City of Burlington

Flood Mitigation Proposal
March 2015
Burlington’s flood control strategy includes a combination of permanent and temporary flood walls.

- Provides flood protection for the City’s priority areas of the downtown and the critical infrastructure of the WWTP.
- Protection of historic and cultural landmarks
- Builds upon improvements totaling $64.2 Million since 2009
- Prevents devastating effects on economic development
- Proposed Flood Protection ~2’ greater than 2008 historic high.

Budget breakdown:
- Total Project: $64,219,235
  - Federal Funding - $17,036,693 (26.53%)
  - Local Funding - $20,982,542 (32.67%)
  - Sales Tax Increment - $26,200,000 (40.80%)

Operations and Maintenance is funded by the general fund and sewer revenue:
- Staff Training
- Periodic operation of all gates
- Exercising of pumps
- Removal of rubbish from green infrastructure
- Permeable pavement maintenance
- Clearing, repair or replacement of flood control devices
Burlington Riverfront Project Area

1 – Memorial Auditorium
2 – Port of Burlington & Visitor’s Center
3 – Depot & AMTRACK Station
4 – Wastewater Treatment Plant
5 – Riverside Park
6 – Market Street Lift Station
Flood Impacts

Millions of dollars of damage occurs:

- Downtown businesses closed & sustained damage
- Market Street Pump Station inundation causes sewers to backup in downtown buildings. Basements flood, infrastructure is damaged, overflow contaminates the Mississippi River.
- Burlington Northern Santa Fe (BNSF Railroad closed in 2008; added ballast in 2014 to maintain operations.
- Front Street closed to traffic; loss of access for businesses.
- A negative impact to Burlington’s Annual Steamboat Days, an event with a multi-million dollar regional economic impact.

100-year (and Higher) level flood events are becoming the “norm”
Master Plan

Through the use of best management practices, the proposed project will help capture, filter, allow infiltration, detention, and the slow release of stormwater.

- Creating a civic destination and park and a Public Promenade along the River for year round use.
- Floating transient dockage
- Addition of trees and other landscape improvements
- Green infrastructure in alleys and on Jefferson & Washington Streets
- Incorporate trails & complete streets
Primary opportunities identified for a green infrastructure demonstration area in the downtown include:

- **Green Streetscapes** – introduction of elements to improve pedestrian environment
- **Green Alleys** – replacement of existing surface with permeable pavers, concrete or asphalt
- **Rain Garden Street** – collection of street and sidewalk stormwater runoff
Complete Project

9 Phases

- Phase I – Hawkeye Equalization tanks (2009) $3,851,000
- Phase II – Water Works System Improvements (2009) $1,511,000
- Phase III – Cascade Watershed Separation Project (2010 - 2016) $2,854,920
- Phase V – (2015-2017) $5,818,894
- Phase VI – (2019-2020) $5,669,723
- Phase VII – (2021 – 2022)$5,119,348
- Phase VIII – MASL Detention Storage (2023) $4,500,000
- Phase IX – (2022 – 2023) $8,354,877
- Bond Interest and Financing Costs $3,909,930

Note: Phases in red text will utilize sales tax increment funding.

TOTAL PROJECT BUDGET SUMMARY $64,219,235
Sales Tax Increment Funded Phases

Phase V – Total Estimated Cost: $5,818,894
- Flood walls (permanent & removable)
- Riverfront restoration
- Preliminary flood proofing of Market Street lift Station
- Green Alley Demonstration

Phase VI – Total Estimated Cost: $5,669,723
- Market Street Pump Station
- Flood walls (permanent & removable)
- Green Alleys
Phase VII – Total Estimated Cost: $5,119,348
- Valley St storm pump station and storm sewer modifications
- Market St lift station rehabilitation
- Tie Back Wall

Phase IX – Total Estimated Cost: $8,354,877
- Flood walls in the WWTP
- Sanitary effluent lift station
- Depot Protection
- Rail Closures
- Green Streets
Sales Tax Increment Request

Estimated Sales Tax Growth
• 1.29% annually since 2003

Total Sales Tax Increment Request: $26,200,000