

City of Oshkosh

Libbey / Nicolet Watersheds

Stormwater Management Study

City Council Meeting; October 11, 2011





Project Goals

Rain Event	Management Goal
10yr – 1 hour rain (1.67")	Eliminate street flooding
100 yr – 1 hour rain (2.98")	Passable road for emergency vehicles
	Reduce stormwater pollution
	A=CO





12 alternatives analyzed

Each alternative included multiple management components

Management components include:

- Improvements to existing storm sewers
- New storm sewers
- Detention basins

Potential Detention Basin Sites



Alternatives were evaluated based on:

- Elimination of street flooding in 10-year storm event
- Feasibility of construction (wetlands, utility conflicts, etc.)
- Construction cost
- Reduction of flooding for larger storm events (25-yr & 100-yr)
- Pollution control





25-yr & 100-yr storm events – significant flooding on Jackson Street (greater than 1-ft)

Evaluated larger storm sewer (box culverts) on Jackson Street

- > Replaced circular storm sewer with box culvert (5' x 8')
- Other components remain the same
- Improved flood control during larger storm events

Alternative Evaluation – Pollution Control

Sediment Removal Summary	
Alternative	Sediment Removed (tons/year)
Alternative 10 A	48.6
Alternative 12 A	48.1

Cost Summary * (with box culvert in Jackson)	
Alternative	Estimated Cost
Alternative 10 A	\$9.4 million
Alternative 12 A	\$8.7 million

* Cost estimates based on 2010 - 2011 City of Oshkosh projects

Recommended Alternative

Alternative 12A

- Flood control benefits (Jackson street flooding eliminated under 25 yr event)
- Water quality benefits
- > Cost
- Fewer detention basin sites



