

Your Guide to Levee Review

National Levee Safety Program
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US Army Corps
of Engineers

THE BENEFITS OF A LEVEE REVIEW

You might be wondering why you would want to participate in a Levee Review and have the U.S. Army Corps of Engineers (USACE) walking around on your levee. The benefits are numerous:

- First and foremost, when USACE comes out to do a Levee Review, they will collect additional data on your levee that you may not already have.
- You will be part of the team to complete a screening risk assessment on your levee that results in information that can help you prioritize maintenance activities, inform emergency planning, and support public awareness efforts.
- You will also have the opportunity to collaborate with levee experts at USACE and get hands-on training on the different tools that will be used during the Levee Review process, including the National Levee Database, Levee Inspection System, and Levee Screening Tool.

This booklet was created to help answer any questions you might have about the Levee Review process, including what you should know if you are thinking about participating, what you can expect if you decide you want to participate, and what happens after you participate.

What previous participants have to say about Levee Review:

“The California Department Of Water Resources encourages local levee owners to volunteer for this program. It is beneficial for levee owners (of non-federal levees) to update their levee data in the National Levee Database, be provided with information that can assist with operation and maintenance activities, better understand levee conditions, and receive preliminary cost estimates for recommendations based on the Levee Review results.”

Unpaved road on a levee.



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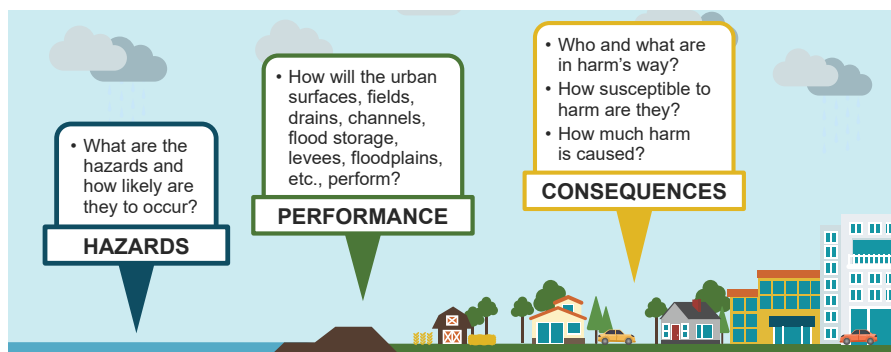
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YOU'RE CONSIDERING PARTICIPATING. WHAT SHOULD YOU KNOW?

What is Levee Review?

Levee Review is a voluntary process in which USACE conducts a field visit and screening risk assessment on a levee to provide a basic understanding of levee components, along with the flood hazard, expected levee performance, and consequences of levee breach—all factors that help determine a levee's risk.



Components of risk.

Asking questions about what storm or rain events a levee may face, how it will perform during those events, and the possible impacts to people and their property should a levee-related issue occur can help you better manage the levee and its associated risks.

Knowing a levee's risk by conducting a screening risk assessment can help inform a variety of decisions, including:

- **Levee Owner/Operators** can prioritize operation and maintenance, repair, and emergency preparedness activities.
- **States/Regional Districts/Tribes** can get a clearer picture of levee-related flood risk across all the levees within their boundaries.
- **Emergency Managers** can identify low or weak spots in the levee to inform emergency preparedness and floodfight activities.
- **Community Leaders** can incorporate specific information into community master plans, hazard mitigation plans, resilience plans, and natural resources plans.
- **Individuals and Families** can have a better understanding of what levees are and support community investments needed for levee upkeep and repair.

Why is USACE conducting Levee Reviews?

As severe weather events increase in frequency and intensity and as populations behind levees grow, communities are relying more and more on levees. For that reason, it has become increasingly important to understand the risks and benefits associated with all levees across the country.

Because of this, Congress gave USACE the authority, under the National Levee Safety Program, to conduct a one-time review of all levees identified in the National Levee Database. These reviews are federally funded.

The National Levee Database, found at nld.sec.usace.army.mil, is a dynamic, searchable inventory of information about all known levee systems in the nation that can inform a wide variety of flood risk and levee management activities. There are currently about 7,000 levees in the National Levee Database.

The Levee Review process is intended to generate a better understanding of flood risk nationally and create a baseline of levee information available to all.

Who is eligible to participate?

Any levee owner who has never undergone a USACE-led screening risk assessment.



Paved road on a levee.

How do I sign up to participate?

There are two ways you can be considered:

- You may contact USACE directly to request a review of your levee. There are several ways to get in touch. You can reach out to your local USACE district office. You can visit the National Levee Safety Program website (leveesafety.org). Or you can email hq-leveesafety@usace.army.mil.
- The state may reach out to you to gauge your interest in participating and provide USACE with your name if you would like to volunteer.

Getting Selected

- Once you have indicated you want to participate, USACE will contact you to discuss the process and confirm eligibility. If still interested, USACE will provide you with a letter of interest to sign to be added to the formal waiting list.
- When prioritizing which levees will be reviewed, USACE will balance order of requests, state recommendations, regional district priorities, how levees can be grouped to promote efficiency of resources needed to conduct reviews, and geographic diversity (i.e., ensuring all the levees chosen do not come from one state).



Galena River and levee in flood conditions (Galena, Illinois).

Current Status

- There are currently about 100 levees with owners who have expressed interest in participating in a Levee Review.
- USACE currently has enough funding to conduct reviews on 30 levees beginning in 2025.
- On or about Nov. 1, 2024 USACE will select the 30 levees to be reviewed and will notify the levee owners when their Levee Review is anticipated to begin.
- If or when additional appropriations are received, USACE will prioritize and select the next set of levees to be reviewed as funding permits.
- Although current funding is limited, interested levee owners are encouraged to submit a letter of interest for Levee Review in order to be considered if or when USACE receives appropriations.



Aerial view of Missouri River and levees.

YOU'VE DECIDED TO PARTICIPATE. WHAT CAN YOU EXPECT?

Who participates in a Levee Review?

A Levee Review is conducted by a multi-disciplinary team of experts from USACE and private contractors who focus on hydrology and hydraulics, geology and geotechnics, structural engineering, and consequences. There is also a USACE technical advisor and a facilitator who help engage all participants to encourage exchange of information and collaboration.

You, as the levee owner, are an essential member of the team and will provide valuable information about the levee. You should work with the technical team to decide who is most appropriate to participate in the Levee Review process. That could include representatives from the state, regional district (if applicable), tribal members, emergency managers, and community leaders.

What are the key phases in a Levee Review?

There are four key phases in the Levee Review process. On the following pages, you will find information about what to expect in each phase. At a high level, the greatest time commitment for Levee Review participants is during the on-site activities, which typically require 2-3 full days for a single Levee Review. In addition, participants should prepare to attend at least two virtual calls before the on-site activities and at least one virtual call to close out the Levee Review process.



A multi-disciplinary team, including USACE, contractors, the levee owner, and the state, conducts a screening risk assessment on a levee in Sacramento County, California in spring 2024.

Phase 1. Initial Outreach and Levee Data Refinement

Once you have signed a letter of interest, the USACE Levee Review manager will keep you informed about the status of your levee on the waiting list and notify you once your levee has been selected for Levee Review.

If your levee is selected, USACE will contact you to discuss the timeline for the review. USACE will then evaluate available levee information in the National Levee Database and make any refinements.

Phase 2. Planning and Preparation

The Levee Review team will request information about the levee from you, including any readily available design drawings, boring logs, hydrology and hydraulics studies, inspection reports, operations and maintenance manual, and survey data. This ensures the team closes any data gaps and starts the process with the most complete and up-to-date picture of the levee.



Levee owners and state representatives prepare for a site visit in Sacramento County, California as part of a Levee Review.

The team will also secure the right of entry and hold a preparation briefing to walk you and other participants through everything that will take place during the on-site activities.

Phase 3. On-site Activities

The Levee Review team will visit the levee in person and meet with you and any other participants, such as the state, regional district, emergency manager, tribal members, and other community leaders. During this in-person visit, the Levee Review team will use the USACE Levee Inspection

System tool to document the most critical observations about the levee to be used for the screening risk assessment. This is not a formal levee inspection.

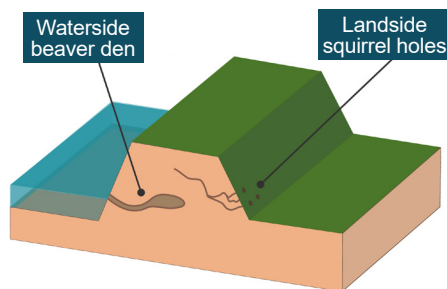
Next, participants will reconvene at a meeting space for a facilitated screening risk assessment of the levee using the USACE Levee Screening Tool and supporting data collected from you and from the field.

The on-site activities support the development of the Levee Review report. The report will include any findings that significantly impact the levee risk, paired with recommendations to reduce those risks. If enough data exists, order-of-magnitude cost estimates can be provided.

Types of recommendations include:

- Completing specific operation and maintenance actions (e.g., repairing animal burrows, removing vegetation).
- Developing an emergency action plan.
- Investigating the feasibility of levee modifications to reduce the potential for poor levee performance and/or overtopping.

The recommendations provided will be prioritized so you have an understanding of what actions are most critical to continuing to reduce levee risk.



Animal burrows impacting levee.



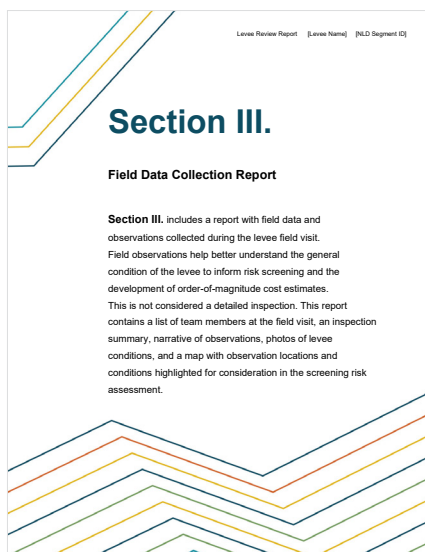
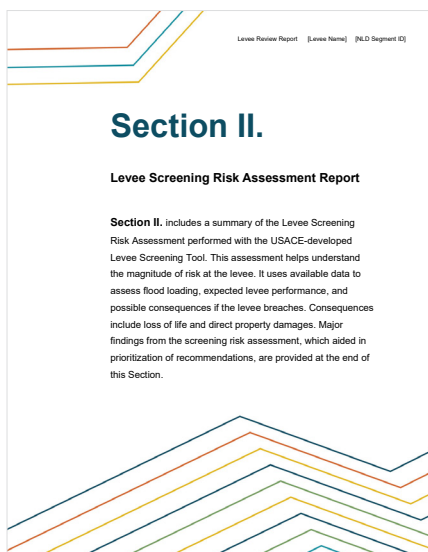
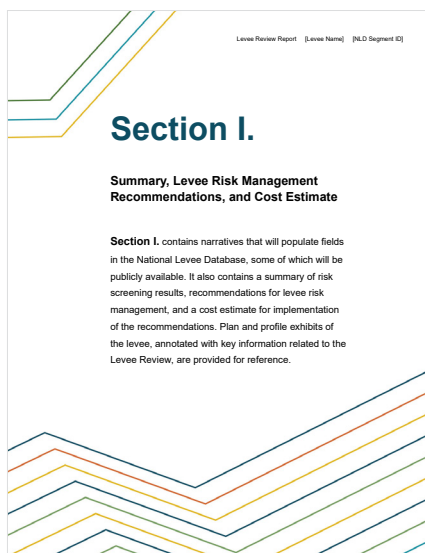
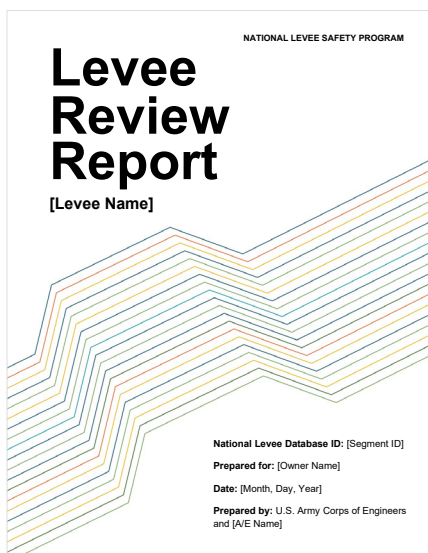
Houses behind a levee.

USACE is not requiring action based on these recommendations.

However, we do encourage you and other participants to consider opportunities to reduce flood risks to the levee and the community.

Phase 4. Reviews and Approvals

The Levee Review report will go through a series of reviews. This includes an opportunity for you, the levee owner, to review and provide feedback. You and other participants will also take part in a closeout briefing.



Cover and section header pages from a Levee Review report.

YOUR LEVEE REVIEW IS COMPLETE. WHAT'S NEXT?

What assistance is available after a Levee Review?

Once the Levee Review report is finalized, uploaded to the National Levee Database, and provided to you, there are a variety of resources available to those looking to implement the voluntary recommendations.

- **State Agencies:** Some states may have funding to support levee activities. Check with representatives from your state.
- **National Levee Safety Program Resources:** There are many resources available for download at leveesafety.org. These resources range from best practices for the life of the levee, including vegetation management, to templates for developing an Operations and Maintenance Manual and an Emergency Action Plan. Engagement and training opportunities will also be available in the near future. You can sign up to receive email updates, including notification of new resources available, at leveesafety.org. Just click on “Get Involved.”
- **U.S. Army Corps of Engineers:** The Silver Jackets, which are interagency teams focused on reducing flooding, may be able to connect you with resources (iwr.usace.army.mil/Silver-Jackets/State-Teams/). Silver Jackets also has an online tool (fedfrmtool.sec.usace.army.mil/) that can help you search for other potential federal assistance based on type (financial, technical, or data and tools).
- **Federal Emergency Management Agency:** FEMA has a wide variety of programs that can help with flood and hazard mitigation, as well as building resilient infrastructure and communities. Visit fema.gov/grants/mitigation/state-contacts for more information.



Bike path on an earthen dike levee along the Mississippi River in Louisiana.

What questions should I ask the point of contact at any assistance entity?

- Does the program provide either technical or financial support, and will activities recommended in the Levee Review report be covered?
- What are the restrictions, requirements, and eligibility criteria for assistance?
- What is the application process and timeline for your program?
- What information do I need to provide with the application?



People ride bicycles on the levee at the Everglades National Park in Coral Springs, Florida.

FREQUENTLY ASKED QUESTIONS

Will levee data be shared with the public?

Data collected as part of a Levee Review will not be publicly available; however, certain data from the Levee Review report will contribute to public-facing fields in the National Levee Database, such as the “Levee Summary” and “Performance and Condition” fields. The actual Levee Review report will only be shared directly with you, the levee owner. The report will be uploaded to the National Levee Database as a limited access document that can be viewed by authorized users (USACE and FEMA), and potentially the state where the levee is located (if applicable).

We encourage you to share the report or key takeaways with relevant partners, such as the state, regional district (if applicable), emergency managers, tribal members, or community leaders/floodplain managers. While not required, this kind of collaboration can be beneficial and lead to conversations about assistance or support.

Do Levee Review results affect FEMA levee accreditation?

The FEMA levee system accreditation process for National Flood Insurance Program mapping is separate and independent from this Levee Review effort. Criteria for levee accreditation for the National Flood Insurance Program are described in the Code of Federal Regulations at 44 CFR 65.10, which is not associated with Levee Review.

The Levee Review process does not evaluate any specific regulatory criteria related to levee system accreditation in accordance with 44 CFR 65.10. Therefore, the Levee Review process does not produce findings or recommendations directly related to accreditation.

The information collected during the Levee Review effort will be available to you and FEMA and may be used to inform any future National Flood Insurance Program mapping efforts. Information from the Levee Review effort would be one of many data sources considered by FEMA. For any National Flood Insurance Program mapping study, FEMA works directly with you and the community to collect all relevant data about the levee system. For more information, visit fema.gov/flood-maps/living-levees/homeowners-business.

You and your communities should understand the flood risk and any vulnerabilities associated with a levee system. This information can be used by a community to make more informed local land use and infrastructure investment decisions that can increase resilience for the community.

Do Levee Review results affect National Flood Insurance Program pricing?

FEMA uses information derived from USACE-led risk assessments in the National Flood Insurance Program's pricing approach, including information about the leveed area, overtopping frequency, and levee performance data (system response curve). Through the Levee Review process, these key pieces of data will be reviewed, refined, and entered in the National Levee Database. This ensures that when FEMA obtains levee data from the National Levee Database, the most current information is used at that time when setting insurance rates.

Information about the levee informs just one of 22 factors that determine insurance pricing for a specific building. While it is difficult to know how changes to any specific levee data might influence insurance rates, participation in Levee Review will provide information that better characterizes your levee's true flood risk reduction.

When setting insurance rates, FEMA uses currently available levee performance information. If levee-specific data is not available, FEMA will apply assumptions based on historic levee performance of other levees. A USACE-led risk assessment on your levee, such as the one you can get through Levee Review, ensures FEMA is using the information specific to your levee.

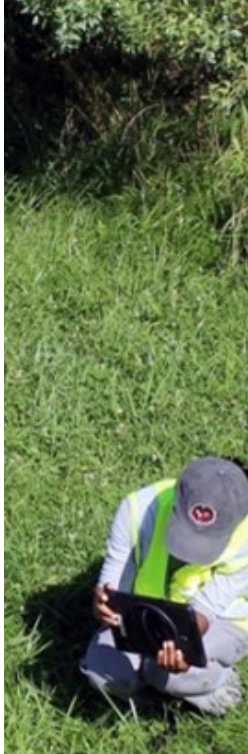
You and your communities should understand the flood risk and any vulnerabilities associated with a levee system. This information can be used by a community to make more informed local land use and infrastructure investment decisions that can increase resilience for the community and align with its values.

Does Levee Review affect eligibility for the USACE Public Law 84-99 Rehabilitation Program?

Levee Review is separate from the USACE Public Law 84-99 Rehabilitation Program, and you cannot enter a levee into the PL 84-99 Rehabilitation Program or become eligible in the program simply by participating in Levee Review. However, it will serve as an excellent baseline report to help inform PL 84-99 Rehabilitation Program eligibility requirements, if you desire to enter the program.

Who do I contact for more information?

For more information about participating in a Levee Review, contact the USACE Levee Review manager, Rick Hauck, at Rick.L.Hauck@usace.army.mil.



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