



# Association of State Floodplain Managers, Inc.

8301 Excelsior Drive, Madison, WI 53717

Phone: 608-828-3000 | Email: [asfpm@floods.org](mailto:asfpm@floods.org) | Website: [www.floods.org](http://www.floods.org)

## USACE Levee Safety Program Guidance EC 1165-2-218 Comments from ASFPM - July 27, 2020

The Association of State Floodplain Managers respectfully submits these comments on, US ARMY CORPS OF ENGINEERS LEEVE SAFETY PROGRAM guidance. The table below summarizes our comments. We have also highlighted themes that emerged during our review of the document in the following bullet points.

- Levee inspection – the required frequency for inspections is too long in some cases, especially for high risk dams, or is not mandated in circumstances where it is warranted.
- Levee Sponsor activities – in many places in the document Sponsors are encouraged to do activities when they should be required to do the activity.
- Levee evaluation process – at points when alternatives to the levee status quo must be evaluated (e.g. advance measures permanency, risk assessment, levee failure, upgrade, mitigation) full consideration of all alternatives and adequate analysis of the full cost and benefits, including long term sustainability, of all alternatives must be completed.
- Impacts of increasing levee height - prior to undertaking any activity which would temporarily or permanently increase the height of the levee, the impact on properties outside the levee, upstream, downstream and landward, are identified and fully evaluated.
- Potential for loss of life – both the risk rating process and tolerable risk determination allow for the potential of loss of life without requiring standards that would normally be required in a high risk situation and would appear to trade loss of life for financial savings. Loss of life should be paramount.
- For Official Use Only - the implementation of this determination limits adequate dissemination to of risk information to entities that are impacted, responsible for responding or charged to mitigate that risk.

USACE Levee Safety Guidance Comments from ASFPM		
Engineering Circular No. 1165-2-218		
Chapter	Page	Comment
I	5	Paragraph d.(1) - If non-project segments are included as part of the USACE Portfolio, who assures that they meet reasonable design and construction standards and are maintained, especially if they are necessary to the function of the levee system? These Non-Project Segments should be taken into consideration in the risk assessment for the associated levee.
II	3	Paragraph (4) - Then end of the statement should be "...by lessening the impacts of <b>current and future floods</b> ." This better defines that mitigation activities are forward looking.

II	4	Table II.2.1 - A 5-year inspection frequency seems long for a formal inspection of a high risk levee. 1-2 years seems more appropriate, similar to what is recommended for high hazard dams. Additionally, Levee Sponsors Inspections should be done more frequently (at least semi-annually and after a significant high water event). There should be a quantitative or qualitative statement regarding the required frequency.
II	5	Table II.2.1 - comment at end of the table. Why use 100 people for the waiver standard? Even if there are only 5 people in the leveed area, do they not deserve the same considerations as if there were 1,000? If risk assessments are not completed, how is it known whether there is a potential for loss of life, which should trigger a high hazard classification. Is there a better risk measure that could be used to distinguish when the requirement is waived? Any potential loss of life should make it high Hazard.
II	7	Section b. - Use of the Levee Inspection Software should be mandatory for Sponsors This will help ensure more uniformity and consistent data tracking.
II	7	Section b. - Levee sponsors should not be allowed to opt out of attending a site inspection which focuses on "a particular area of concern". They or their designee should be required to be at the inspection.
II	7	Section b. - What is the justification for no longer requiring and overall inspection rating? Since the change is in the text, justification should also be included.
II	8	Table II.2.2 - the Final Documentation Step indicated the report is not to be publically available. The report contains valuable risk information that could be important to the public. There should be a way to balance infrastructure security concerns with providing valuable risk information. Perhaps a requirement for a summary that can be more publically shared.
II	9	Paragraph c. - Similar to comments on table II.2.1, there should be a minimum interval between Levee Sponsor Inspections and a requirement for when additional inspections should be done. Why are they not required to use the defined USACE inspection procedures as a minimum standard?
II	14	Continuation of paragraph (1) from pervious page for EAPs. Levee sponsors should be <b>required</b> (instead of encouraged) to coordinate with local emergency management authorities and the same should be signatories of the plan. Especially since they are the ones who would have the authority to require an evacuation should one be necessary.
II	14	Paragraph (2) - Similar to the previous EAP comment, maintaining relationships with emergency mangers should be <b>required</b> .
II	15	Paragraph b. - Highlighting that these USACE programs are voluntary and provide assistance to the Levee Sponsor supports the comments above that the USACE should be more directive on some of the sponsor requirements in this section, i.e., require rather than recommend.
II	15	Paragraph b. - Advanced measures should not become permanent unless the project was designed, built and maintained to appropriate standards for a permanent structure, there is a full alternatives analysis completed and the project is the determined to be the best option to manage the risk. The fact that the structure is already on the ground should not weigh into economic considerations.

II	20	Paragraph (g) - a sponsor inspection should also be considered in this step as it may be more recent.
II	22	Paragraph (1) instead of mentioning just helicopters for remote monitoring the options should be more open ended to allow for newer technology such as drones.
II	26	Paragraph (d) - When providing the option for temporarily increasing the height of the levee the impact of this on areas outside the levee must be considered.
II	29	Section 3.5 - Any assistance provided under this section must consider the impact of the work on others outside the area of levee protection. If it would have a negative impact, it should not be done or all the impacts must be mitigated.
II	32	Paragraph (1) - The assessment should recognize that if there was significant damage or failure, all options for long term flood risk reduction should be evaluated before repairs are made. In addition to repair and upgrade, alternatives considered should include levee setback and decommissioning/removing the levee.
II	33	Paragraph c & d - As stated in the previous comment, there should not be a rush to put things back to the way they were before until there is an evaluation of all options to provide risk reduction for the leveed area. Quick repair perpetuates the status quo and prevents looking at more long term and sustainable solutions to make communities more resilient.
II	35	Paragraph (4) - Identification of the least cost alternative needs to fully weigh the long term cost of maintaining levee functions, not just the immediate rehabilitation cost verses the benefits of more sustainable/permanent options.
II	36	Section 5.1 - Mitigation needs to look beyond the risk in the area protected by the levee and include the areas outside the levee that may be impacted by its existence. Need to look beyond the assumption that the levee will always be in place. Setting levees back should be evaluated.
II	37	Table II.5.1 - In the "Assess how mitigation actions change risk over time" section, why does the USACE only perform a new risk assessment under their own volition if they find that the mitigation actions merit an updated risk assessment in the previous section (Track progress)? This risk assessment should not require a request from the sponsor in order to be initiated.
II	39	Table II.5.2, Levee setback should be included as an option in the Consequence column
II	39	Paragraph b.(1) - Change "may wish to" to "should" in the 2nd sentence.
II	40	Paragraph e.(1) - The statement "changes in risk in one area of a levee could impact anticipated performance of other levees or the levee system" should recognized that change should not occur if it has a negative impact on the performance of other levees or systems.
III	3	Paragraph c. - To be consistent with the first sentence, the second sentence should add "and risk" after "...will be accomplished by recognizing the benefits".
III	3	Section 1.6 -Why is interior drainage only be considered on a case by case basis? It should always be considered.

III	6	Paragraph a. - Concerned about the limitations and perhaps overuse of the "For Official Use Only". In addition to the levee sponsor, much of the information listed should also be available to state levee safety programs and state emergency management as well as local emergency managers and failure inundation mapping should be available to those whose property is at risk.
III	11	Paragraph f. - This section should recognize that states may also have levee databases and the need to coordinate information and database updates with the state.
III	13	Section 4.1, paragraph b.(1) - Concerned about the statement "or the benefits are so great that risks are considered insignificant or negligible." Benefits do not make the risk go away. This implies that we are trading money for lives, which is inappropriate.
III	13	Section 4.1, Paragraph b.(3)- This statement provides a loophole to allow unacceptable risk. If it is unacceptable, why is it allowed and not remediated?
III	14	Paragraph d. - the references in the first sentence should be 4.2 to 4.5
III	14	Paragraph d. - Why is the community's or an individual's perception of tolerability NOT weighed in the USACE tolerability determination?
III	15	Continuation of paragraph (1) - The sentence "Exceptional circumstances refer to a situation when USACE, acting on its own...based on benefits that the levee system brings to society at large and that additional risk reduction is not justified or feasible." is very concerning, especially in the light of a previous statement that a community's or individual's perception of tolerability is not weighed in the USACE tolerability determination. If a risk to life exists, it should be considered and remediated.
III	15	Paragraph (2) - The source/justification for "the probably of loss of life for an individual or group of individuals" threshold of 1 in 10,000 should be cited.
III	17	Section 4.3, paragraph c. - Consider requiring real estate disclosure of residual risk associated with a property protected by a levee or some other means to make sure property owners and individuals living behind a levee are aware of the risk and see the failure inundation information.
III	19	Paragraph 5.2, paragraph c. - a representative of the levee sponsor should be required to participate in every inspection. This stresses their ownership of some responsibility for the levee.
III	26	Paragraph 6.5 b. - What is the process for addressing data gaps if no plans for the levee segment are available?
III	31	Table III.6.1 - How is a moderate rating appropriate if there is a potential for loss of life during a failure? Loss of life should equate to high hazard.
III	32	Table III.6.1 - How is a low or very low rating appropriate if there is a potential for loss of life during a failure? Loss of life should equate to high hazard.
III	36	Paragraph c. - Guidance should define who is responsible for patrolling the levee in events in excess of 25 percent of the levee, "if no documentation exists for the levee system".
III	36	Paragraph d. - Why are Emergency Action Plans not required for all levees for which USACE provides assistance?
III	37	Section 7.7 - Levee setback should be one of the options mentioned to reduce levee risk for those inside and outside the levee.

III	41	Paragraph g. - Where do levee failure inundation maps fall in the “For Official Use Only” continuum? They should be available to all properties in the shadow of the levee and those who live and work in areas protected by the levee.
-----	----	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

The ASFPM and its 37 Chapters represent over 19,000 state and local officials as well as other professionals engaged in all aspects of floodplain management and flood hazard mitigation including management of local floodplain ordinances, flood risk mapping, engineering, planning, community development, hydrology, forecasting, emergency response, water resources development and flood insurance. All ASFPM members are concerned with reducing our nation’s flood-related losses. More information on the Association, its 14 policy committees and 37 State Chapters can be found at: [www.floods.org](http://www.floods.org).