



John D. Hunter, Mayor



Sheffield Village Flood Prevention Strategies

Jungbluth Ditch

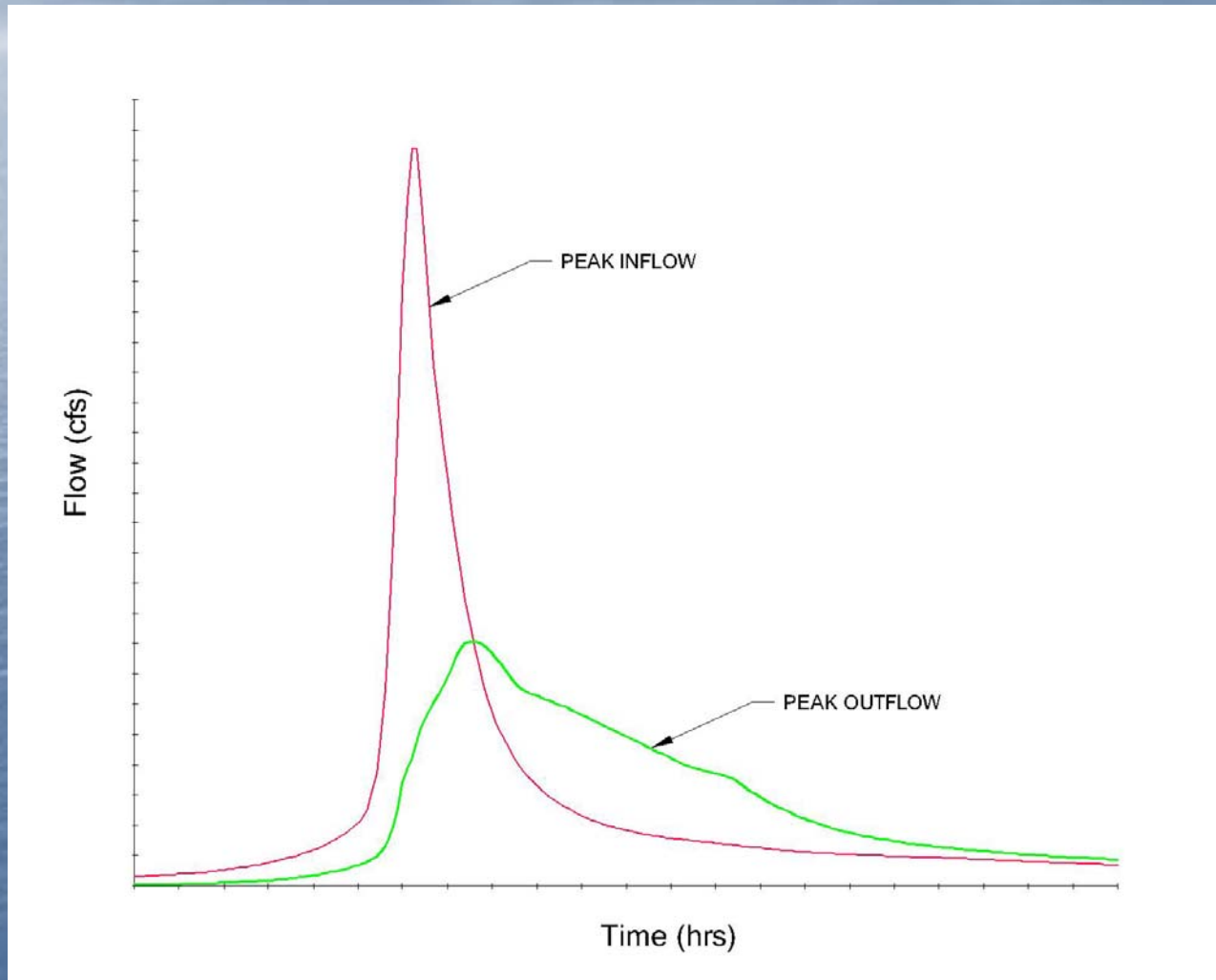
From Abbe Road to Interstate 90

August 14, 2008

John D. Hunter, Mayor

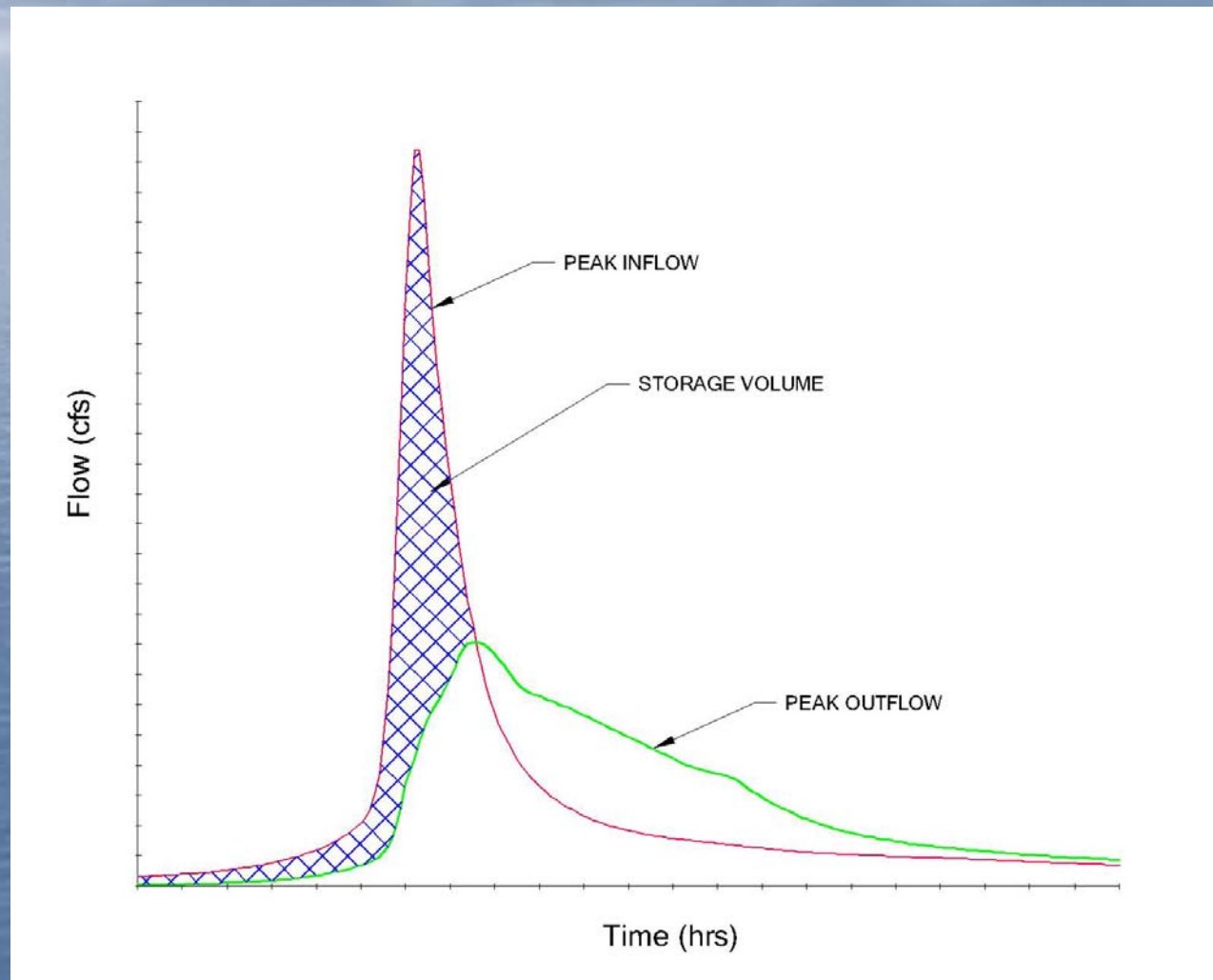
Generic routed hydrograph-A

Shows Pre & Post Retention



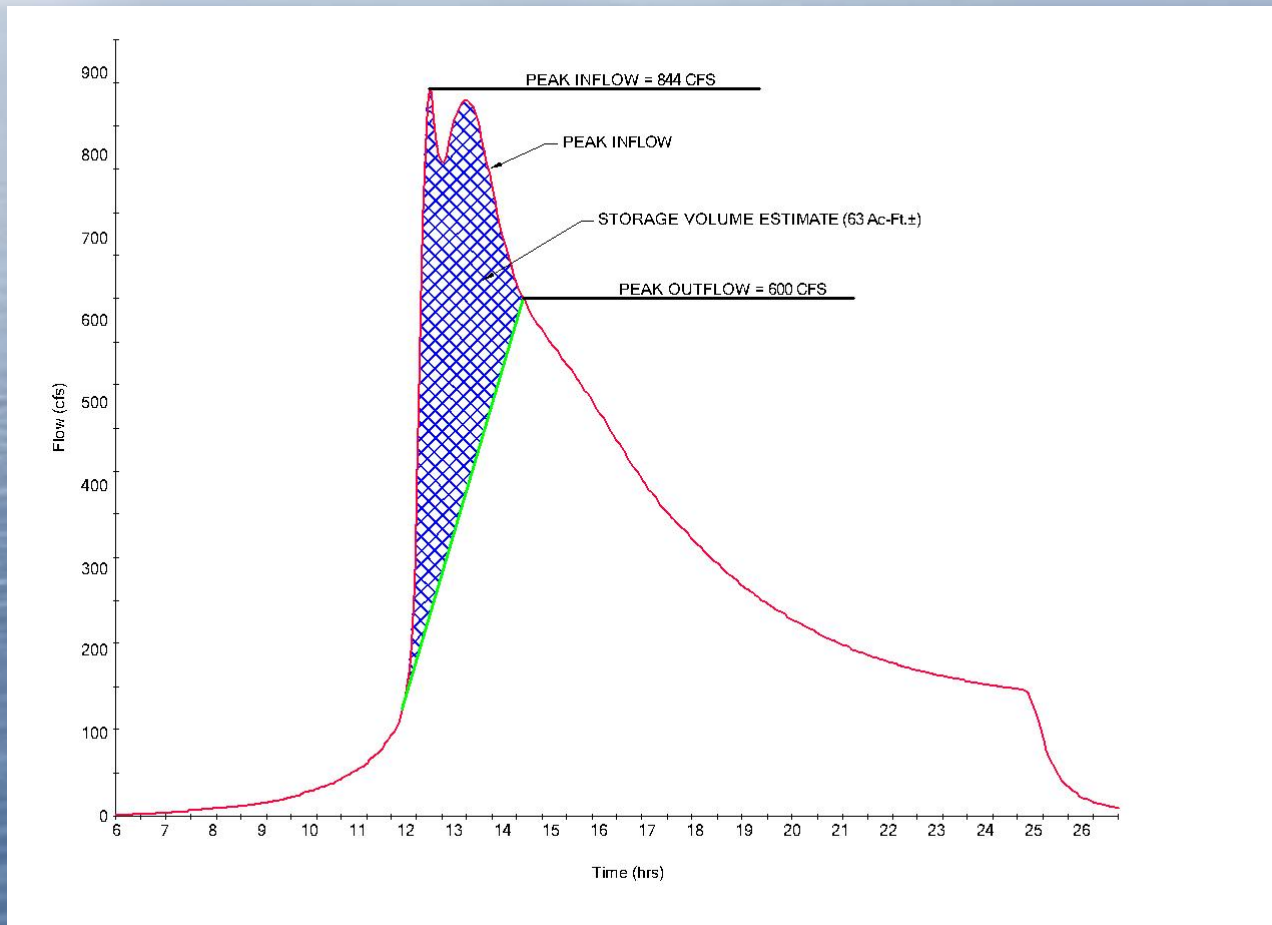
Generic routed hydrograph

Shows Storage Volume as an area



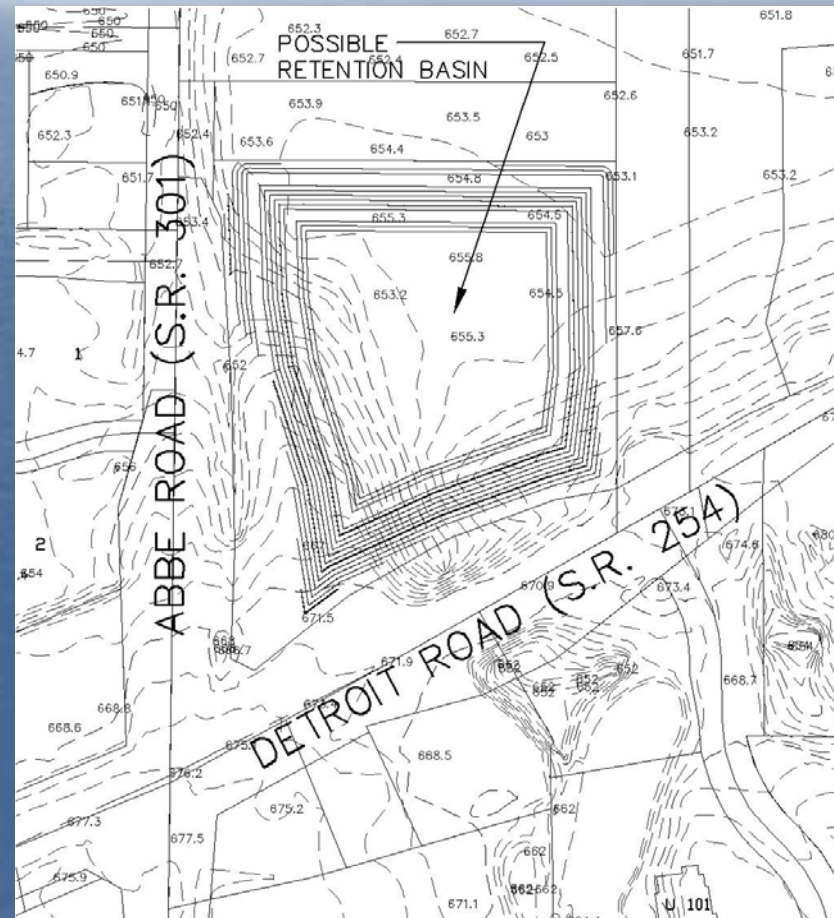
Existing hydrograph

Shows Needed Storage Volume as an area

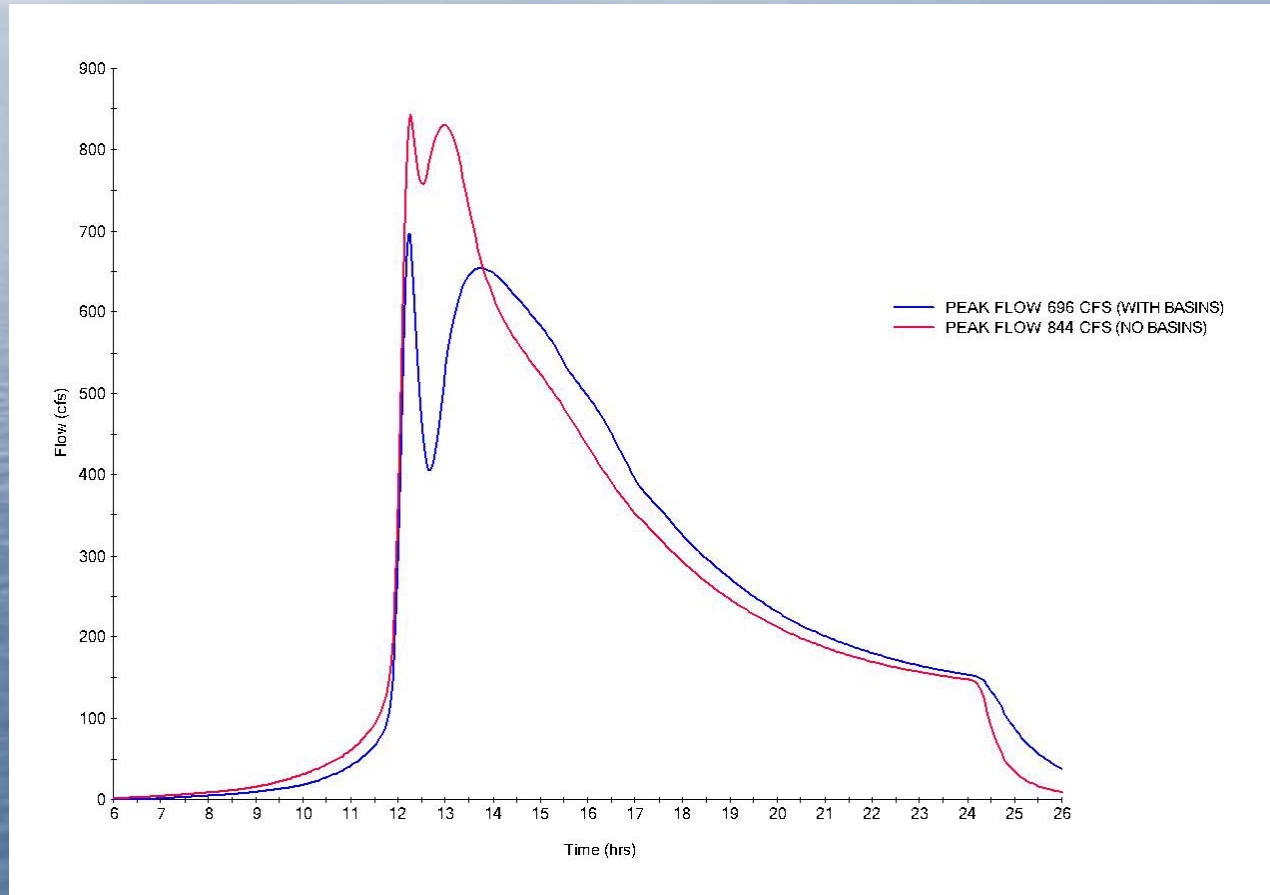


Brown property basin plan

- Shows possible 34.1 Ac-ft +/-



Hydrographs if Basins are Built



Impact of basin construction on inundation elevations:

Strategy

1. Waterford basin constructed
2. Brown basin constructed
3. Willoway basin constructed

Effect

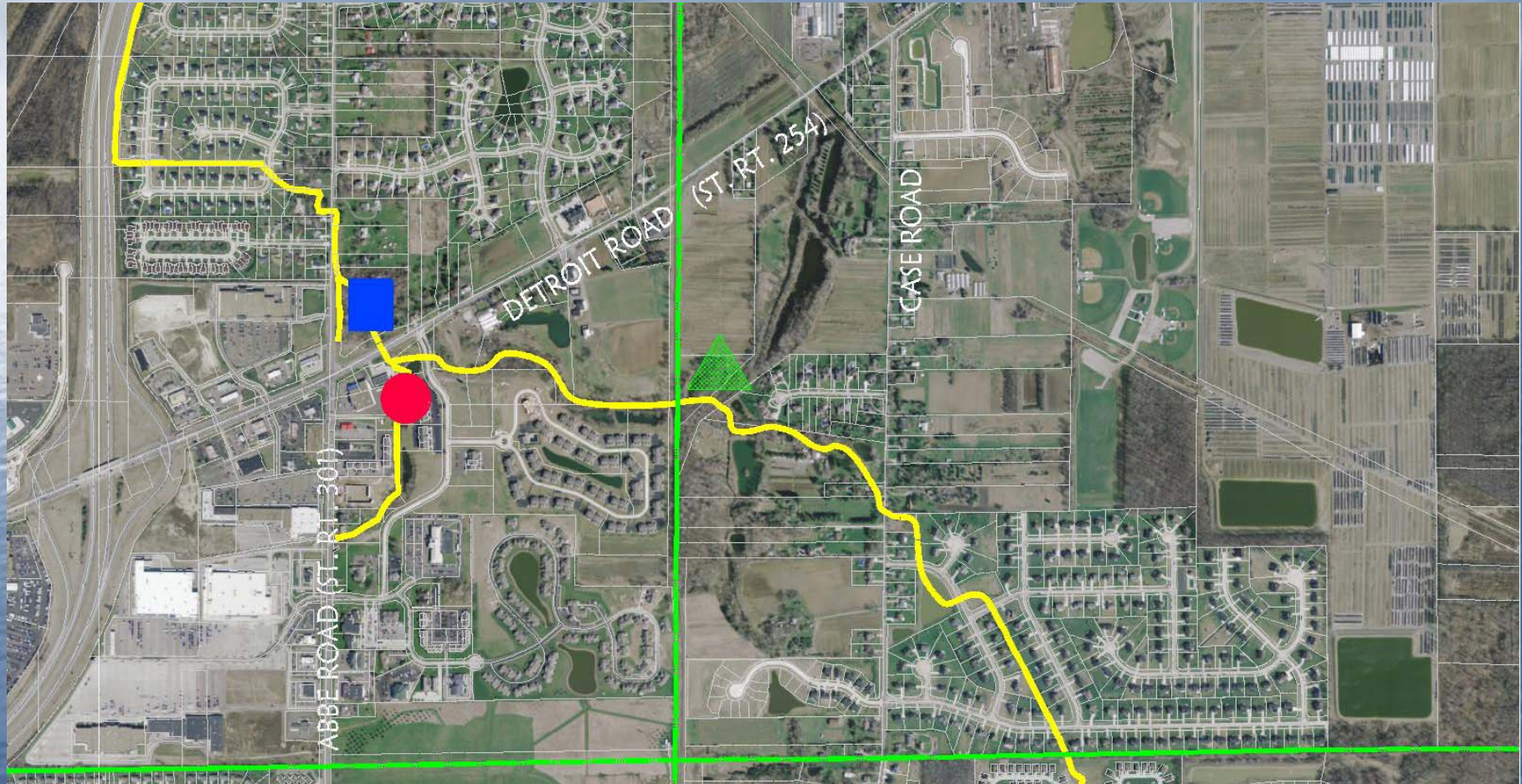
negligible
lowers WS 0.2–1.0 feet
under study

Note- Combined impacts of multiple strategies is only approximately linear

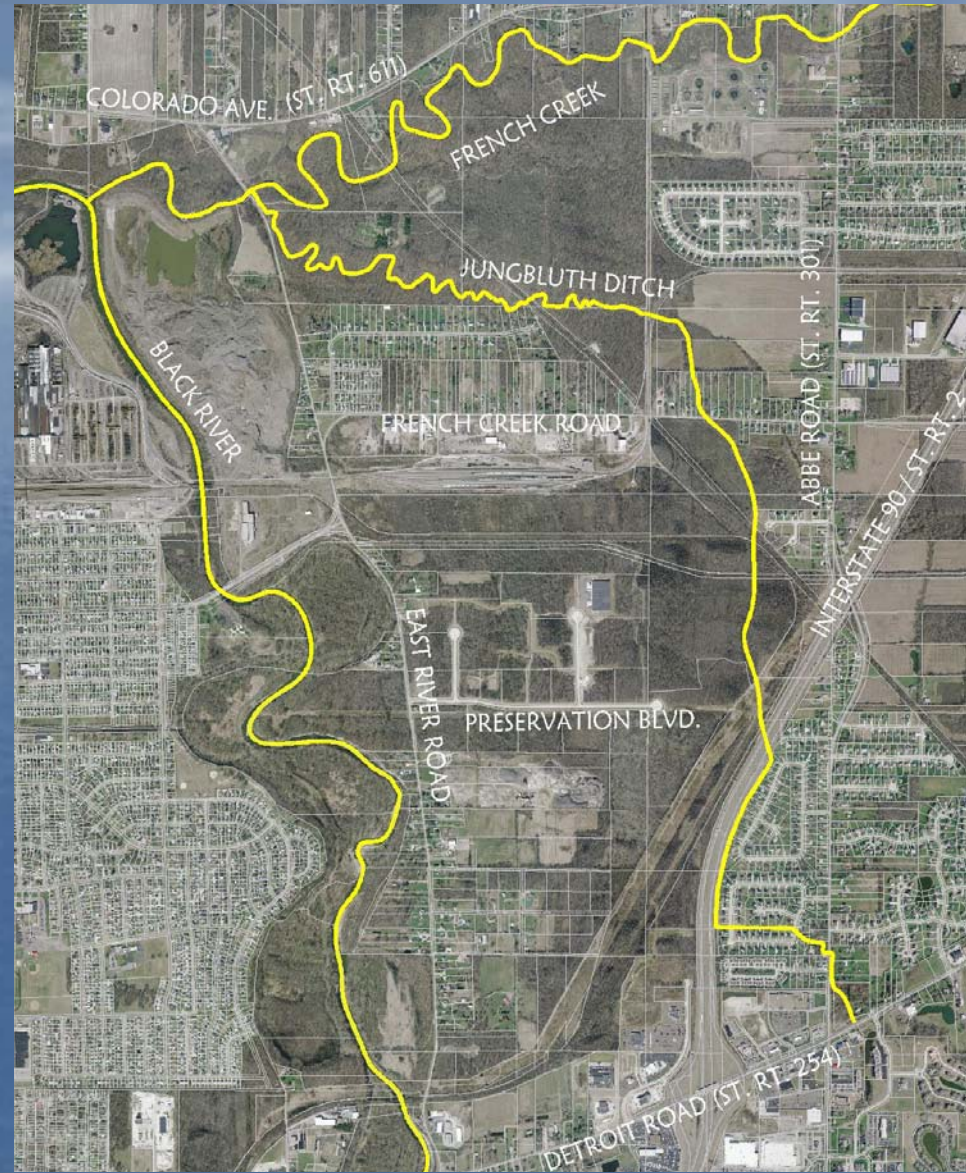
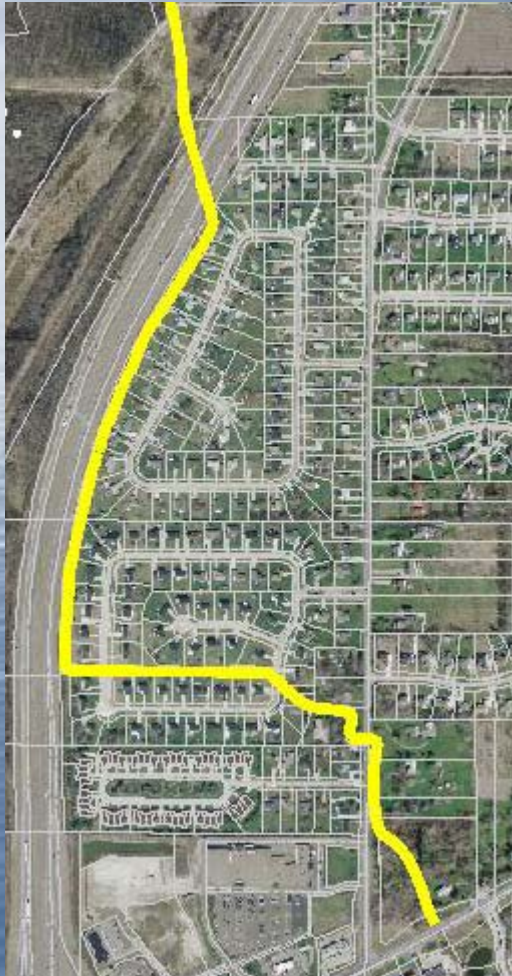
Preliminary Project Costs:

- Waterford Basin \$150,000
- Brown Basin (Const) \$1,525,000
- Brown Property \$1,200,000
- Willoway Basin under study

Potential Basin Locations



Jungbluth Ditch



Other noteworthy issues:

- The cities of Avon & North Ridgeville are continuing to work modifications to their existing basins upstream.
- The future development of upstream areas in the watershed will reduce flooding in the future.
- ODOT is replacing Abbe Road Culvert/Bridge
- The Lorain County Engineer is working on a Regional Storm Water Control Feasibility Study.

Next Steps for Mayor:

- Make sure ODOT analyzes impact of New Abbe Road Culvert on Flooding
- Continue to work on Regional Solutions such as Willoway
- Continue to identify possible revenue sources

Next Steps for Council:

- Determine the viability of this project in terms of its costs and benefits.
- Develop a project financing plan.
- Help set direction for future alternatives analysis

Next Steps for the Engineer

(After the council develops a financing plan and confirms project viability):

- Produce project timeline and permitting plan (12-15 months to start of Construction);
- Prepare plans and specifications; and
- Complete and publish a report summarizing all findings
- Supervise Bidding & Construction
- Total Duration 2 years minimum, likely 2.5 years before completion

Open Floor to Questions?



THANK YOU FOR
ATTENDING AND
PARTICIPATING