

Fact Sheet
Nonstructural Measures
(Building Retrofit)

Option: Free-Standing Barriers

- Description:** Scaled-down levees or floodwalls applied to individual facilities (such as wastewater treatment plants), designed to prevent floodwaters from reaching the portion of the facility located above grade. Typically designed to protect to the 1% ACE (100-year) water level plus freeboard.
- Example(s):** Surround a flood-prone municipal facility with three-foot high ringwall, with gates or walkovers for access.
- Benefits:** Protects above-grade portion of building without requiring substantial alteration to structure; no displacement of occupants required during construction. May be suitable for certain critical public facilities that cannot be relocated or elevated.
- Challenges:** May not eliminate flooding of below-grade portions of building due to groundwater infiltration; lot-size constraints in densely developed areas; vulnerable to overtopping. May cause additional flooding on adjacent or downstream properties. May restrict public access to riverfront. Use is prohibited in many designated environmentally sensitive areas such as wetlands.

