# Don’t Test The Waters:  Linn County Community Flood Outreach Forum

Cedar Rapids Flood Mitigation Efforts

June 15, 2011

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# Cedar Rapids Flood Mitigation Efforts

- The Challenge:  No City is ever completely ready for the worst natural disaster in it's history
- The June 2008 record flood crested 11 feet over the previous 79-year-old record flood and 19 feet above flood stage
- The Cedar River flooded over 10 square miles of the adjacent downtown and neighborhoods in Cedar Rapids
- Over 7,000 properties damaged and 18,600 persons impacted by the flood
- Hundreds of public facilities damaged
- No deaths, some minor injuries, one hospital evacuated

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- On June 17, 2008, the Cedar Rapids City Council adopted the following goals:
  - Improve flood mitigation efforts to help reduce or eliminate damages to homes and businesses
  - Rebuild high-quality and affordable workforce neighborhoods
  - Restore full business vitality
  - Preserve our arts and cultural assets
  - Maintain our historic heritage
  - Assure we can retain and attract the next generation workforce

# Cedar Rapids Flood Mitigation Efforts

- Key Strategies for Improving Flood Mitigation Efforts
  1. Reduce or eliminate flood risk where feasible
     - Buyout plan (over 1,200 homes)
     - Remove critical City facilities from high-risk areas
     - Funding assistance to rebuild in high-risk areas not offered

  2. Where avoidance of flood risk is not feasible, mitigate flood risks
     - Flood proof structures at risk in high hazard areas
     - Structural flood options including walls and levees
     - Non-structural options including flood insurance and watershed management practices

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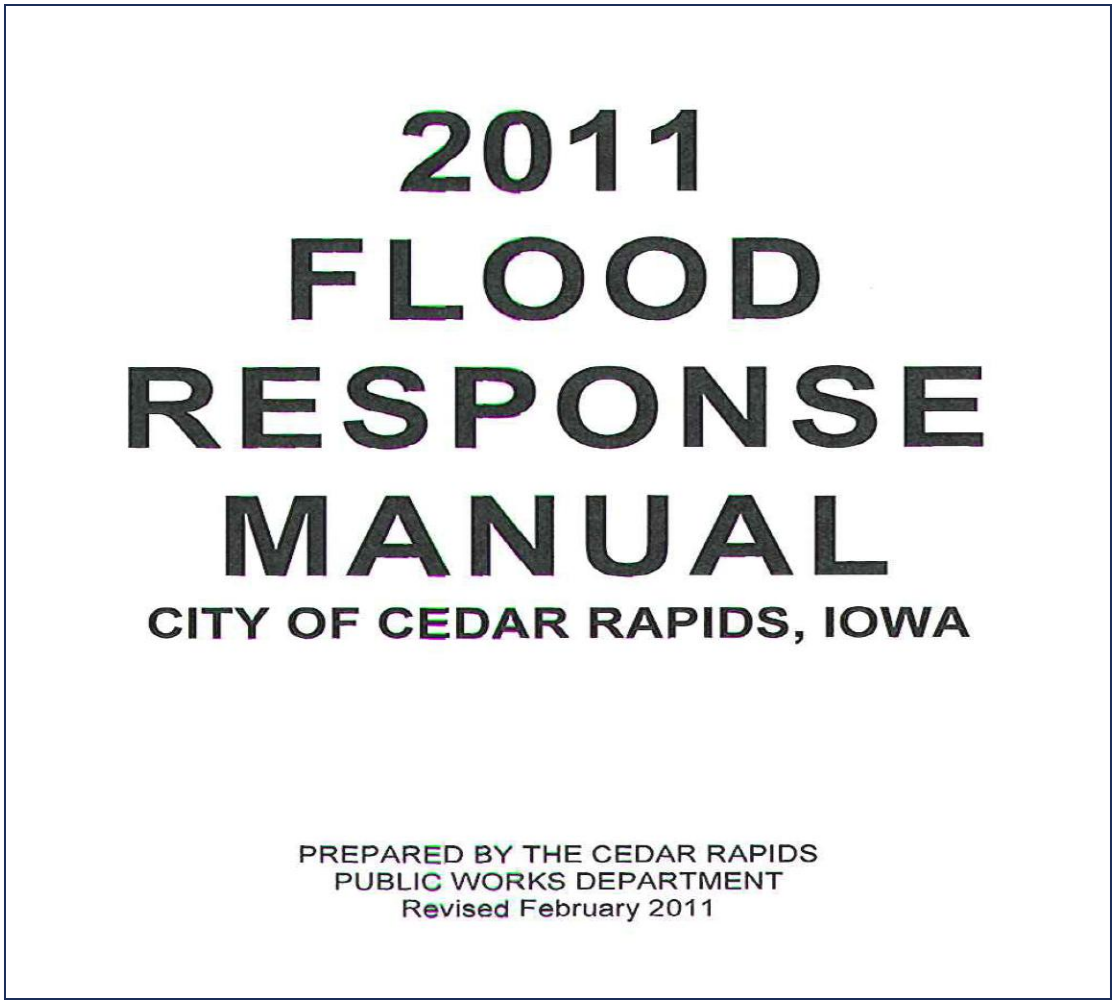

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- Interim Flood Response Plan
- Approximately 3.5 Miles of HESCO Barriers/Baskets
- Approximately 2,000 lineal feet of Tiger Dams
- 10,000 sand bags for flash flooding
- 60 pumps, pipe plugs, standpipes, hoses, etc.
- Standby Resources (Corps of Engineers, Contractors, etc.)

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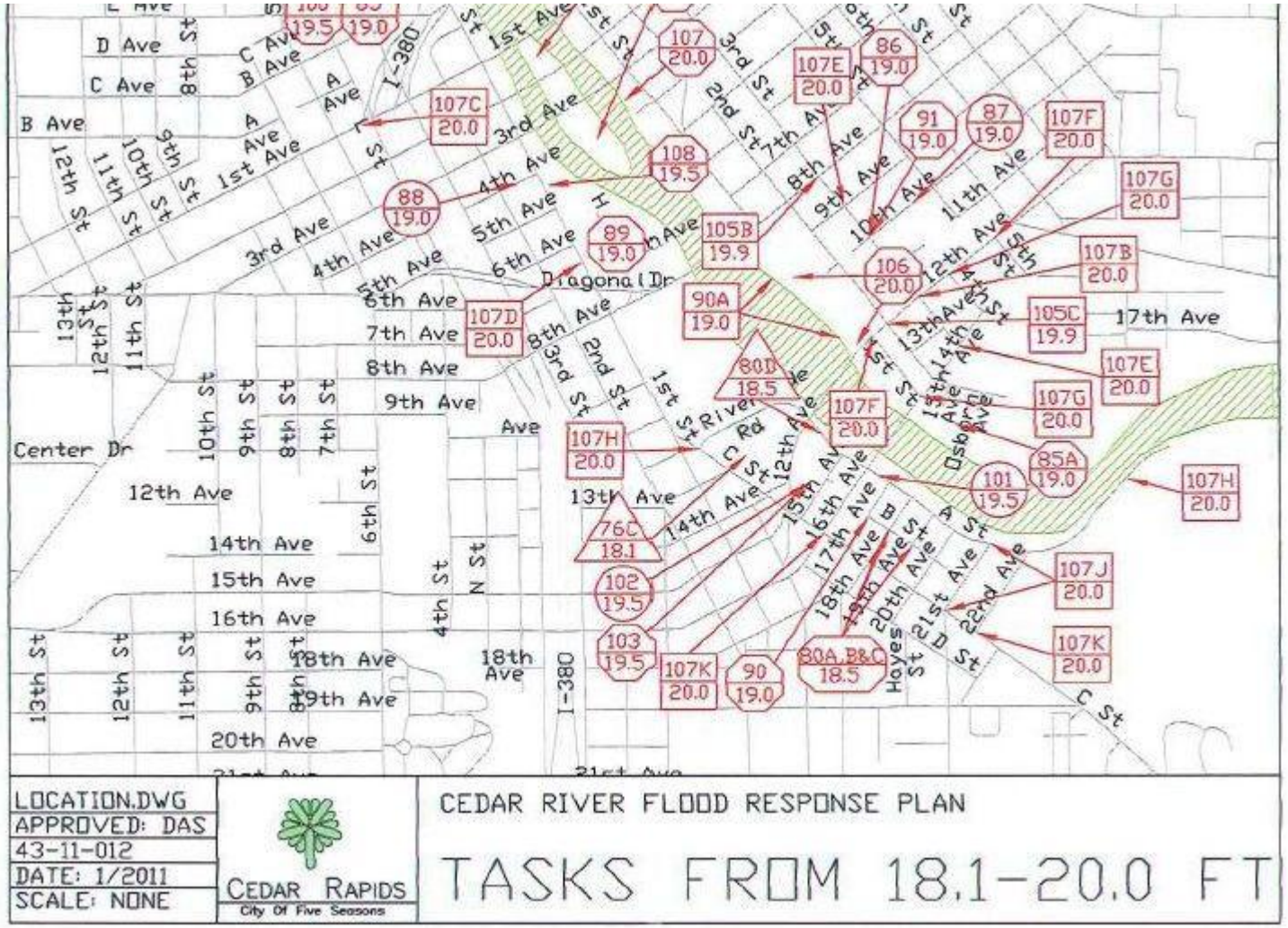

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- Long –Term Flood Management Plan
  - Approved by Council in November 2008 following disciplined public participation process
  - 30 structural and 10 non-structural options evaluated
  - U.S. Army Corps of Engineers participation and coordination with Detailed Feasibility Study
  - Greenway and construction zones established
  - Combination of levees, floodwalls and gates selected as the most probable cost-effective option
  - February 2011 Cost Opinion:  $375 Million for both sides of River

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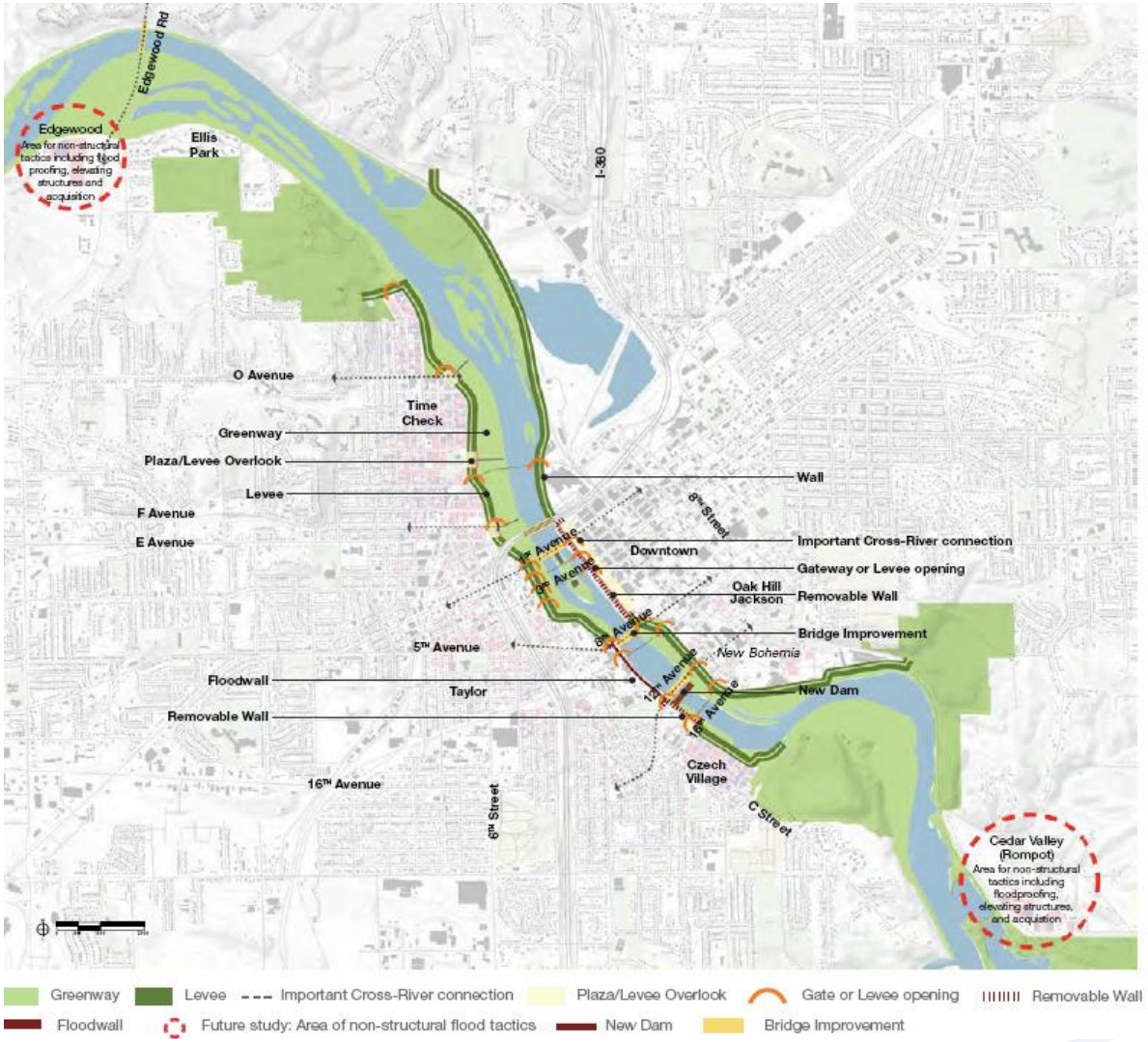

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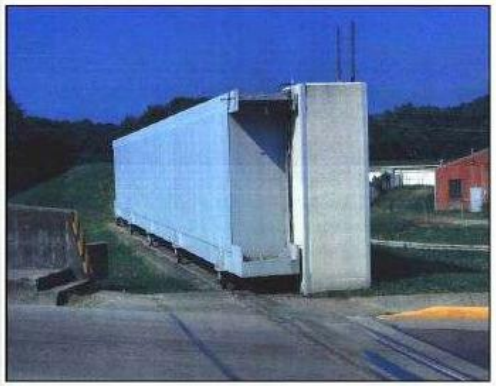
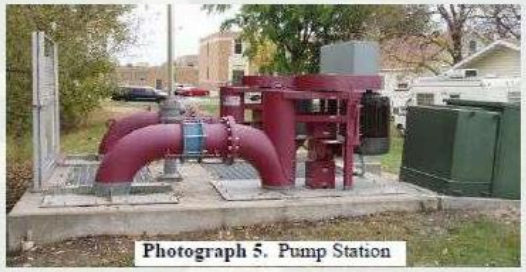
## Typical Gates & Pump Station



Photograph 2. Steel Roller Gate

Photograph 4. Removable Floodwall

Photograph 3. Steel Swing Gate



Photograph 5. Pump Station

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- Watershed Management—Sustainability
  - Support of legislative policies related to watershed management for long-term sustainability
  - Policies to encourage reducing the potential for increased runoff and major flood frequency
  - Storm Water management best practices with focus on continuous improvement

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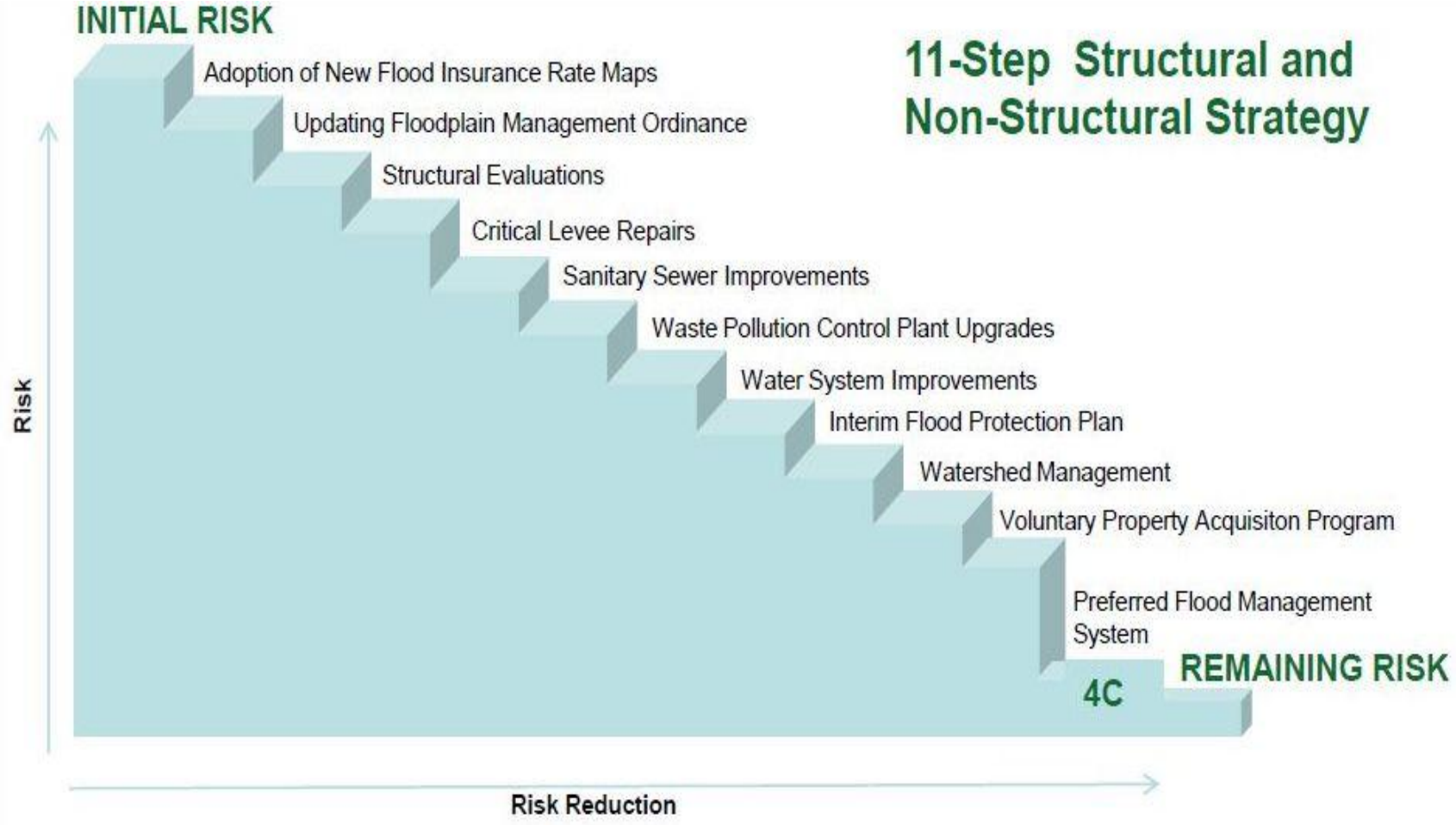

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- Thank you for the opportunity to present this information.

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Flood Link: http://www.cedar-rapids.org/government/departments/public-works/engineering/Flood%20Protection%20Information/Pages/default.aspx