



Interim Risk Reduction Measures

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

What are Interim Risk Reduction Measures?

- Interim Risk Reduction Measures (IRRM) are effective, interim actions taken to reduce inundation risks posed by a levee system while longer term solutions are planned and implemented. IRRMs are a critical part of responsible, adaptive flood risk management and recognize the dynamic nature of flood risk. Even levee systems that may not pose high risks can benefit from IRRMs.
- In establishing IRRMs, the prevention of loss of life is the highest priority.



What triggers the need to consider IRRMs?

- Many IRRMs are good practice for levee operators and maintainers regardless of the levee condition.
- Specific activity or event revealing safety issues, such as,
 - Routine, periodic or special inspections
 - Flood event
 - Risk assessments/levee screenings
 - System-wide Improvement Framework requests

Who is responsible for developing IRRMs?

- US Army Corps of Engineers (USACE) for levees systems it operates and/or maintains.
- Levee sponsors of federally-authorized, locally operated and maintained systems (at their discretion).
- Levee sponsors of non-federal systems (Rehabilitation and Inspection Program [RIP]) (at their discretion).

Who pays for IRRMs?

- USACE will fund the development and implementation of IRRMs, including a public communication plan, for levee systems it operates and/or maintains.
- The local levee sponsor of federally-authorized, locally operated and maintained systems and non-federal systems is responsible for developing and implementing IRRMs.
- USACE districts may advise levee sponsors on their IRRMs via available partnership opportunities, for example, through Levee Safety Program activities; Silver Jackets interagency teams; Planning Assistance to States; or, Floodplain Management Services.

What are some examples of IRRMs?

- Example nonstructural IRRMs include: levee system-specific flood warning and emergency evacuation plan; emergency response training and exercises; floodplain management plan; and public communication plan.
- Example structural IRRMs include: seepage control measures; target grout program; overtopping resiliency features; erosion protection; and stability berms.

For more information and guidance about IRRMs, see Engineering and Construction Bulletin No. 2012-1 at http://www.wbdg.org/ccb/ARMYCOE/COEECB/ecb_2012_1.pdf.