

Flexible Water Barriers

Low height perimeter flood barrier used to contain or divert shallow flooding (less than 6 inch) around the perimeter of a site or building. Includes sand or water filled bags and ridged containers, water activated barriers, and solid flexible low height barriers that conform to doors and entries.

Relation to Adaptation and Resiliency

Helps achieve protection of structures/facilities in the event of floods or natural disasters at the ground level.

Benefits

Requires only a small storage space onsite; rapid deployment; relatively low cost.



Limiting Factors (Constraints)

Not applicable for areas of flood waters in excess of 6 inches and some barriers may not be re-deployable after use. Provides flood protection by slowing/redirecting flood waters but is not a "waterproof" barrier.

Design & Preliminary Costs

Design requirements include: determination of length of barrier required (with adequate overlap past opening to be protected); determination of anticipated depth of flooding (flooding should be less than approximately 6 inches); number of units (with backup quantities); assessment of storage location for materials; assessment of availability of sand or water at point of use (for sand or water filled barriers).

Numerous systems are available. Choice of selected system should be based on site conditions (door or entry protection versus perimeter site protection). Accessibility to sand or water may be required to fill some types of systems.

Low capital cost. Variable depending on system and length of barrier(s) required. In general, cost expected to be less than \$500 dollars per system and location.

Permits & Approvals

None identified.

Implementation

Rapid deployment. Flexible water barrier systems can be rapidly deployed with one to two people.

Maintenance Requirements

Limited maintenance. Annual inspection and deployment (for applicable systems) to ensure all systems are working properly and staff are trained to deploy them.



Useful Life

Variable. Generally, this measure has an expected useful life of 20 years.

References/Specifications

QuickDam

<https://quickdams.com/>

HydraBarrier

<https://hydrabarrier.com/>

FloodSax

<https://floodsax.us.com>

