

Big Creek Watershed Balanced Growth Plan Partners Annual Meeting

March 7, 2018
Brooklyn, Ohio



Big Creek Watershed cities in the
Ohio Balanced Growth Community

Brook Park
Brooklyn
Cleveland
Parma
Parma Heights



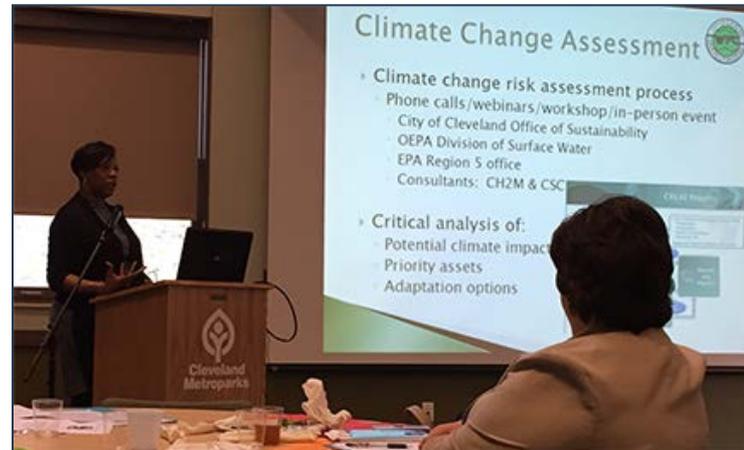
Balancing growth and watershed stewardship

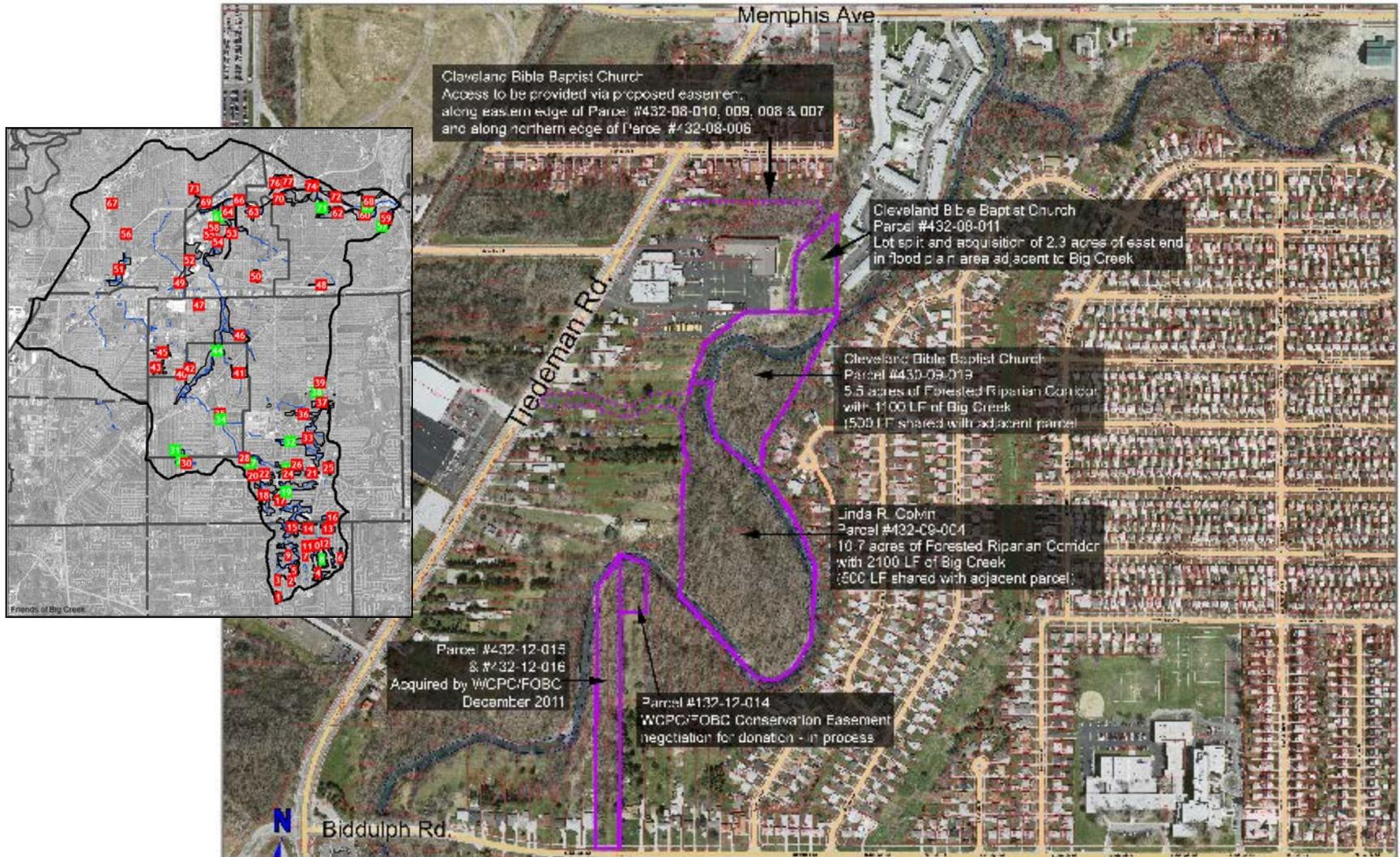
Big Creek Watershed Balanced Growth Partnership



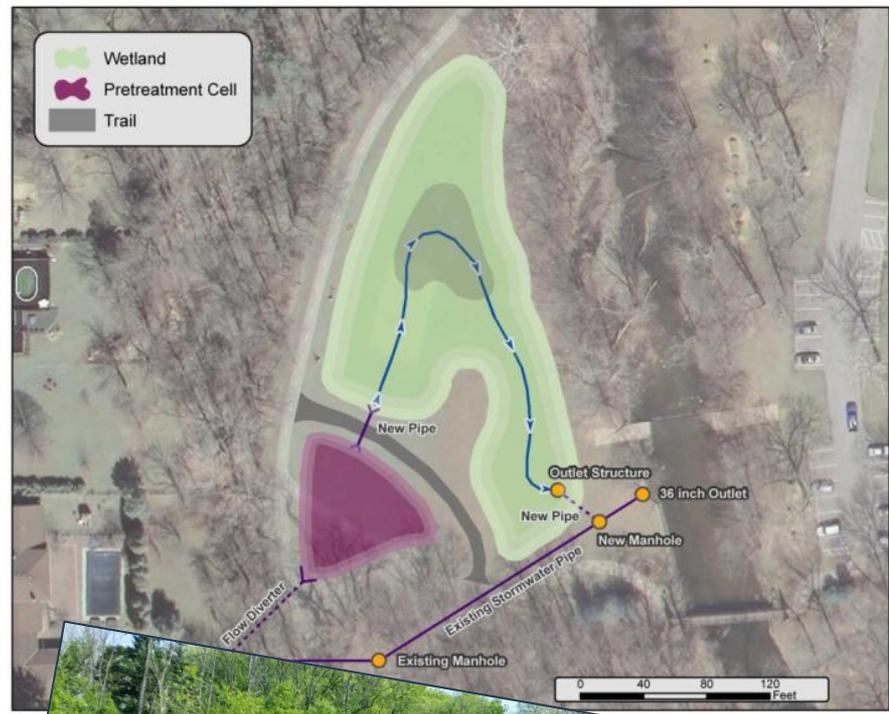
5th Annual Meeting
Cleveland
March, 2016

6th Annual Meeting
Parma
April, 2017





Priority Conservation Areas



| Existing Conditions | | | |
|---------------------------------|---------|---------------------|--------|
| Drainage Acres | 50.8 | TN Load (lbs/year) | 136.1 |
| Impervious Acres | 15.2 | TP Load (lbs/year) | 20.2 |
| Flood / Water Quality Treatment | 0 / 0 % | TSS Load (lbs/year) | 12,945 |

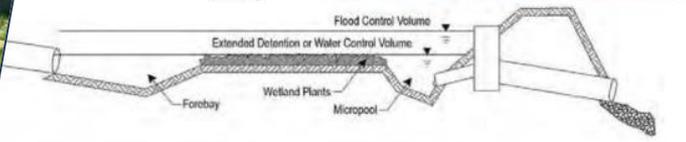
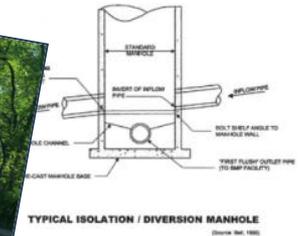
General Finding: 36 inch pipe enters directly into Big Creek just downstream of the bridge. There is a manhole on private property that would provide access to the pipe.

| Proposed Conditions | | | |
|--|------|-------------------------------|--------|
| Existing Storage Volume (ac-ft) | 0 | Pretreatment Cell (SF) | 5,701 |
| Proposed Storage Volume (ac-ft) | 0.77 | Wetland (SF) | 27,807 |
| Proposed Ohio EPA Water Quality Volume Met (%) | 100% | TSS Load Reduction (lbs/year) | 10,744 |
| Additional Flood Control Volume (ac-ft) | 0.06 | TN Load Reduction (lbs/year) | 35.4 |
| | | TP Load Reduction (lbs/year) | 8.7 |

Retrofit Description
 Runoff associated with small storm events will be diverted from an existing pipe into a pretreatment cell, which will allow sediment to fall out of suspension. Water will then meander through a constructed wetland, whose depth will be maintained by a flow control structure that empties into the existing stormwater pipe. Vehicle access will be provided to ensure ease of maintenance.

| Planning Level Cost Estimate* | | |
|-------------------------------|-------------|-----------|
| Lower Range | Upper Range | |
| Total Cost | \$192,000 | \$304,000 |
| Cost per Square Foot | \$5.73 | \$9.08 |

*Includes probable construction costs, design, survey, permitting, sediment testing, and a 25% contingency.



Source Control Retrofit Conceptual Design



Existing Conditions

Total site area – street and driveways draining to intersection (sq ft): 41,280
 Imperviousness (%): 100
 Pollutant loading (lbs of sediment/year): 379

General Findings: Residential streets are generally untreated in the watershed and they make up 10-15 percent of the total watershed imperviousness. Typical streets include 12 foot driving lanes and no on-street parking. Sidewalks are common, and tree lawns are 6-8 feet in width.



Existing street

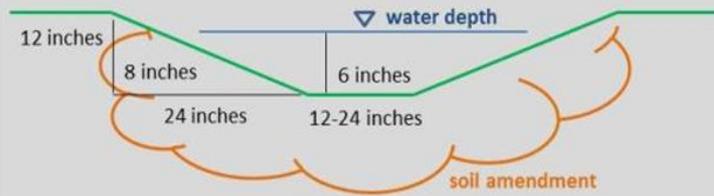


Conceptual street bioswales

Proposed Concept Design



7-8 foot grassed median



Retrofit Description: Bioswales are proposed to treat runoff from residential streets and driveways. Bioswales are approximately 7-8 feet in width, depending on available right of way with six inches of ponded water. Bump outs that add 2-3 feet of additional width to the swale are proposed at intersections with 9 inches of ponded water. Runoff will be routed to bioswales/bump outs through new curb cuts that will also serve as overflow structures. An average length of 50 feet is assumed. A planting plan that is prominently herbaceous native plants that are salt and water tolerant is recommended.

| | | |
|--|--------|--------------------------------------|
| Total area to be treated (per intersection) (sq ft): | 41,280 | Retrofit Cost Estimate: |
| Proposed storage volume (cubic feet): | 833 | \$46,000 - \$54,000 per intersection |
| Percent of Ohio EPA water quality volume: | 36% | |
| Additional flood control volume (cubic feet): | 0 | |
| Pollutant load reduction (lbs of sediment/year): | 110 | |

Big Creek Nonpoint Source Implementation Strategy

Version 1.0
May 27, 2017
Approved: June 9, 2017

PRESENTED TO

Big Creek Connects
4352 Pearl Road, Suite C
Cleveland, OH 44109

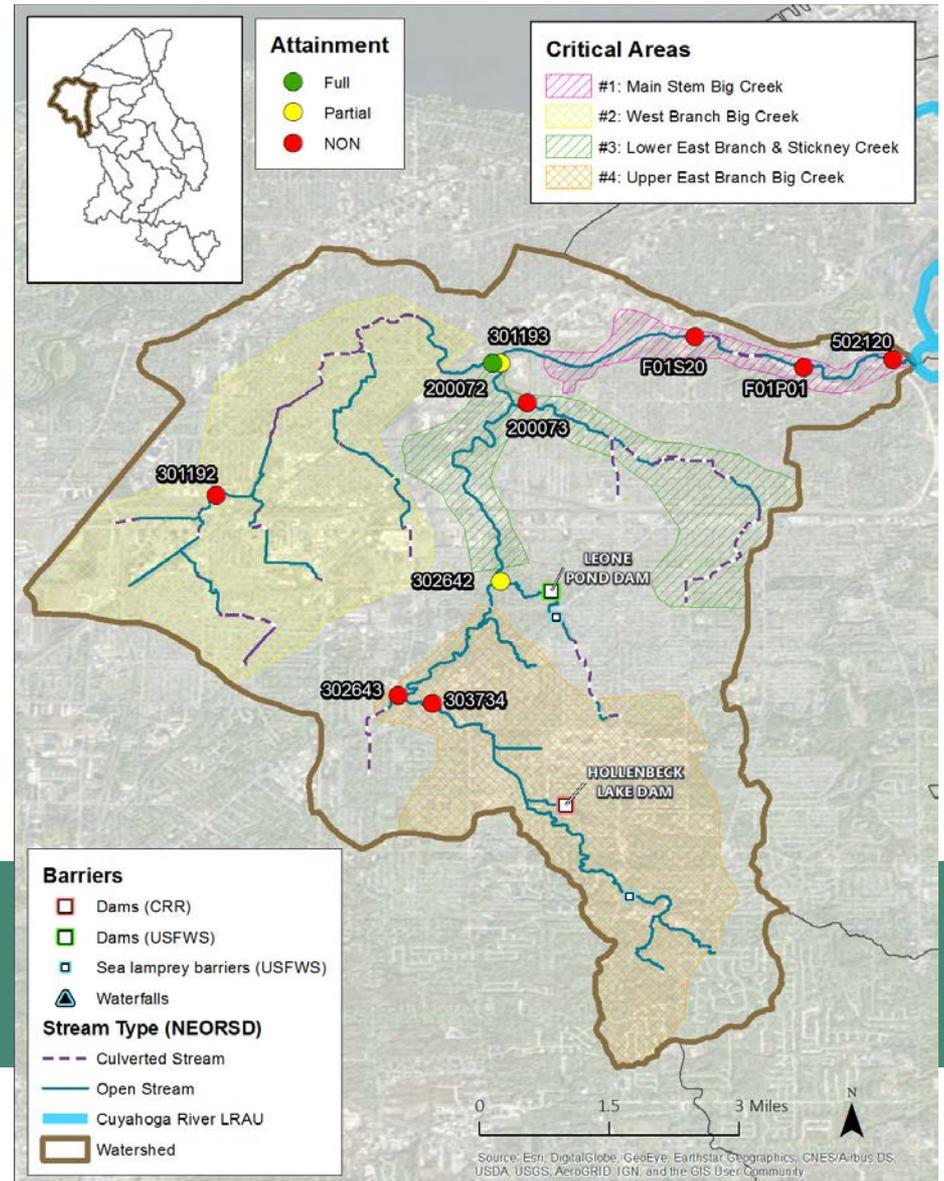
West Creek Conservancy
1440 Rockside Road, Suite 329
Parma, OH 44134

PRESENTED BY

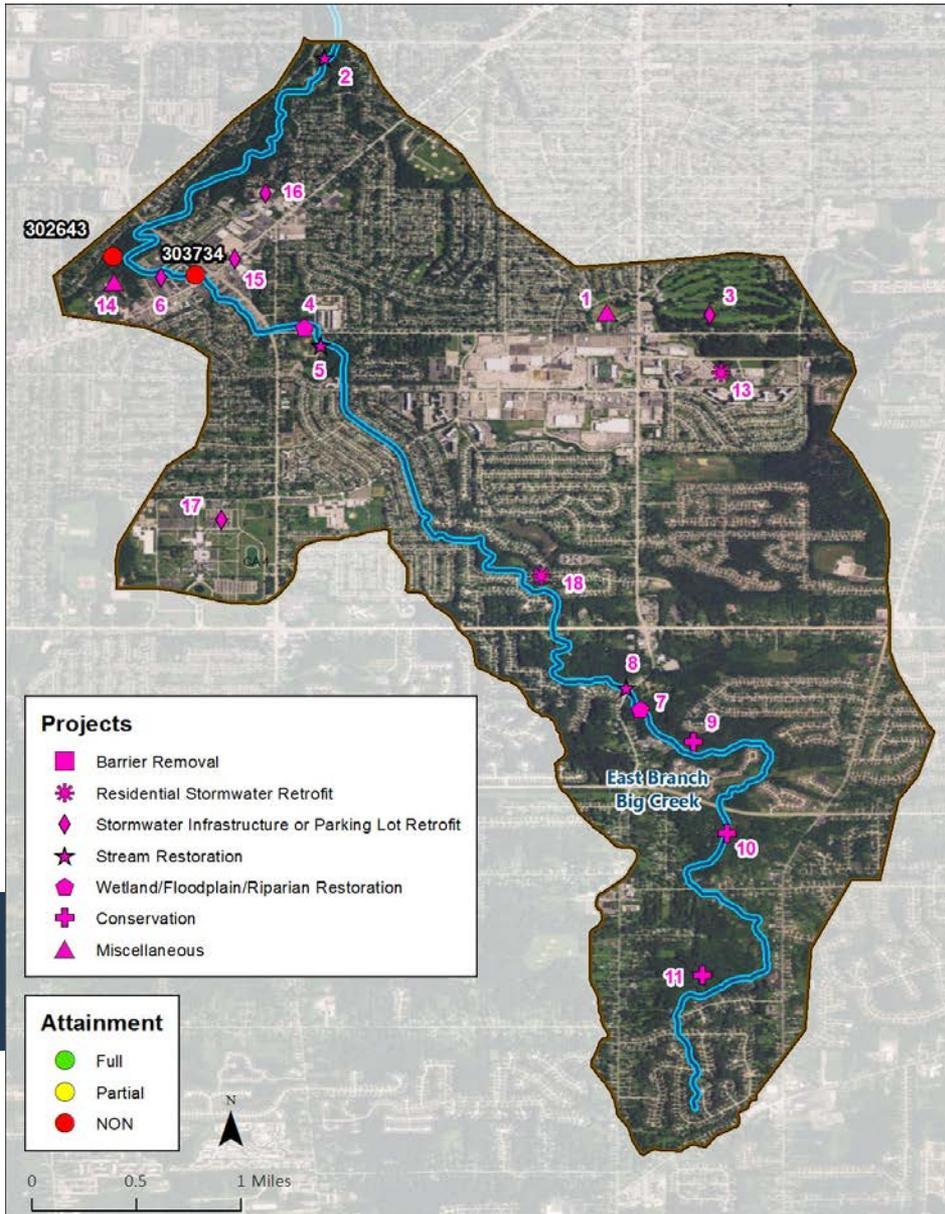
Tetra Tech, Inc. (216) 861-2950
1468 W. 9th Street, #620
Cleveland, OH 44113 tetratech.com

52 projects identified –
6 short term

NPS-IS



Critical Area #4:



NPS-IS

Critical Area #4 - Project #2

NPS-IS



Snow Road Picnic Area
Stream Restoration/Floodplain
Connectivity





Near West Design Review District

Agenda

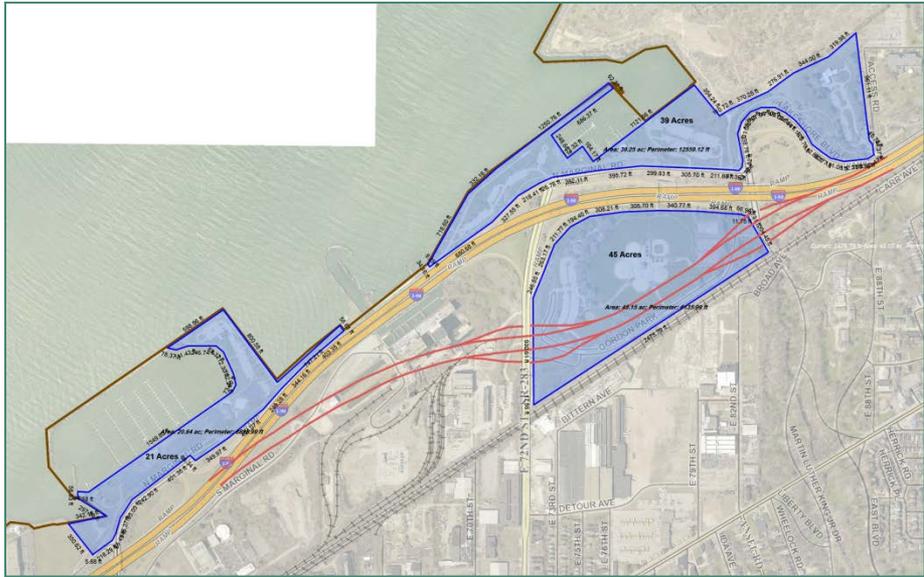
(8:30 a.m., Wednesday, October 11th, 2017)
Dollar Bank, 3115 West 25th Street

- 8:30 a.m. 1. NW 2017-026: Teriyaki Express Business ID Signs (N)**
3300 Clark Avenue
Project Representative – Aldo Dure, BNext Awnings & Graphics
Proposed installation of a 37 SF channel letter business ID sign for a new restaurant.
- 8:45 a.m. 2. NW 2017-027: Caribe Restaurant & Bakery Plaza (C)**
2900 Fulton Road
Project Representatives – Luis Burgos, Caribe Restaurant & Bakery; John Rakauskas, Rakauskas Architecture, Inc.
Proposed construction of an outdoor fenced-in, landscaped plaza and related paved outdoor event space to be located in front of the existing Caribe Restaurant & Bakery Building. Project is located within an Urban Form Overlay District.
- 9:15 a.m. 3. NW 2017-028: McDonald's Restaurant Building Facade Renovation & Site Modifications (C)**
3211 Clark Avenue
Project Representatives – Ken Estry, Larsen Architects, Inc.; Susie Stames, Franchise Owner, & Dave Gnatowski, McDonald's, Inc..
Renovation of existing building's exterior façade to include removal of existing design elements and replacement with new wall materials, paint colors and signage details. Also includes new digital menu boards and ADA-compliant walkway and parking lot modifications.
- 9:45 a.m. 4. NW 2017-029: Walworth Pointe Townhomes (C)**
Walworth Avenue
Project Representatives – Marc Strauss, Walworth Real Estate, LLC; Gary Fischer, Fischer Architects, Inc.; Matt Neff, GPD
Proposed construction of 14 attached townhome residential units intended to complete a partially constructed 24-unit townhouse project.
- 10:15 a.m. 5. NW 2017-030: West 54th Townhomes (C)**
West 54th Street & Bridge Court
Project Representatives – Martin Smith, West 54th Townhomes, LLC; Arne Goldman, Focus Planning, Inc.
Proposed construction of a 6-unit townhome project consisting of two 3-unit buildings.

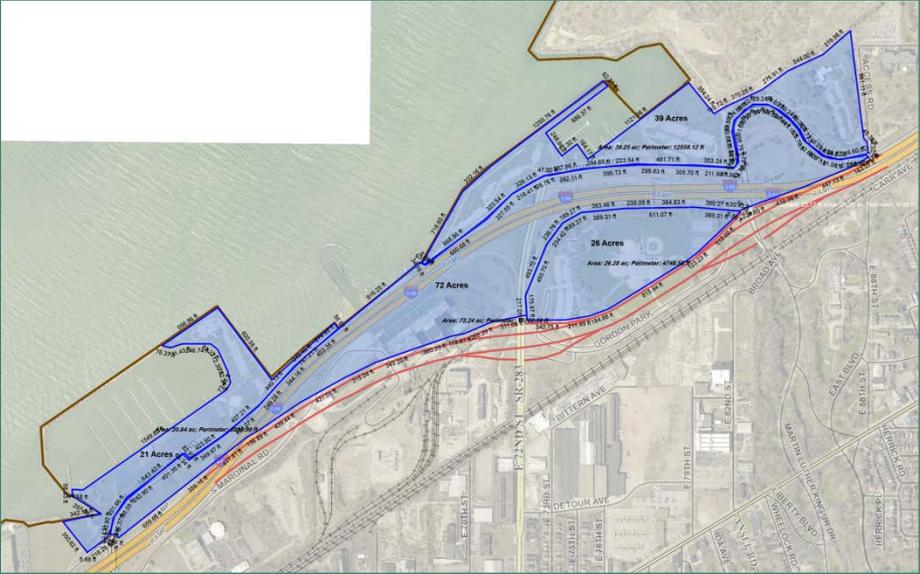
C = will need to appear on City Planning Commission agenda
L = will need to appear on Landmarks Commission agenda
N = will not need to appear on either of the above agendas



Assisting communities with measures
addressing Stormwater Management Issues



Existing



Proposed

Assisting Communities with Planning Initiatives

Assisting Communities / Community Education



Community Engagement and Education



Brooklyn Intermediate School students take scientific field trip to Stickney Creek



On Sept. 29, Brooklyn Intermediate School's 7th grade students studied water samples and macro-invertebrates along Stickney Creek in Brooklyn's Memorial Park. (Photo courtesy of Big Creek Connects)

By [John Benson, special to cleveland.com](#)

BROOKLYN, Ohio - Brooklyn Intermediate School 7th grade science students recently took a walking field trip to Brooklyn's Memorial Park where they spent the morning testing water and searching for water bugs in Stickney Creek.

Comment



81 shares



Brooklyn 7th graders





4th Biennial

Greater Cleveland

Trails & Greenways

Conference 2016

Connecting Recreation and Transportation



June 2, 2016

Brecksville Human Services Center, Brecksville, Ohio

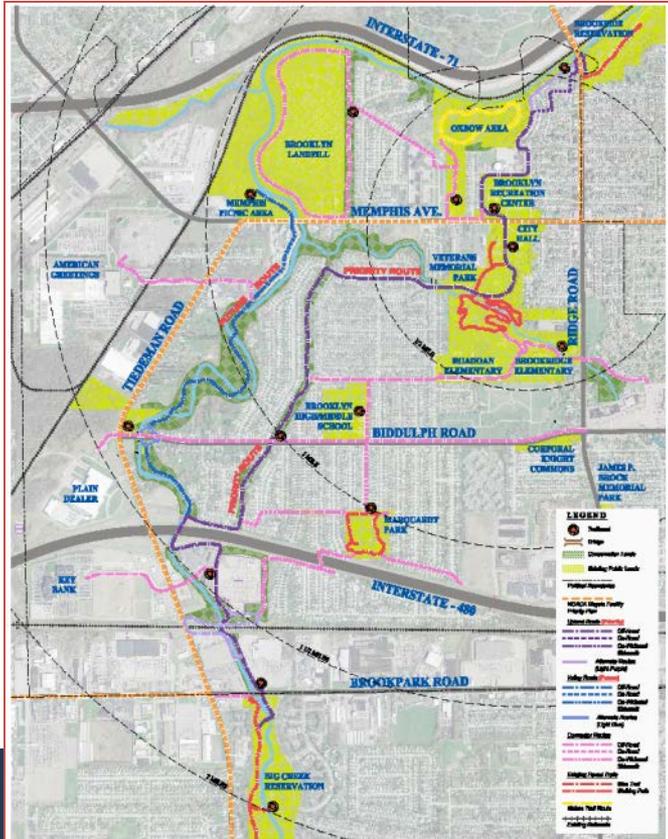
SAVE THE DATE

Thursday, May 31, 2018
Cleveland, Ohio



Lago East Bank
1091 Main Avenue • 44113

 **BIG CREEK
CONNECTS**

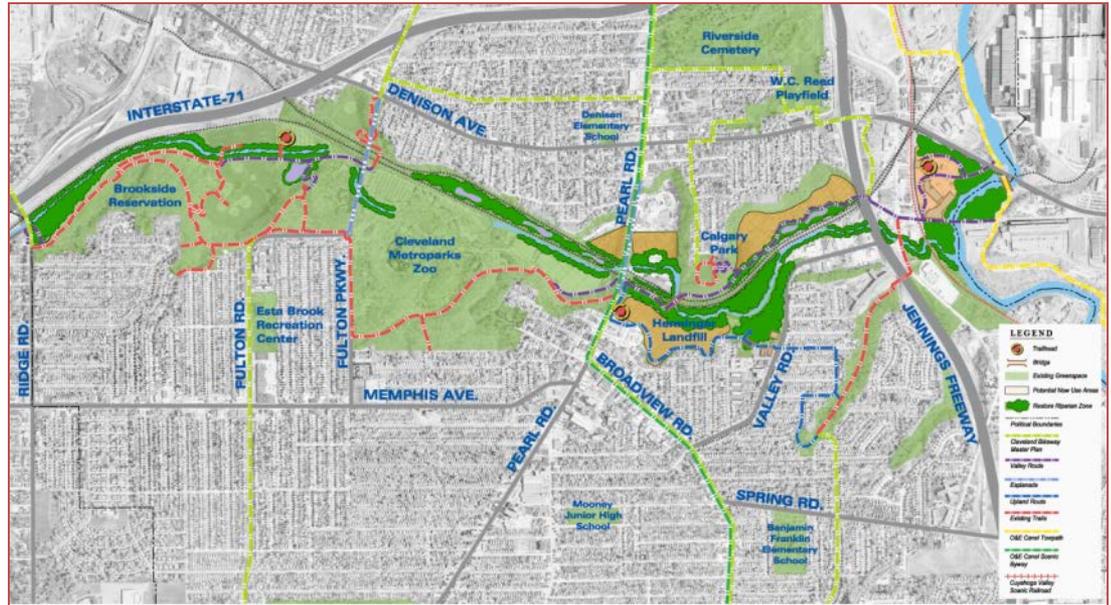


Big Creek Greenway Trail Alignment & Neighborhood Connector Plan

Overall Master Plan

Client Partners:

Prepared By:



Lower Big Creek Greenway Redevelopment & Restoration Plan

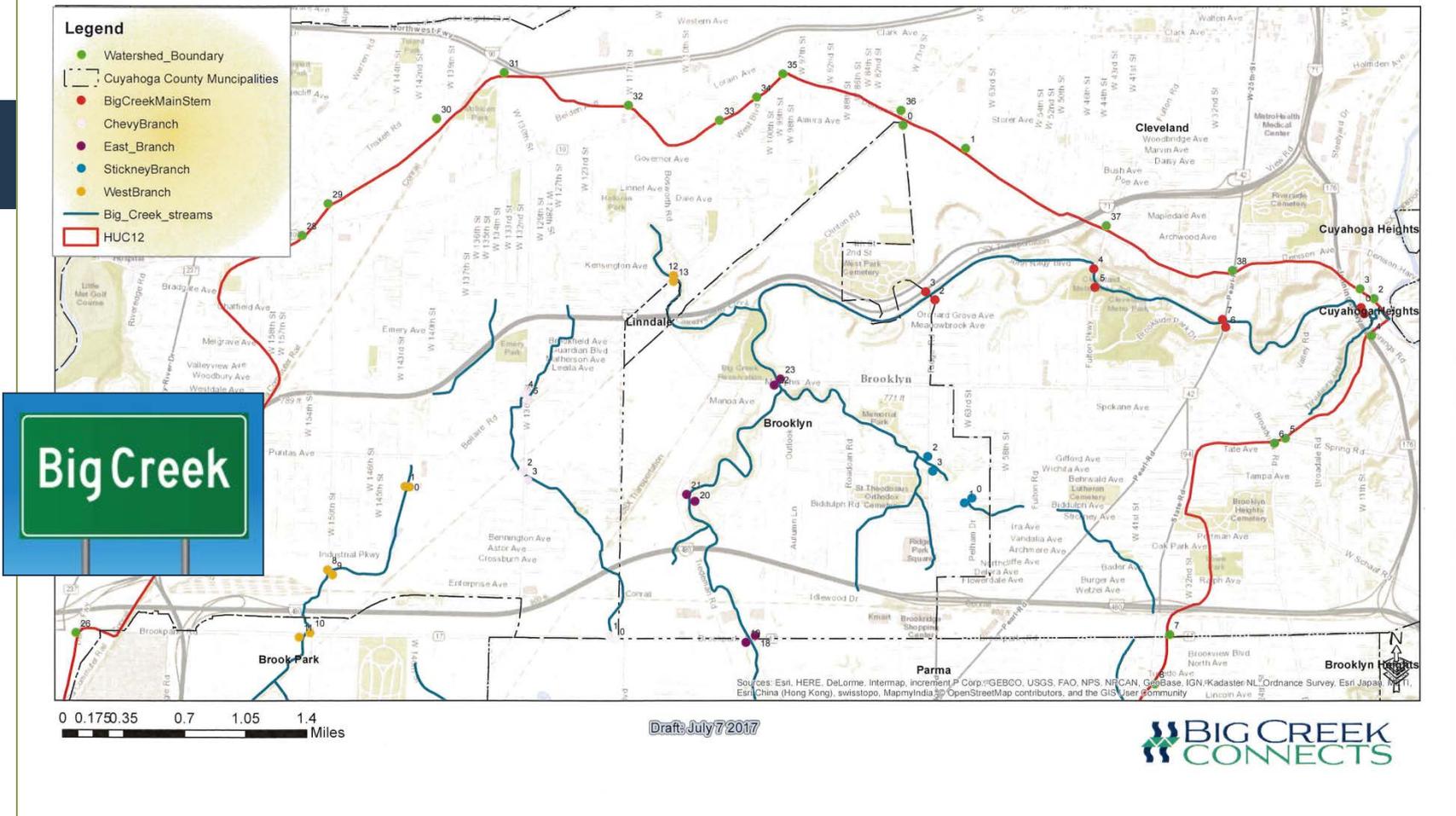
Overall Map - Trail Plan & Restoration

Client Partners:

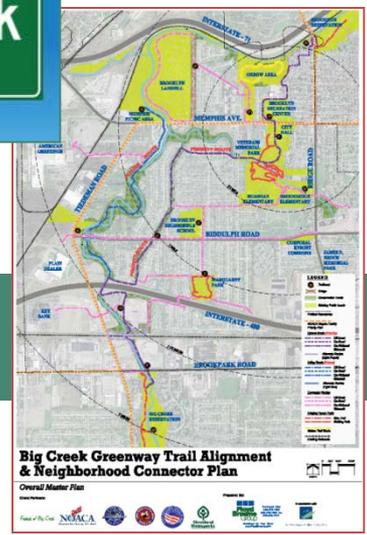
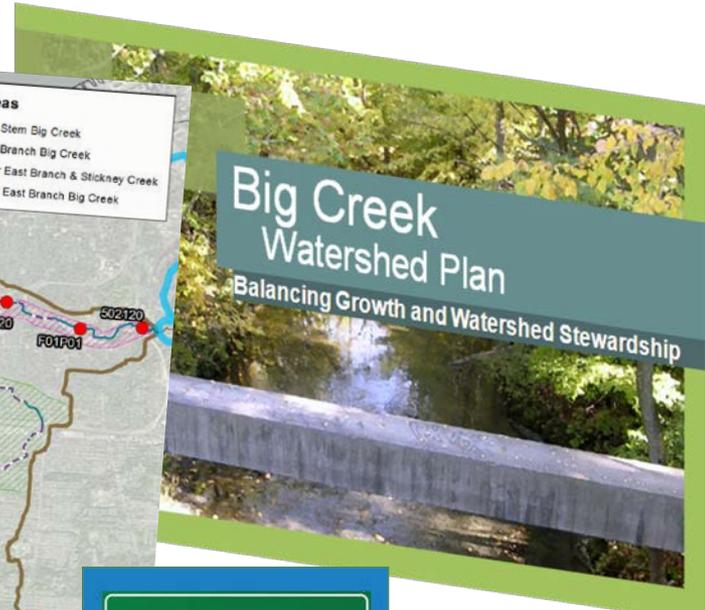
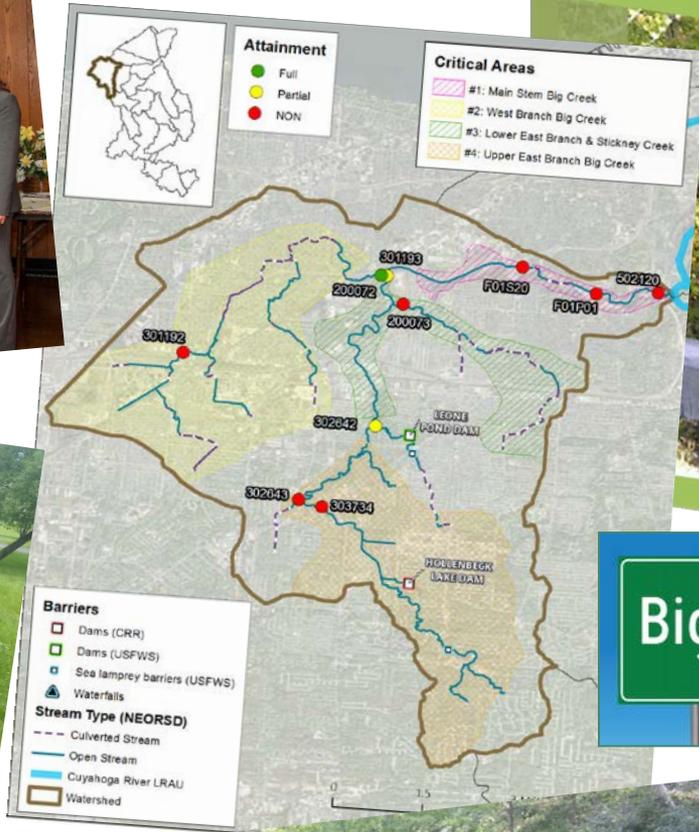
Prepared By:

Implementation of Big Creek Greenway plans

Big Creek Watershed Boundary and Stream Crossing Sign Locations North Section



Up to 54 stream crossing and 39 watershed boundary signs



2018

Thank you!

Contact:

Bob Gardin, Executive Director

bgardin@bigcreekconnects.org



Sponsors

