

Illinois Emergency Management Agency



Flooding Lessons Learned
Ron Davis
9/08/16



Success

Since the 1993 flood, we have purchased about 4000 properties around the state.

Last year after Christmas, we had:

- 3rd highest flood at Hardin
- 4th highest flood at Grafton
- 2nd highest flood at Chester
- Highest flood at Thebes

No Disaster Declaration



Mitigation is a mind set

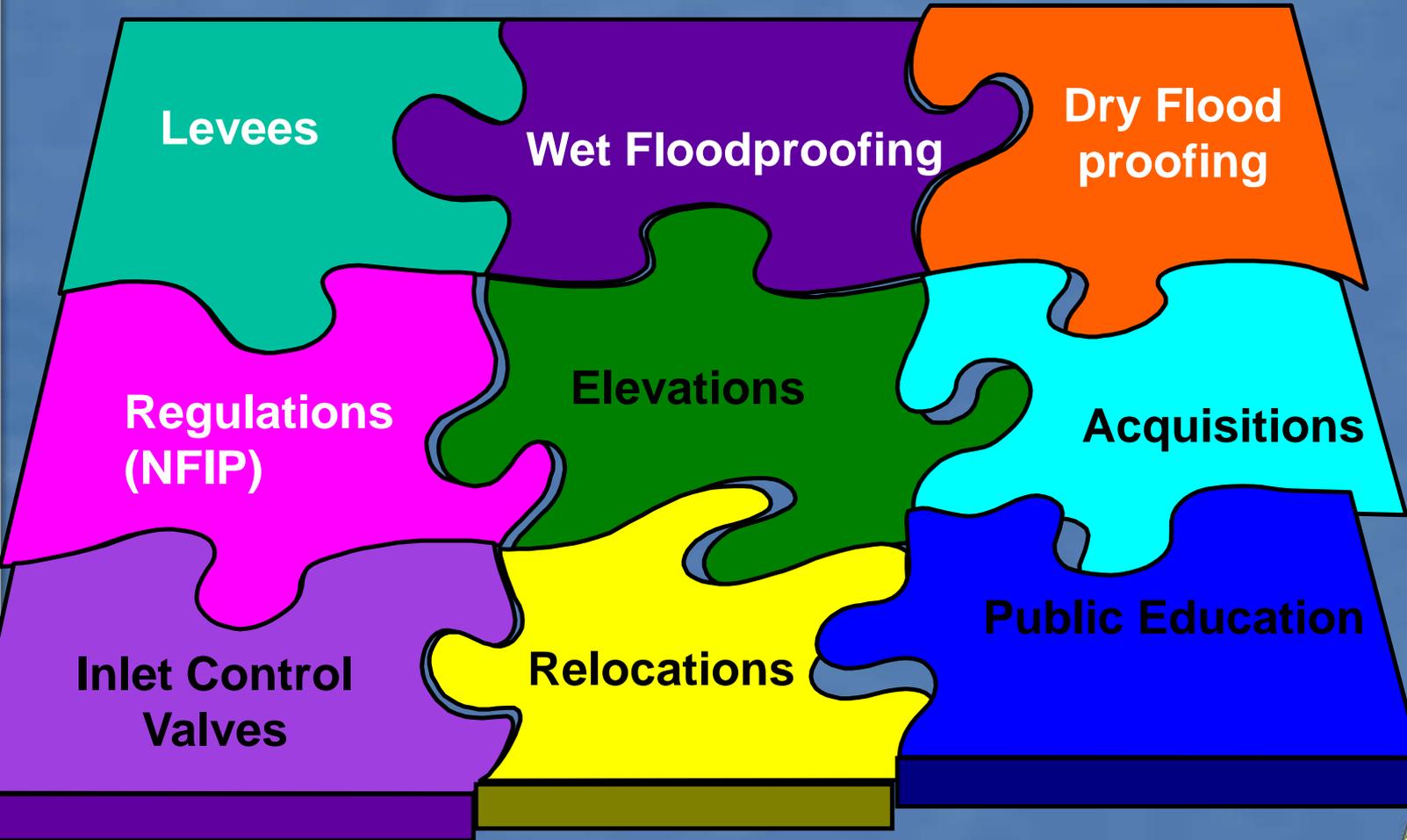


Don't Plan for the Past; Plan for the Future

- Increasing number of extreme events
- Urban flooding is becoming more significant



Methods to Mitigate Floods



Regulations

- Support your floodplain coordinator
- Mitigating existing structures will have a minimum impact if new structures are built in the floodplain.
- Alternate routes out of floodplain



What comes first: Disaster or Mitigation?

The Hazard Mitigation Grant Program (HMGP) provides most of our funding.

We get these funds after a disaster.

We need to do more to minimize the risk prior to the disaster.



Mitigation Funds will NOT Solve all of your Problems

- Limited amount of funds
- Some projects too big
- Some projects too small
- Some don't qualify under the rules



Changing Emphasis

- FEMA now allows funding for floodwalls
- Four of five applications for floodwalls were selected for further review.



Climate Resilient Mitigation Activities

Aquifer Storage and Recovery

Flood Diversion and Storage

Floodplain and Stream Restoration

Green Infrastructure Methods



Minor Flood Control Projects

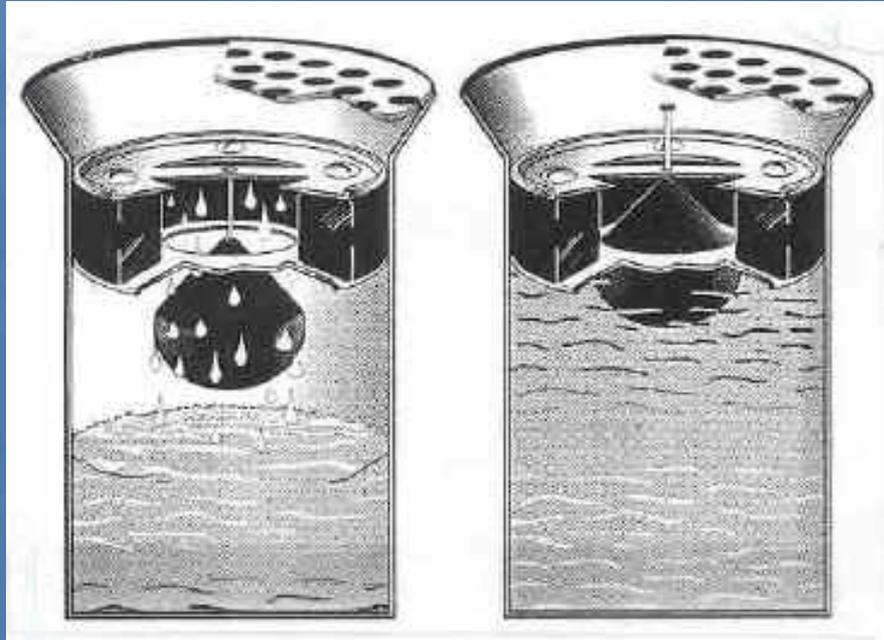


Dry Floodproofing

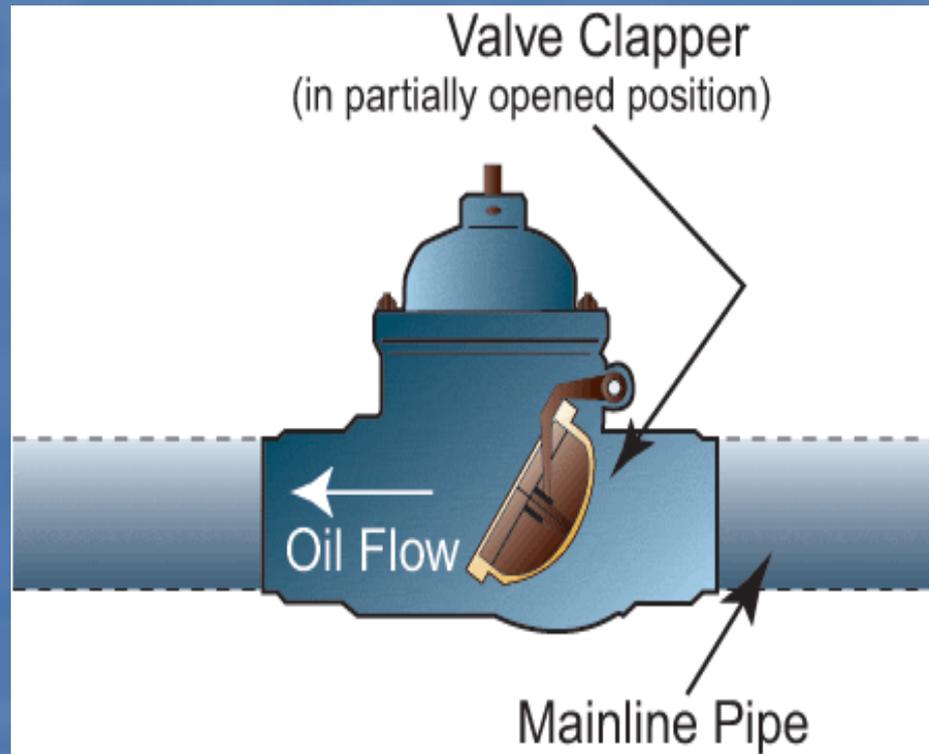
- Number of small projects that can be highly effective.
- Sump pumps (have alternative energy source)
- Backflow valves
- Disconnecting downspouts from sewer line
- Running downspouts away from foundations
- Floodproofing workshops



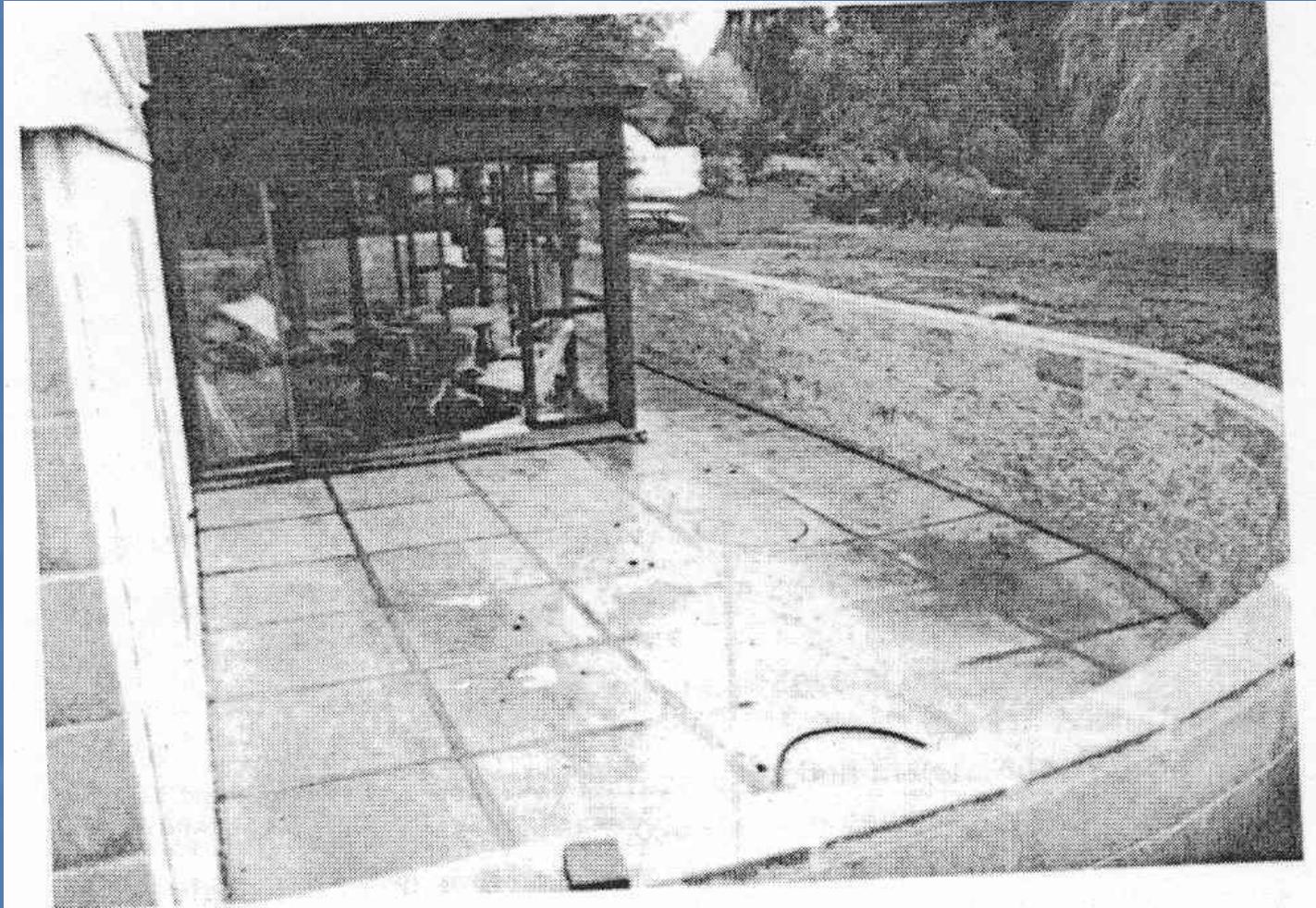
Dry Floodproofing



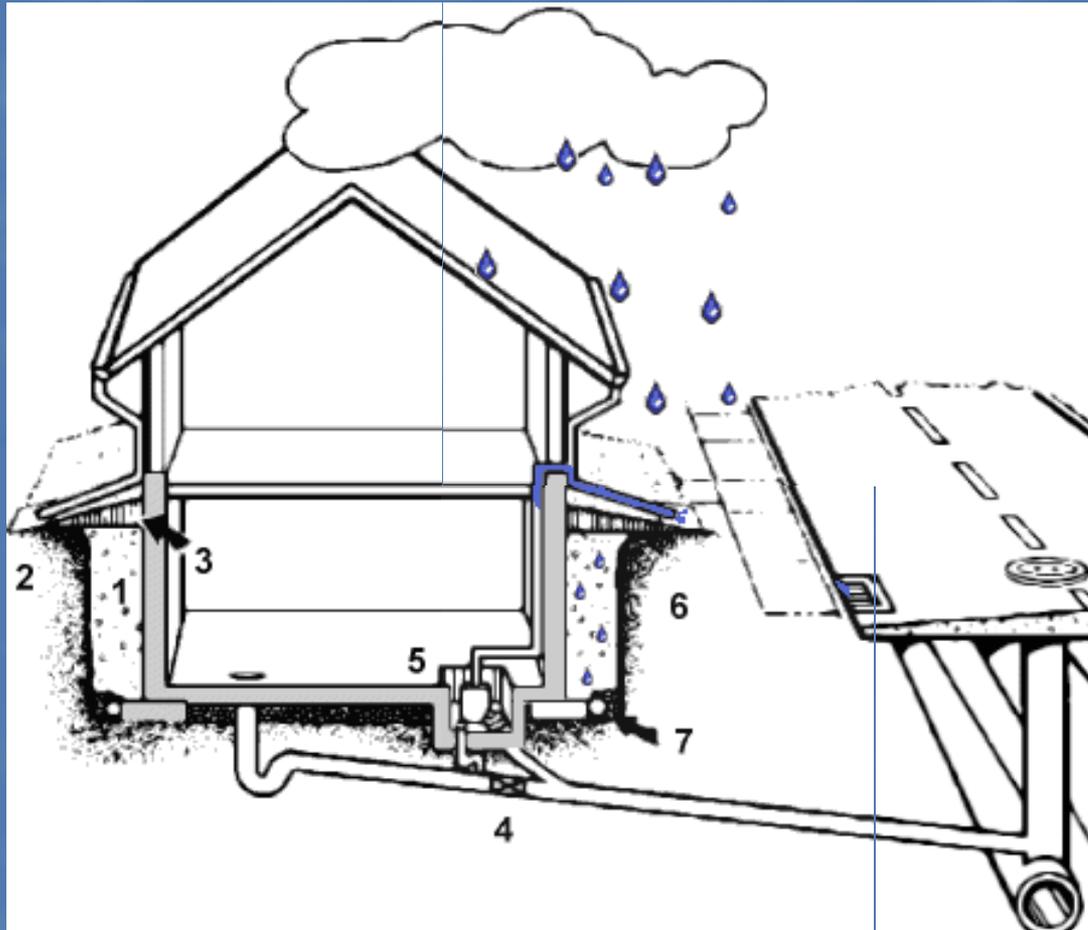
Dry Floodproofing



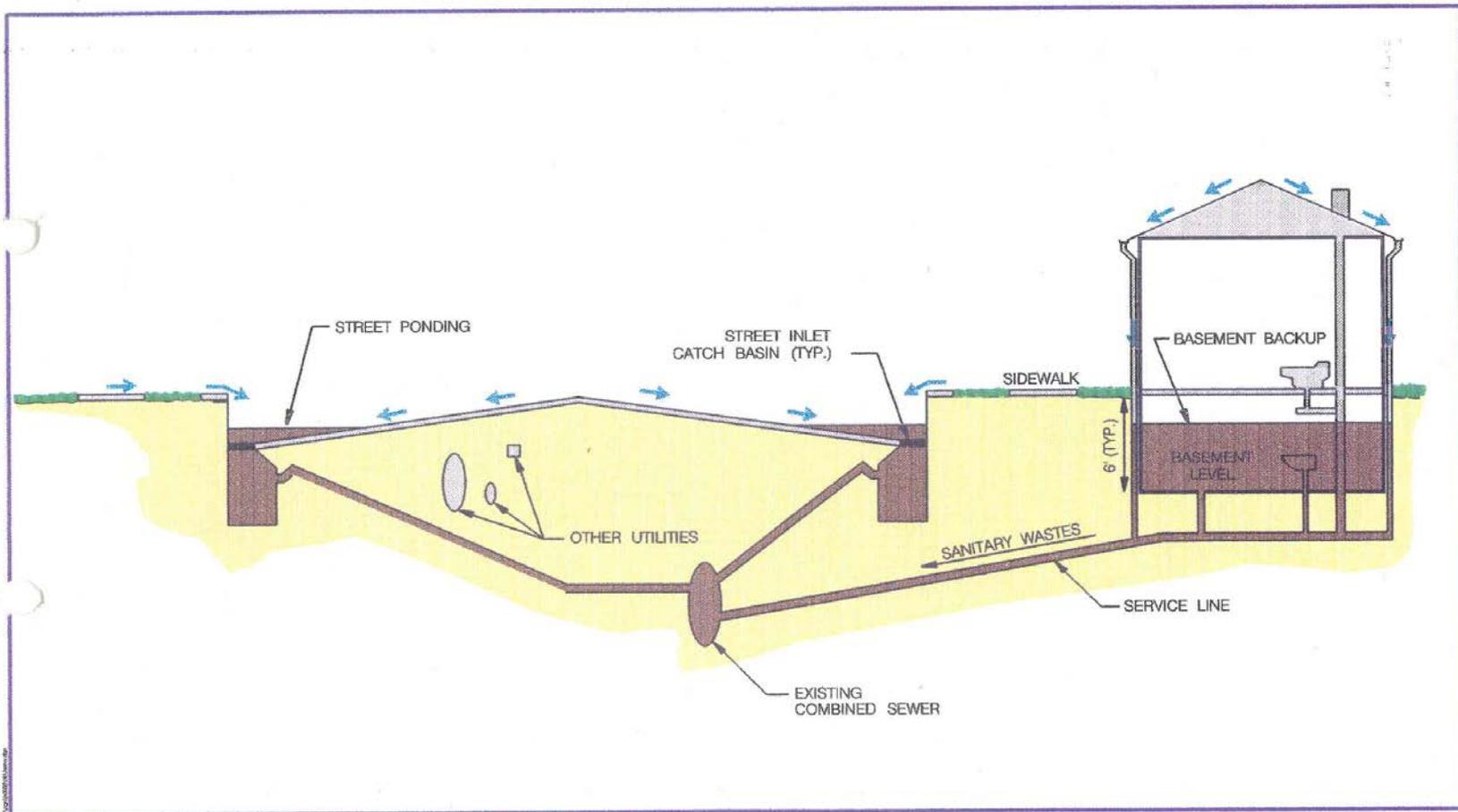
Dry Floodproofing



Dry Floodproofing



HEAVY RAINFALL



HARZA Consulting Engineers and Scientists



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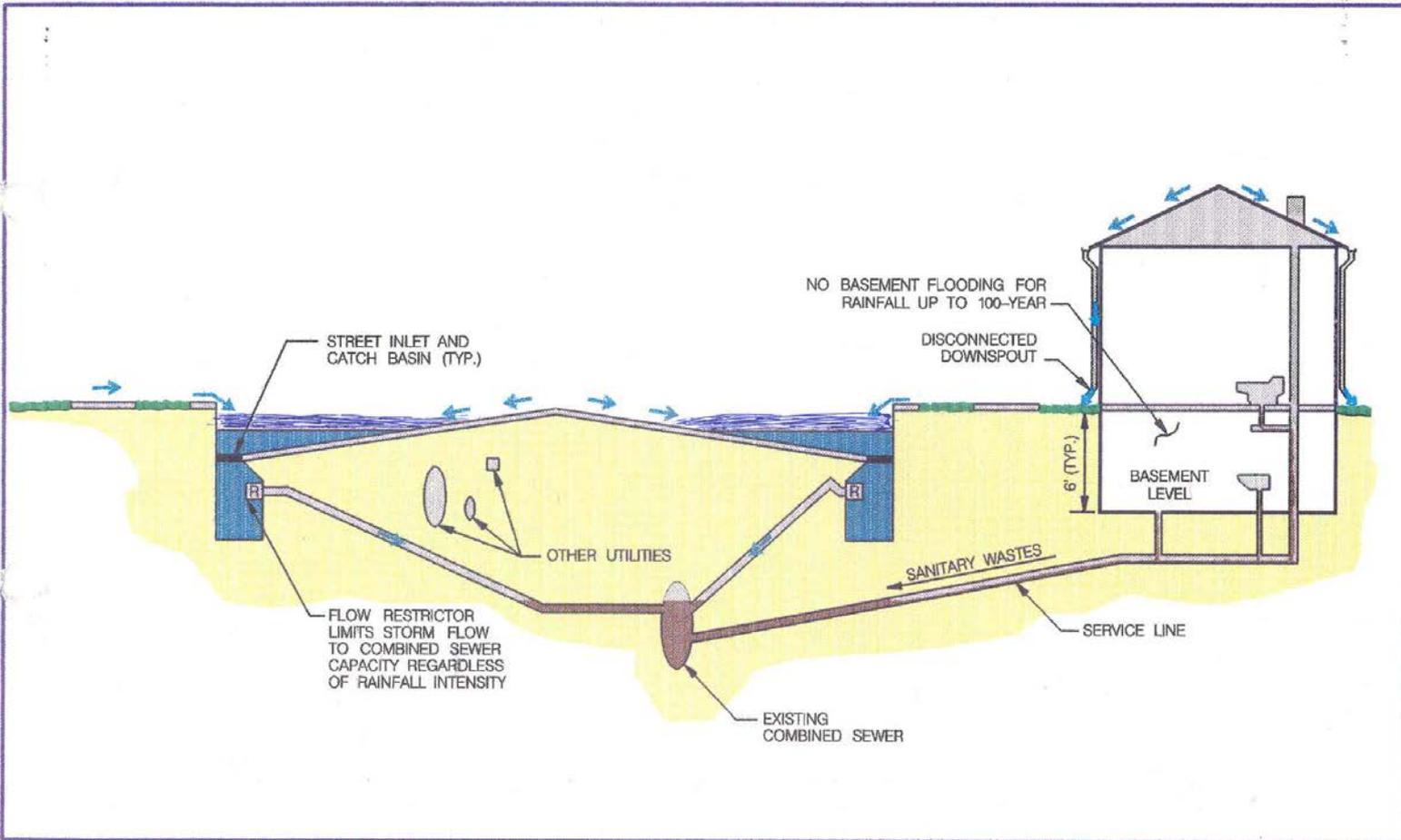


Inlet Control Valves

- Prevents the system from becoming overloaded during peak of storms
- Designed & calibrated to restrict flow of water—holds rainwater on the streets, and gradually releases rainwater into sewers
- Rainblocker is much less expensive than separating the stormwater and sewer systems



RESTRICTED SYSTEM



HARZA Consulting Engineers and Scientists



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Project Requirements

- Project must have positive Benefit / Cost ratio.
- No environmental issues
- Federal programs pay 75% of total cost.
- Jurisdiction must be in good standing with the Flood Insurance Program
- A mitigation plan is required.



National Water Model

The National Oceanic and Atmospheric Administration unveiled a tool in August 2016 that might make predicting the next major flood event easier, giving people more time to react to the oncoming deluge, in much the same way that weather forecasters can more easily predict storms now than they were able to in the past.



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