

ENGINEER CIRCULAR 1165-2-218

LEVEE SAFETY PROGRAM

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ver. 2



**US Army Corps
of Engineers®**





AGENDA

- Introductions
- Guidance Overview
- Round-robin Feedback
- Comment Period Reminder



USACE INTRODUCTIONS

- North Atlantic Division
- Baltimore District
- New England District
- New York District
- Norfolk District
- Philadelphia District



GUIDANCE OVERVIEW: LEVEE SAFETY PROGRAM CIRCULAR

- Provides a framework for USACE and levee sponsors to work together
- Describes roles and responsibilities for USACE and levee sponsors
- Directs USACE to plan ahead and include levee sponsors and FEMA
- Clarifies how and when risk assessments and levee inspections will be completed
- Highlights the importance of sharing levee information
- Describes how Levee Safety Program information is used



Working together



Roles &
Responsibilities



Planning Ahead



Sharing levee info
with others



USACE AND LEVEE SPONSORS

- Levee sponsors are our partners in levee management
- USACE is committed to open communication and coordination
- Continued conversation about what is or is not working, and adapting is key





ROLES AND RESPONSIBILITIES

Levee sponsors:

- Ensure the levee is properly maintained and routinely inspected
- Perform response and recovery efforts
- Share levee condition information with community leaders and emergency managers
- Participate in Levee Safety Program activities

USACE:

- Facilitates levee risk assessments
- Works together with sponsors to inspect levees
- Provides technical assistance with engineering solutions to sponsors, as requested
- Supports levee sponsors with sharing levee condition and performance information with community leaders and emergency managers





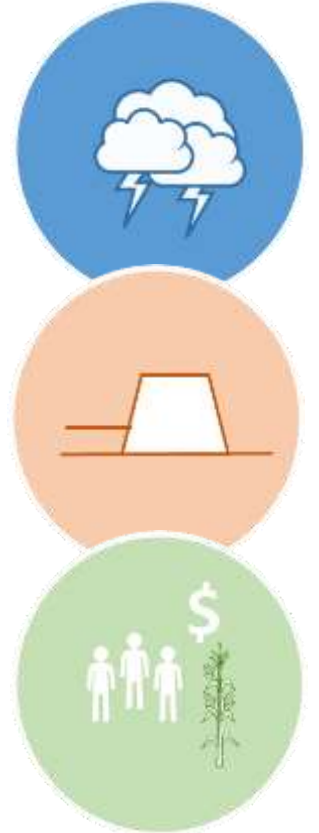
PLANNING AHEAD

- USACE will plan ahead and include levee sponsors and FEMA
- Planning ahead helps USACE and levee sponsors prioritize levee management activities
- USACE Districts will develop program management plans and 10-year outlooks for Levee Safety Program activities that detail:
 - Regular interactions with levee sponsors
 - Frequency and sequence of program activities
 - Who should be involved, and their roles and responsibilities



LEEVE SAFETY PROGRAM RISK ASSESSMENTS

- Risk Assessments consider:
 - Hazard – how often, deep, and widespread flooding is
 - Performance – how the levee was designed and how it has performed during past events
 - Consequence – who and what could be harmed in the area behind the levee
- Provide information that:
 - Help levee sponsors prioritize levee management activities based on the most critical performance issues for their levee
 - When shared, helps others in the area behind the levee understand levee-related benefits and potential performance during flooding
- Updated every 10 years





LEEVE SAFETY PROGRAM INSPECTIONS

- Document the physical condition of a levee at a given point in time
- Completed every 5 years, but can be done more frequently
- Supported by site visits, which can be used to observe or verify any changed conditions between inspections
- Done using the existing inspection checklist with specific items related to the levee condition and performance
- Result in individual item ratings, but no overall system and segment ratings

CHECKLIST



Levee Embankments
(15 items)



Floodwalls
(9 items)



Interior Drainage
(15 items)



Pump Stations
(21 items)



Channels
(11 items)



LEVEE SAFETY INSPECTION INFORMATION USED FOR PL 84-99 REHABILITATION ELIGIBILITY DECISIONS



INSPECTIONS



Levee Embankments
(15 items)



Floodwalls
(9 items)



Interior Drainage
(15 items)



Pump Stations
(21 items)



Channels
(11 items)

SUBSET OF THE EXISTING CHECKLIST (18 ITEMS)



Levee Embankments

1. Encroachments
2. Closure structures
3. Slope stability
4. Erosion/bank caving
5. Animal control
6. Culverts/discharge pipes
7. Underseepage relief wells/ toe drainage systems



Interior Drainage

1. Culverts/discharge pipes
2. Sluice/slide gates
3. Flap gates/ flap valves/ pinch valves



Floodwalls

1. Encroachments
2. Closure structures
3. Tilting, sliding, settlement of concrete structures
4. Foundation of concrete structures
5. Underseepage relief wells/ toe drainage systems



Pump Stations

1. Intake and discharge pipelines
2. Sluice/slide gates
3. Flap gates/ flap valves/ pinch valves



SHARING LEVEE INFORMATION

- Levee sponsors are the lead for sharing levee condition and performance information with community leaders and emergency managers
- Sharing levee information helps raise awareness about:
 - Why the levee is there and the benefits it provides
 - Potential performance issues associated with the levee
 - Actions taken by the community leaders and emergency managers before, during, and after a flood event
 - Actions being taken to preserve levee related benefits
- Levee information is helpful to others who have authority and responsibility in the area behind the levee
- USACE can assist levee sponsors with sharing levee information with others





FEEDBACK/COMMENTS

- Questions entered into the Chat window
- Take turns and provide feedback/comments
 - Please let us know that you'd like to speak by saying, **"I'd like to speak."**
 - We will respond with, **"Go ahead, speaker."**
 - Then, please tell us your name and your entity/organization, then your question or comment.

Where is this PowerPoint presentation posted?

Go to <https://www.nad.usace.army.mil/>, and look for a related link.



REMINDERS

- Comment period closes July 27, 2020
- Submit comments using the Federal Register:
<https://www.regulations.gov/docket?D=COE-2020-0003>
- Guidance is an Engineer Circular, which will be active for a two-year period
- Intent is to learn together during this two-year period



RESOURCES

- Levee Safety Program Website:
<https://www.usace.army.mil/Missions/Civil-Works/Levee-Safety-Program/>
- Levee Safety Engineer Circular:
<https://usace.contentdm.oclc.org/utls/getfile/collection/p16021coll9/id/1568>
- Levee Safety Engineer Circular Fact Sheet:
<https://usace.contentdm.oclc.org/utls/getfile/collection/p16021coll9/id/1576>
- The Sponsor's Guide to the USACE Levee Safety Program:
https://www.publications.usace.army.mil/Portals/76/Users/227/19/2019/EP_1105-1-1.pdf?ver=2018-11-01-072651-603