

**SUMMARY PROPOSED ACTIONS  
WITHIN THE PROGRAMMATIC ENVIRONMENTAL ASSESSMENT  
FOR FLOOD CONTROL PROJECTS  
STATES OF ILLINOIS, INDIANA, MICHIGAN, MINNESOTA, OHIO, AND  
WISCONSIN**

**COMMON SCOPE OF WORK**

- Flood control work may take place where current flood levees have been damaged, in areas where no damage has occurred, but improvements would mitigate future flood damage, or in areas where there are currently no levees. Proposed actions covered by the PEA would be limited to no more than 1 mile and no more than 10 acres of ground disturbance.
- Typical construction activities for flood control projects may include:
  - Demolition or modification of existing facility or structure
  - Tree and vegetation cutting, clearing, removal, and restoration/planting
  - Excavation in upland and embankment areas
  - Grading
  - Creation and use of staging areas and site access routes
  - Installation of erosion and sediment control (ES&C) measures
  - Traffic disruptions, lane closures, possible detours for projects adjacent to or crossing roadways
  - Site restoration and stabilization

**LEVEES ALONG STREAM BANKS**

- Encompasses construction of new levees that would include earthen embankments and floodwalls along waterbodies such as streams and rivers with the primary purpose of reducing the frequency of flooding to a portion of the floodplain.
- Designs for earth embankments would follow guidelines provided in the U.S. Army Corps of Engineers (USACE) Design and Construction of Levees (USACE 2000). Earthen embankments are composed of soils and rock either obtained from borrow areas or adjacent excavation or dredged areas and are piled by mechanical means. Levee materials may or may not be compacted. The foundation of an earthen embankment may or may not be over-excavated to provide a solid foundation.
- Floodwalls would follow guidelines provided in USACE's Engineer Manual for Floodwalls and Other Hydraulic Retaining Walls (USACE 2022). Floodwall types would include concrete walls with shallow foundations, concrete walls with deep foundations, cantilever pile walls.

**LEVEES AROUND FACILITIES AND STRUCTURES**

- Construction of levees around facilities and structures to keep floodwaters out of the enclosed area.
- Facility and structure levees may be earthen embankments and floodwalls as described under streambank levees.
- Levees would remain within the footprint of the facility or structure's property.

## REFERENCES

U.S. Army Corps of Engineers (USACE). 2000. "Design and Construction of Levees." Available at: [https://www.publications.usace.army.mil/portals/76/publications/engineermanuals/em\\_1110-2-1913.pdf](https://www.publications.usace.army.mil/portals/76/publications/engineermanuals/em_1110-2-1913.pdf)

\_\_\_\_\_. 2022. "Floodwalls and Other Hydraulic Retaining Walls" <https://www.publications.usace.army.mil/Portals/76/Users/182/86/2486/EM%201110-2-2502.pdf>