

Agenda

- Introductions
- Presentation
- Question & Answer Period



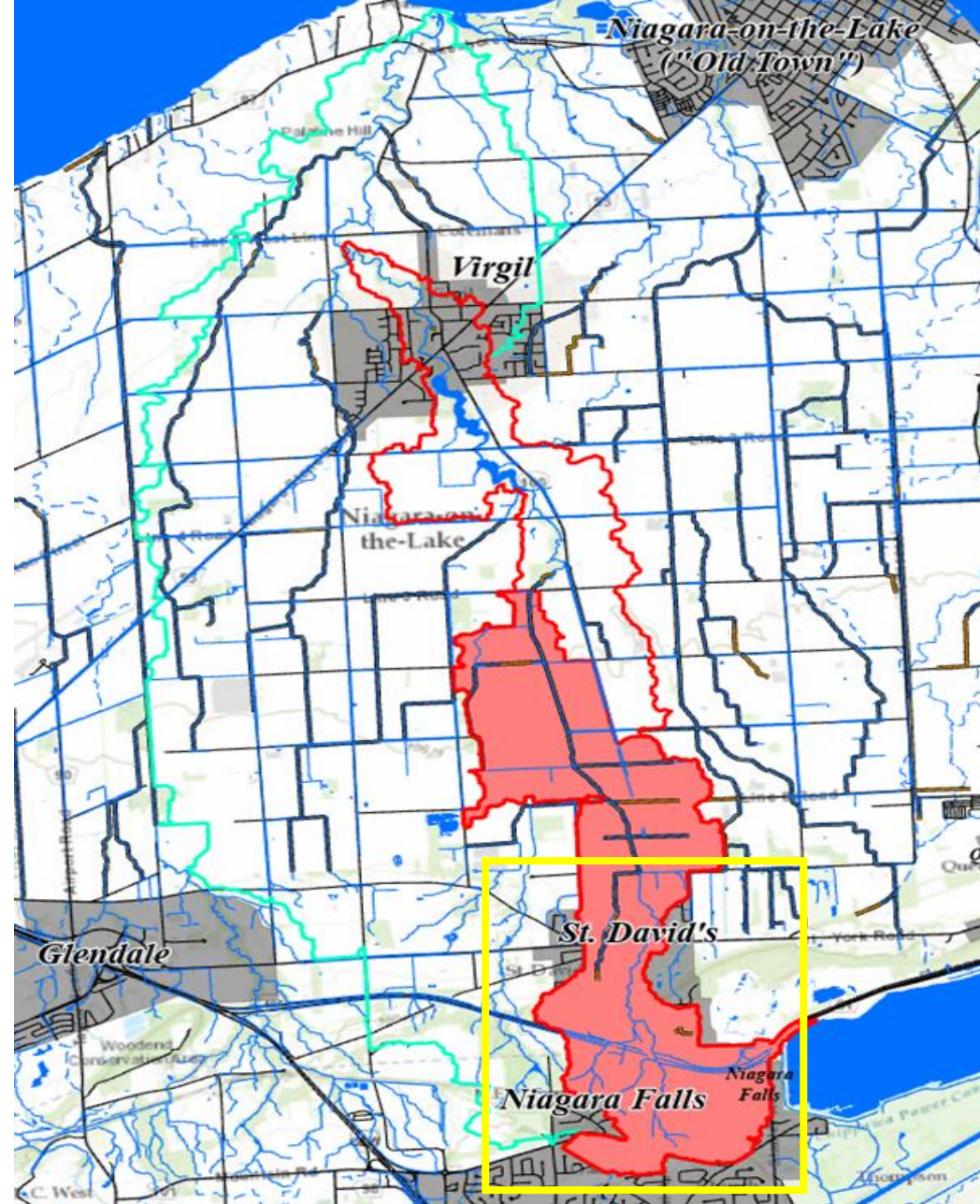
Four Mile Creek Geomorphology Project Public Information Session

May 18, 2022

Presentation Outline:

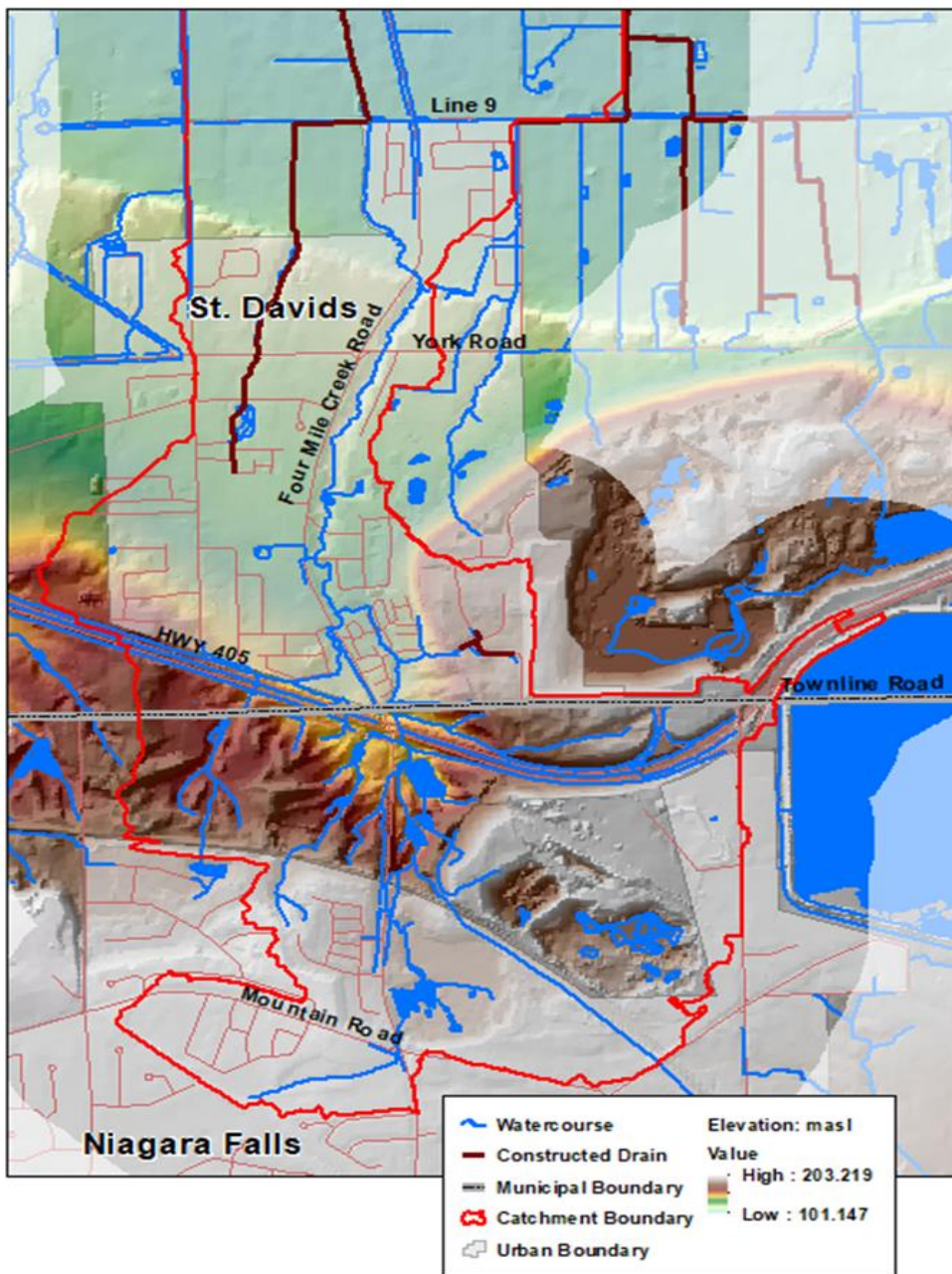
- Area of Interest
- Brief Characterization
- Issue Identification
- Next Steps

Four Mile Creek Watershed and Area of Interest



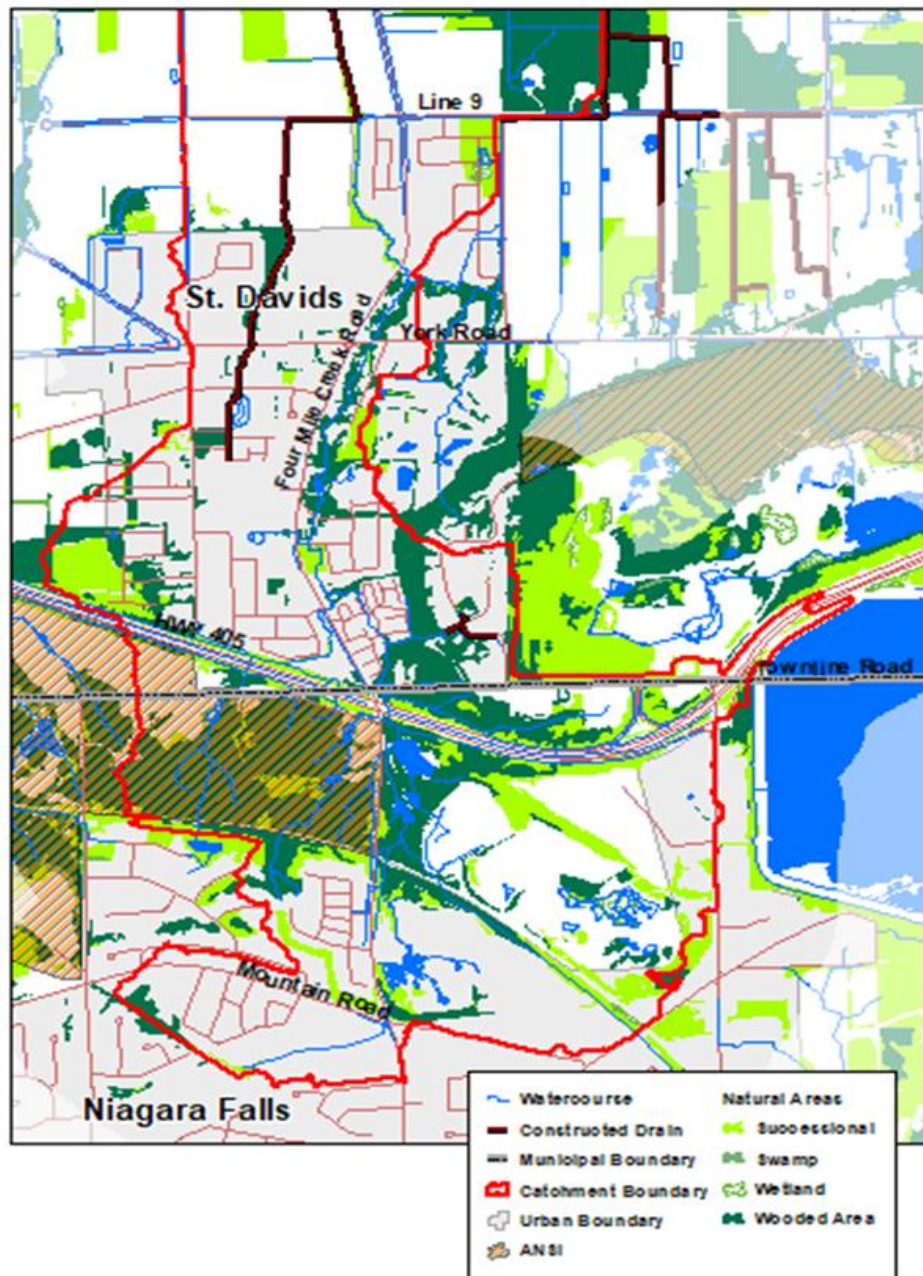
Area of Interest: Brief Characterization

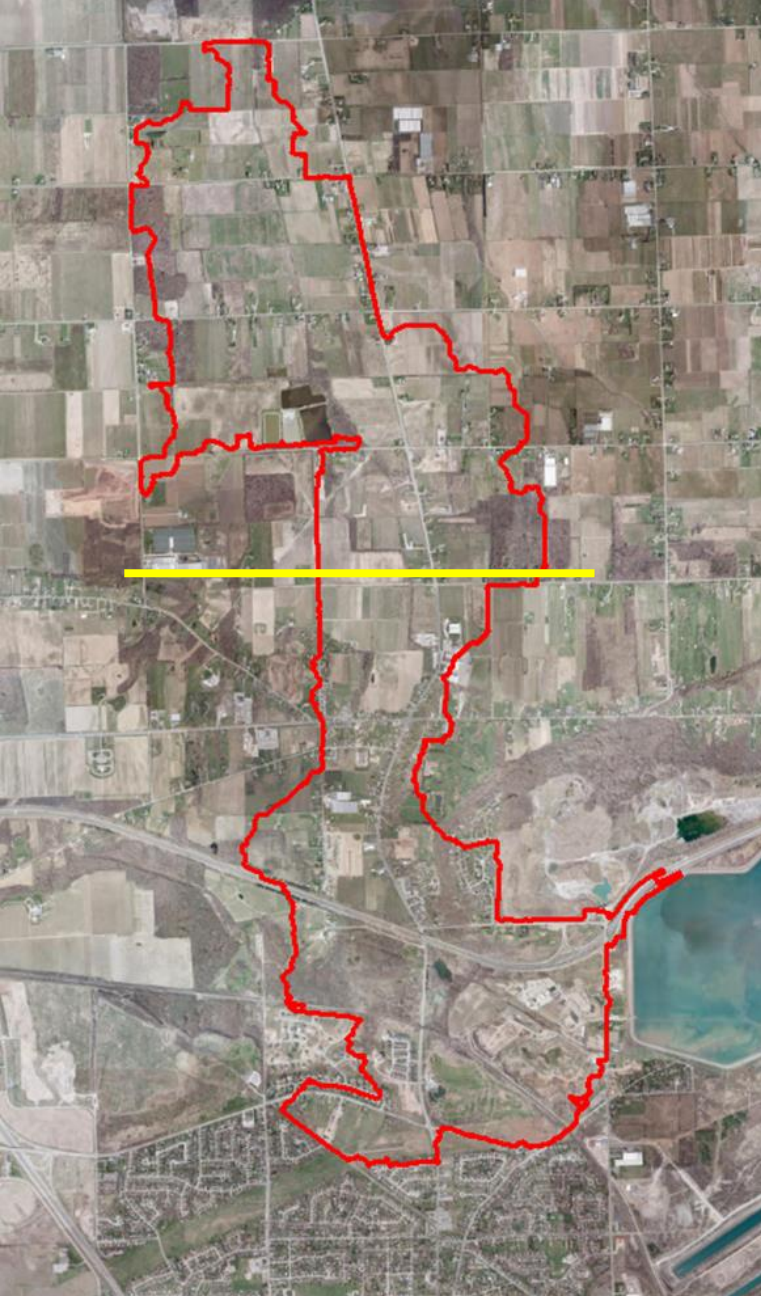
- Main Channel of Four Mile Creek south of Line 9
- Relatively steep descent from headwaters to York Road
- Identified as Highly Vulnerable Aquifer and Significant Groundwater Recharge Area



Area of Interest: Brief Characterization

- Entire main channel north to Virgil Dam is classified as 'Type 2: Important' Fish Habitat
- Natural Areas Inventory update
- Area of Natural Scientific Interest



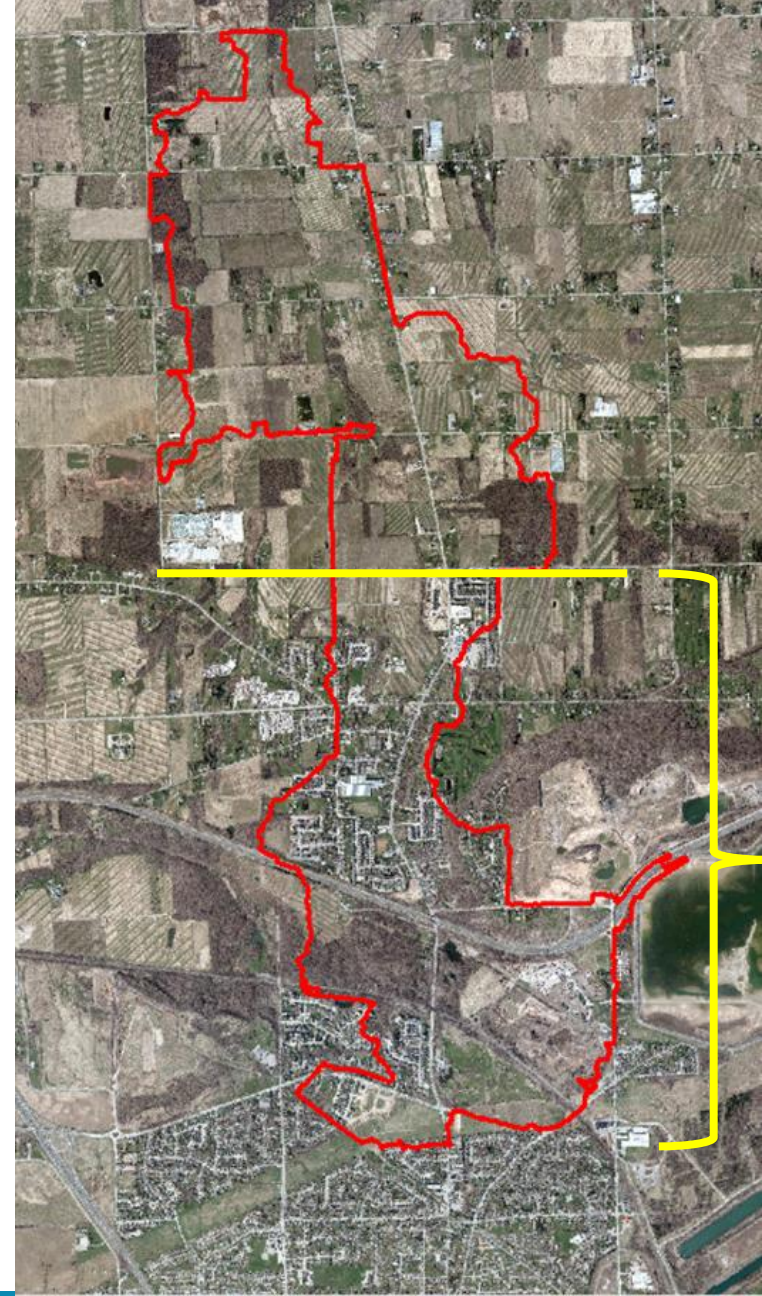


Substantial
Development

2006



2020



Issues/ Concerns

- Issues Identified Include:
 - Flooding
 - Erosion
 - Sedimentation
 - Property damage
 - Debris Jams



Issues / Concerns

- NPCA staff identified significant undercutting and slump erosion



NPCA Restoration

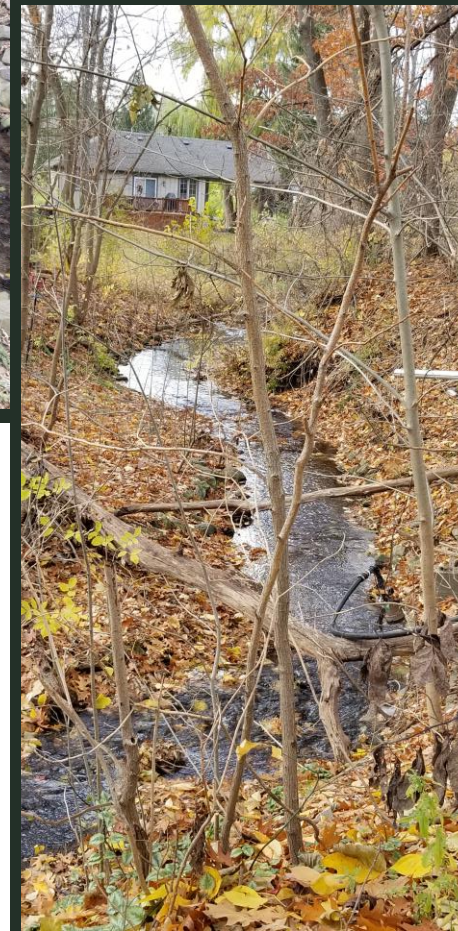
- The NPCA has completed 3 voluntary riparian stabilization projects along the reach that flows through Creekside Estates



Moving
Forward



Current
Initiatives



Knowledge
Gaps

Phased
Approach?

Phase One: 3 Steps

Phase	Task
Preliminary Review	Background Research and Data Review : COMPLETE
	• Review of existing reports • Issues/Concerns identification • Data review • Data and information gap identification
Phase One:	Remediation South of Line 9
Step One	Rapid Geomorphic Assessment • Quantifies channel sensitivity based on evidence of aggradation, degradation, channel widening, and planimetric adjustment • OUTPUT: values that indicate whether channel reaches are stable, in regime, stressed/transitional, or adjusting
	Project Management/Administration/Overhead
Step Two (Requires output of Step One)	Identification of Priority Areas and Mitigation Options • Review geomorphic assessment results to identify priority areas for restoration • Create workplan ranking sites by level of importance • Scope out workplan for high priority areas • Identify mitigation options for high priority areas
Step Three (Requires output of Step Two)	Implementation of Mitigation • Create detailed workplan of priority sites • Class EA?

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