes to the effective Base (1-percent-annual chance) Flood Elevations (BFEs) are no longer being proposed along [Flooding Source Name(s)], FEMA is {withdrawing/correcting} the original Notice of Proposed Base Flood Elevation Determinations published in the Federal Register on [Publication Date], at FR Volume [Volume Number], page{s} [Page Number(s)], and is no longer proposing BFE determination changes along {Flooding Source Name(s)}. Please note, however, that the BFEs previously provided in these areas may assist your community in establishing more restrictive floodplain development requirements in these areas if they were adopted.

[INCLUDE THE FOLLOWING IF AN APPEAL PERIOD IS REQUIRED DUE TO CORRECTIONS MADE ON THE PROPOSED FEDERAL REGISTER – NON EAP]

Because changes are being made to the original Notice of Proposed Base Flood Elevation Determinations published in the *Federal Register* on [Publication Date], at FR Volume [Volume Number], page{s} [Page Number(s)], we will initiate a statutory 90-day appeal period for certain communities within [County/Parish Name] following the release of this {revised} preliminary, {CCO Meeting}, and a Notice of Correction to the Proposed Flood Hazard Determinations in the Federal Register. If your community is identified as requiring an appeal period, we will send you a letter approximately 2 weeks before the start of the 90-day appeal period to detail the appeal process. The letter will forward information regarding notifications to be published in the Federal Register and local newspaper(s) and will provide the first and second publication dates. The appeal period will start on the second publication date. {Additional information concerning the 90-day appeal period will be provided during the CCO Meeting.}

[INCLUDE THE FOLLOWING 3 PARAGRAPHS IF A FEDERAL REGISTER WITHDRAWAL NOTICE TO THE PUBLISHED NON-EAP FEDERAL REGISTER PROPOSED NOTICE IS REQUIRED AND A NEW APPEAL PERIOD WILL BE REQUIRED UNDER THE EAP]

On December 1, 2011, FEMA revised its existing appeal policy to expand the due process procedures provided for new or modified Base (one-percent-annual-chance) Flood Elevations; base flood depths; and to other new or modified flood hazard information shown on a FIRM, including the addition or modification of any **{Special Flood Hazard Area / SFHA}** boundary or zone designation, or regulatory floodway. Additional information on FEMA's Expanded Appeals Process (EAP) is provided in the enclosed document titled *Changes to FEMA's Appeals Process*.

In accordance with FEMA's procedures for processing flood risk studies and Physical Map Revisions under the EAP, both the new or modified flood hazard information shown on the enclosed revised preliminary FIRM panel{s} and {revised preliminary portions of the FIS report / FIS report}, and all other new or modified flood hazard information shown on the preliminary FIRM and in the FIS report dated {Preliminary Date}, that are unaffected by the revised preliminary changes, will be afforded a new appeal period. Therefore, we will withdraw the original Notice of Proposed Flood Hazard Determinations published in the Federal Register on [Publication Date], at FR Volume [Volume Number], page{s} [Page Number(s)]. We will publish a new proposed notice in the Federal Register that will apply to the entire study, both the revised preliminary FIRM panels and {revised preliminary portions of the FIS report / FIS report} as well as the above-mentioned preliminary FIRM and FIS report components that are unaffected by the revised preliminary changes.

After **(the CCO Meeting and after)** publications in the *Federal Register* have occurred, we will initiate a statutory 90-day appeal period for certain communities within **[County/Parish Name]**. If your community is identified as requiring an appeal period, we will send you a letter approximately 2 weeks before the start of the 90-day appeal period to detail the appeal process. The letter will forward information regarding notifications to be published in the *Federal Register* and local newspaper(s) and will provide the first and second publication dates. The appeal period will start on the second publication date. **(Additional information concerning the 90-day appeal period will be provided during the CCO Meeting.)**

(INCLUDE THE FOLLOWING PARAGRAPH IF AN ADDITIONAL 30-DAY COMMENT PERIOD IS BEING PROVIDED WITH A NEWSPAPER PUBLICATION AFTER THE CCO MEETING)

After the CCO Meeting, we will initiate a 30-day comment period for certain communities within **[County/Parish Name]**. During the 30-day comment period, you may continue to submit any comments or corrections to non-technical information presented within your jurisdictional area on the revised preliminary FIRM and **{revised preliminary portions of the FIS report / FIS report}**. We will send you a letter approximately 1 week before the start of the 30-day comment period. The letter will forward information regarding the notification to be published in the local newspaper(s) and will provide the publication date. The 30-day comment period will start on the publication date. Additional information concerning the 30-day comment period will be provided during the CCO Meeting.

[INCLUDE THE FOLLOWING PARAGRAPHS IN ALL LETTERS]

After the **{90-day appeal and}** 30-day comment period**{s} {has/have}** ended and we have addressed all **{appeals and}** comments, we will initiate final preparation of the FIRM and FIS report. The new FIRM and FIS report for your community will become effective approximately

seven to ten months later. Please note, until the new FIRM becomes effective, your current effective FIRM will continue to be used to rate insurance policies. Prior to the effective date, we will notify your community in writing of the official FIRM and FIS report effective date and ask that your community adopt floodplain ordinances or modify existing ordinances, as necessary, that correspond with the new FIRM and FIS report. If you or other community officials have any questions regarding floodplain ordinances, you may address them with our Regional Office staff or you may discuss those issues with your State NFIP Coordinator. Several months before the effective date, we will mail one set of printed copies of the finalized FIRM and FIS report and digital copies of the FIRM and FIS report products.

If there are further questions regarding the {revised} preliminary FIRM and FIS report for the community {or participation in the program}, please feel free to contact [Insert appropriate contact]. If you have any questions concerning mapping issues in general, please call the FEMA Map Information eXchange (FMIX) toll free at (877) 336-2627 (877-FEMA MAP), or e-mail the FMIX staff at FEMAMapSpecialist@riskmapcds.com.

Sincerely,

[Insert Appropriate Regional/FEMA HQ Signature Block]

Enclosures: {Revised} Preliminary FIRM Panel[s] {list of Panels (format example:

12345C0100F)}

{Revised} Preliminary FIS Report {Revised Preliminary portions of the FIS Report}

CD containing the {Revised} Preliminary FIRMs in digital format

{Revised} Preliminary SOMA {if applicable}

Understanding FEMA's Summary of Map Actions and Revalidation Letter

Joining the National Flood Insurance Program (if applicable)

Changes to FEMA's Appeals Process {if applicable}

cc: [Community FPA Name]; [Title], [Community/Organization]
[State NFIP Coordinator Name], State NFIP Coordinator, [Office]
[Others: RSC Coordinator, CTP contact, IDIQ contact, etc.]

Bcc: FEDD File



All variables are shown in **bold black** and are contained in brackets { } or []

All upper case **BOLD RED** text should be removed

U.S. Department of Homeland Security FEMA Region [xx] Address City, ST Zip



[Mailing Date]

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

[Courtesy and Name – Use "The Honorable" for all elected positions Title, Community/Org Address City, State Zip]

IN REPLY REFER TO: 30-DAY COMMENT PERIOD

Community: [Community Name,

County/Parish Name,

State

Community No.: 6-digit CID]

Dear [Title, Last Name]:

On [Preliminary or Revised Preliminary Date], the Department of Homeland Security's Federal Emergency Management Agency (FEMA) provided your community with {preliminary / revised preliminary} copies of the Flood Insurance Rate Map (FIRM) and {revised preliminary portions of the Flood Insurance Study (FIS) report / Flood Insurance Study (FIS) report} for [County/Parish Name, State] and Incorporated Areas. [Use the next sentence for a Revised Prelim} The revised preliminary FIRM panels and {revised preliminary portions of the FIS report / FIS report} serve to supersede the information shown on the preliminary FIRM panels and FIS report sent to your community on, [Prelim Date]. {Use this sentence in all letters} The information on the {revised} preliminary FIRM and FIS report in areas affected by the [Levee System(s) Name(s)] has reverted to what is shown on the current effective FIRM and FIS report.

[INCLUDE THE FOLLOWING PARAGRAPH IF THE COMMUNITY IS UNAFFECTED BY THE REVISION]

No new flood hazard information has been presented in the revised preliminary FIRM panel(s) and FIS report for your community since the **{Prelim Date}** release date. Although your community is unaffected by the updated flood hazard information presented in the revised preliminary FIRM and **{revised preliminary portions of the FIS report / FIS report}**, your community is geographically located on one or more of the revised FIRM panels.

[INCLUDE PARAGRAPHS BELOW IN ALL LETTERS]

FEMA has implemented updated levee analysis and mapping procedures for areas that have not been demonstrated to meet the requirements in the National Flood Insurance Program (NFIP) regulations related to a levee system's capacity to provide 1-percent-annual-chance flood protection. These regulations are found in the Code of Federal Regulations (CFR) at Title 44, Chapter 1, Part 65.10 (44 CFR 65.10).

The [Levee System(s) Name(s)] {are / is a} non-accredited levee system(s), meaning that {this / the} levee system(s) {is / are} not in compliance with the levee certification requirements described

in 44 CFR 65.10. The current effective flood hazard information is being retained as an interim measure until updated levee analysis and mapping procedures in the vicinity of non-accredited levee systems is performed as part of a future flood hazard analysis and mapping project. Until FEMA is able to initiate a project employing the new procedures to establish updated flood hazard information associated with the levee system{s}, the information as shown on the effective FIRM and FIS report for this area will not change.

FEMA has posted digital copies of the {revised} preliminary FIRM, FIS report materials, and supporting database on the following page of the Map Service Center website: http://www.fema.gov/preliminaryfloodhazarddata. We also request that your community make the hard (paper) copy of the {revised} preliminary FIRM and FIS report available for review at your community's map repository located at [Insert map repository address]. [The next 2 sentences are Region 6 specific examples. Modify as needed for each Region or omit if not applicable] Also, feel free to interact with both the current effective data and the {revised} preliminary flood hazard data through an interactive mapping tool available at: http://maps.riskmap6.com/[ST]/[County/Parish Name]. This interactive tool allows communities to

http://maps.riskmap6.com/**[ST]/[County/Parish Name].** This interactive tool allows communities to review the flood risk at any known address. An instructional fact sheet for this Interactive Web Tool is available at: http://www.riskmap6.com/documents/resource/WhatisyourFloodRisk.pdf.

To ensure that residents of your community are provided a final opportunity to submit comments and concerns on the **{revised}** preliminary FIRM and FIS report before they are finalized, FEMA will provide a 30-day comment period. Public notification of the comment period will be published in the **[Newspaper Name]** on or about **[Publication Date]**. The 30-day comment period will commence on the publication date of this notice. A copy of this notice is enclosed for your reference.

During this 30-day comment period, any interested party may submit comments to you, or to an agency that you publicly designate. If we do not receive any formal comments from your community in its own name within 30 days of the date of public notification, we will consolidate and review on their own merits such comments from individuals that you may forward to us, and we will make such modifications to the information presented on the **{revised}** preliminary FIRM and FIS report as may be appropriate. Please forward any comments or concerns to our FEMA Regional Office in **[City, State]** at the following address:

[Insert appropriate contact]

[USE THE FOLLOWING PARAGRAPH ONLY FOR NON-PARTICIPATING COMMUNITIES AND COMMUNITIES WITH UNKNOWN PARTICIPATION STATUS]

I would also like to take this opportunity to remind you that your community can and should apply to participate in the NFIP. Participation in the NFIP makes flood insurance available to residents at federally subsidized rates, thereby providing valuable financial protection against potential flood losses. Participation in the NFIP provides additional protection because it leads to local enactment of a sound floodplain management program that will ensure safe construction standards in areas of special flood hazard. The pamphlet previously sent to your community, titled *Joining the National Flood Insurance Program*, explains the effects of non-participation in the NFIP. Additional copies of this pamphlet may be downloaded from the following page on the FEMA website: http://www.fema.gov/media-library/assets/documents/13610?id=3310.

[USE THE FOLLOWING PARAGRAPHS IN ALL LETTERS]

[Courtesy and Name] [Mailing Date] Page 3

If you have additional questions regarding the {revised} preliminary copies of the FIRM and FIS report for your community **{or participation in the NFIP}**, please feel free to contact **[Insert appropriate contact]**. If you have any questions concerning mapping issues in general, please call the FEMA Map Information eXchange (FMIX), toll free, at 1-877-336-2627 (1-877-FEMA MAP), or e-mail the FMIX staff at FEMAMapSpecialist@riskmapcds.com.

Sincerely,

[Insert Appropriate Regional/FEMA HQ Signature Block]

Enclosure:

Newspaper Notice

cc: [Community FPA Name]; [Title], [Community/Organization]

[State NFIP Coordinator Name], State NFIP Coordinator, [Office] [Others: RSC Coordinator, CTP contact, IDIQ contact, etc.]

Bcc: FEDD File



All variables are shown in **bold black** and are contained in brackets { } or []

All upper case **BOLD RED** text should be removed

DEPARTMENT OF HOMELAND SECURITY

FEDERAL EMERGENCY MANAGEMENT AGENCY

{Revised} Preliminary Flood Insurance Rate Map (FIRM) and Flood Insurance Study (FIS)
Report for [County/Parish Name, State and Incorporated Areas]

The Department of Homeland Security's Federal Emergency Management Agency (FEMA) {issued/revised previously issued} preliminary copies of the FIRM and FIS report for [County/Parish Name, State and Incorporated Areas], on [Preliminary or Revised Prelim Date]. FEMA requests comments on the {revised} preliminary FIRM and FIS report dated, [Preliminary or Revised Prelim Date], for communities in [County/Parish Name].

FEMA has coordinated a solution with the [County/Parish Name] and communities for flood hazard mapping in the area of the [Levee System(s) Name(s)] which {are / is a} non-accredited levee system is a levee system that is not in compliance with National Flood Insurance Program (NFIP) requirements related to a levee system's capacity to reduce flood risk during the 1-percent-annual-chance flood event. These requirements are found in the Code of Federal Regulations (CFR) at Title 44, Chapter 1, Part 65.10 (44 CFR 65.10).

The current effective flood hazard information is being retained as an interim measure until updated levee analysis and mapping procedures in the vicinity of the non-accredited levee system{s} is performed as part of a future flood hazard analysis and mapping project. The flood hazard information shown on the {revised} preliminary copies of the FIRM and FIS report in the vicinity of the identified levee system{s} has therefore not been updated; [Use the next sentence to reference a single FIRM and FIS report] the flood hazard information within this area reflects the same information presented on the current effective FIRM dated, [FIRM Effective Date] as well as supporting information provided in the current effective FIS report dated, [FIS Report Effective Date]. [Use the next sentence to reference multiple FIRMs and FIS reports] the flood hazard information within this area reflects the same information presented on the current effective FIRMs and FIS reports listed below.

- [Community Name], [County/Parish Name], [State], dated [Current Effective FIRM Date]
- Unincorporated Areas, [County/Parish Name], [State], dated [Current Effective FIRM Date].

[INCLUDE PARAGRAPHS BELOW IN ALL LETTERS]

These areas are also clearly identified on the affected FIRM panels with an associated map note. [Include the following sentence if applicable] Additionally, all appeals and comments received have been investigated and resolved.

FEMA is providing a 30-day comment period to allow for comments and concerns found on the **{revised}** preliminary FIRM panels and FIS report released on **[Prelim or Revised Prelim Date]**. This comment period will commence on the publication date of this notice.

FEMA will continue to coordinate with the communities and levee owners until the flood hazard information in the vicinity of the [Levee System(s) Name(s)] is revised using updated levee analysis and mapping procedures. Community residents and business owners should investigate their personal flood risk and remain aware of the residual risk that remains in the vicinity of flood control system(s).

FEMA has posted digital copies of the **{revised}** preliminary FIRM, FIS report materials, and supporting database on the following page of the Map Service Center website: http://www.fema.gov/preliminaryfloodhazarddata. [The next 2 sentences are Region 6 specific examples. Modify as needed for each Region or omit if not applicable] Communities, residents and business owners can review the current effective data and the revised preliminary flood hazard data on-line at: http://maps.riskmap6.com/[ST]/[County/Parish Name]. An instructional factsheet is available

to assist you in you determine the risk at any address using the tool, available at: http://www.riskmap6.com/documents/resource/WhatIsYourFloodRisk.pdf. Contact your local Floodplain Administrator to better understand and prepare for the flood risk identified.

For more information, please call the FEMA Map Information eXchange, toll free, at 1-877-FEMA MAP (1-877-336-2627).