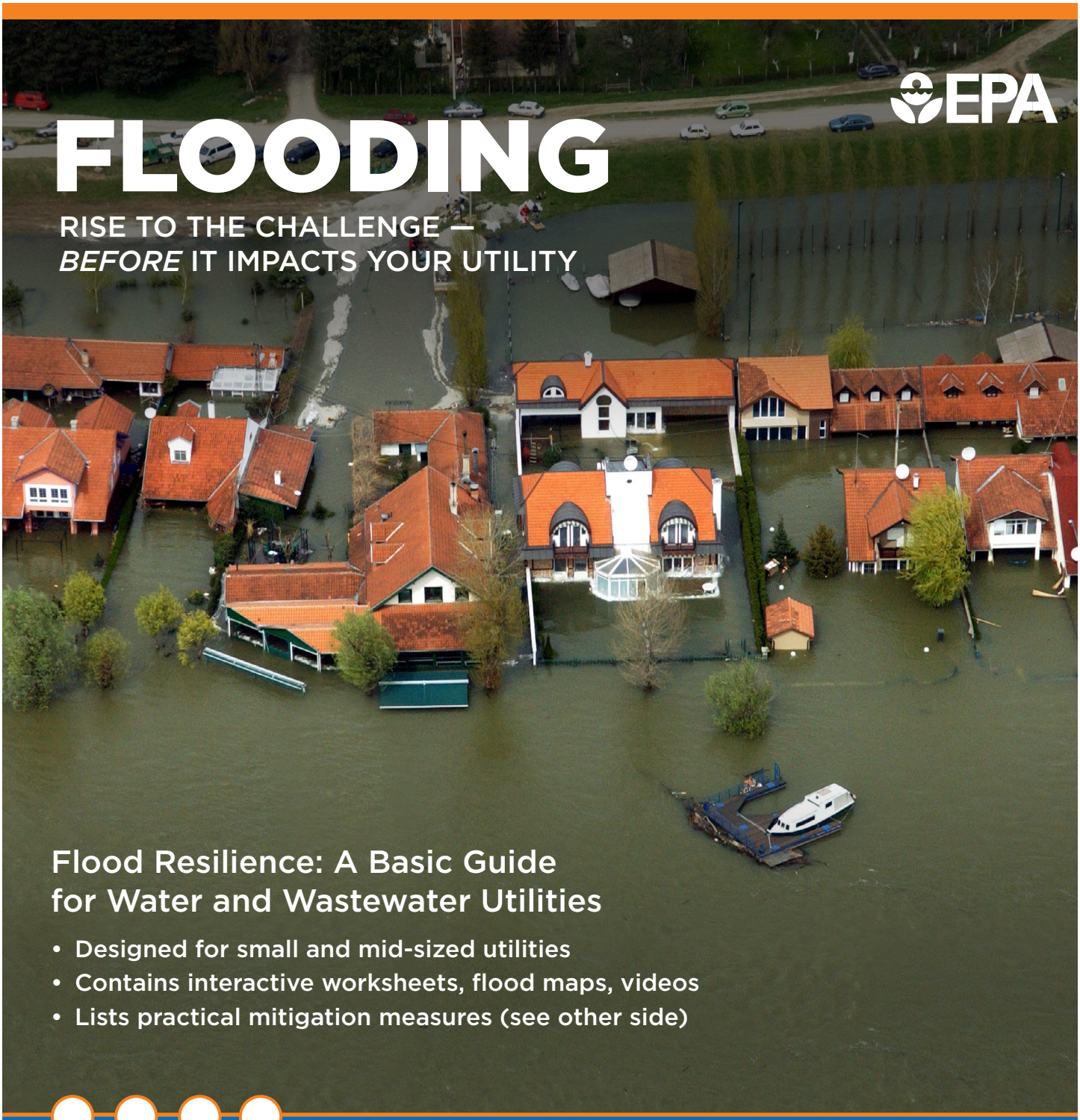

FLOODING

RISE TO THE CHALLENGE — *BEFORE* IT IMPACTS YOUR UTILITY

Flood Resilience: A Basic Guide for Water and Wastewater Utilities

- Designed for small and mid-sized utilities
- Contains interactive worksheets, flood maps, videos
- Lists practical mitigation measures (see other side)

4 STEPS TO FLOOD RESILIENCE

01 Understand Flooding Threat

02 Identify Vulnerable Assets, Determine Consequences

03 Identify/Evaluate Mitigation Measures

04 Develop Plan to Implement Mitigation Measures

To access Guide:
http://water.epa.gov/infrastructure/watersecurity/emerplan/

For video on flood resilience:

Practical Mitigation Options for Flood Resilience

Prevent Intrusion of Flood Water

- Implement a program to keep all drains and culverts clear of debris to reduce possible flooding.
- Use sandbags to make a quick and low-cost barrier to minor flooding. Have sand and bags available.
- Install flap valve on low-lying overflow pipes to protect finished water.

Protect Assets and Operations

- Secure or elevate chemical and other tanks to prevent them from floating away, releasing contents, or damaging other equipment.
- Plan to move vehicles to high ground. Develop alternative methods to access the facility if entry is blocked by high flood waters or debris.
- Elevate or relocate instrumentation, electrical controls, computers, and records.

Ensure Power Reliability

- Contact your local power utility and local emergency management agency to plan for priority restoration of power to your water or wastewater utility.
- Ensure backup power for pumps, treatment facilities, and remote units. Purchase, rent, or borrow generators (e.g., through mutual aid). Install connections to enable your utility to rapidly hook up generators to your system.
- Make sure generators, electrical connections, and fuel supplies are protected from flooding (e.g., elevated, easy to access).
- Arrange for priority access to fuel supplies (e.g., vendor contract).