

Improving Ox Creek

Marcy Colclough
*Southwest Michigan
Planning Commission*



MICHIGAN

Van Buren
County

Kalamazoo County

Calhoun County

Lake
Michigan

*Paw Paw River
Watershed*

St Joseph River Watershed

Ox Creek Watershed

Berrien
County

Cass County

St. Joseph
County

Branch County

Hillsdale County

INDIANA

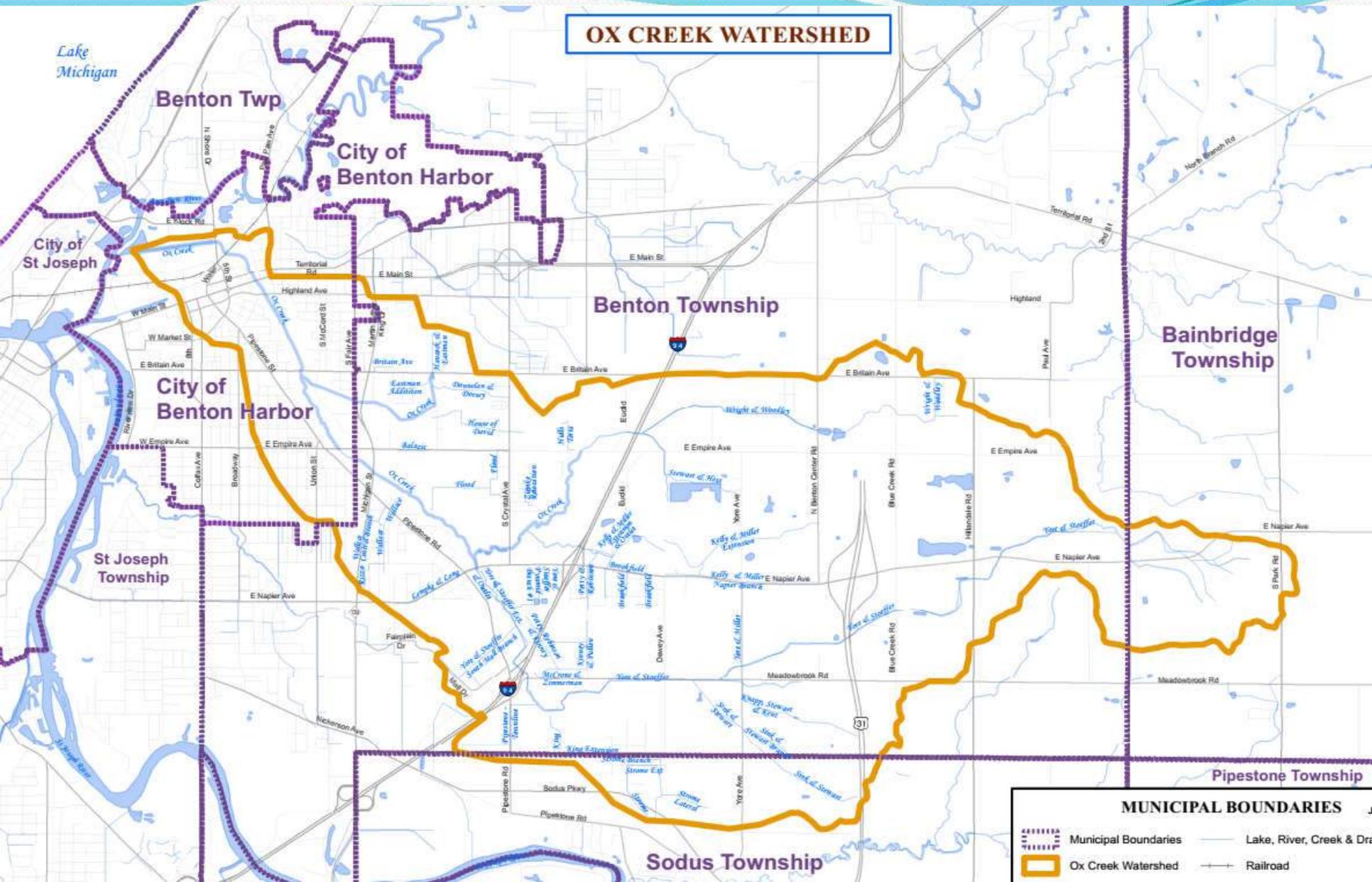
St Joseph River

*Pigeon River
Watershed*

OHIO

*Elkhart River
Watershed*

OX CREEK WATERSHED

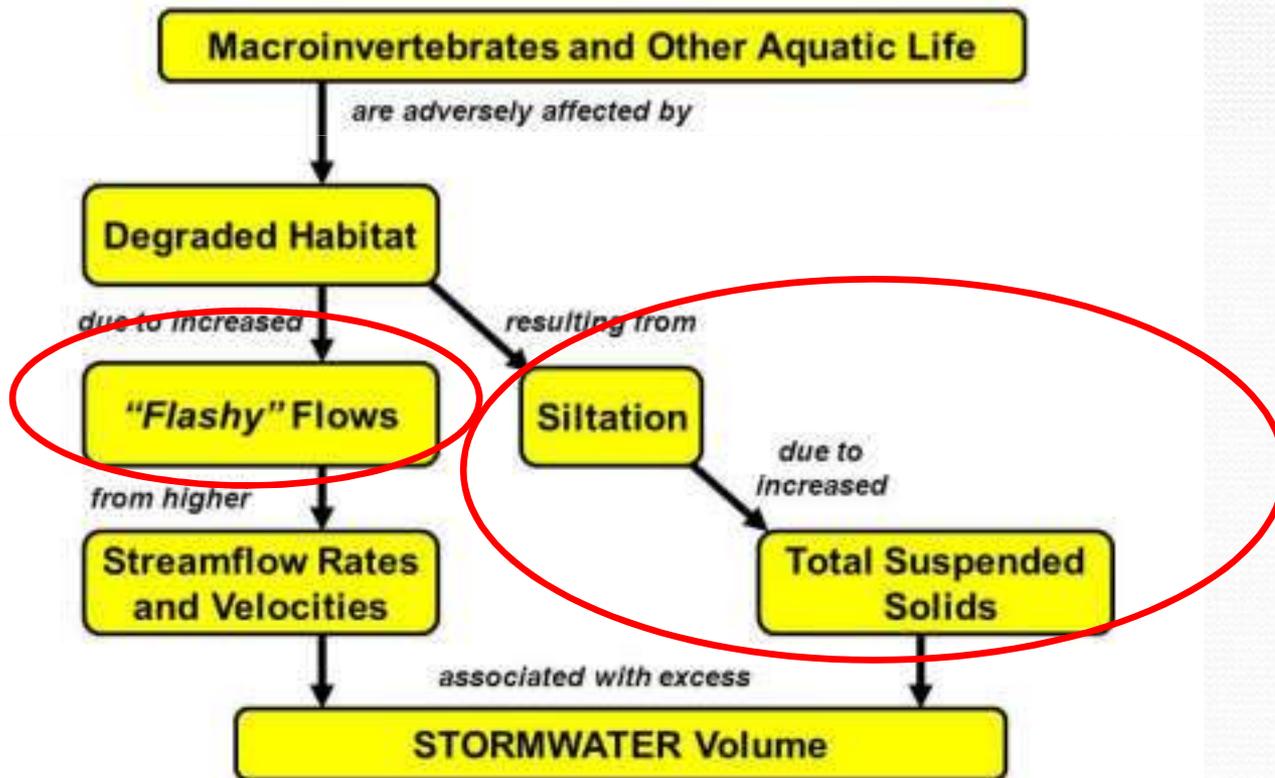


MUNICIPAL BOUNDARIES

-  Municipal Boundaries
-  Ox Creek Watershed
-  Lake, River, Creek & Drainage
-  Railroad

Why Ox Creek?

- 8,600 acres (13 sq miles)



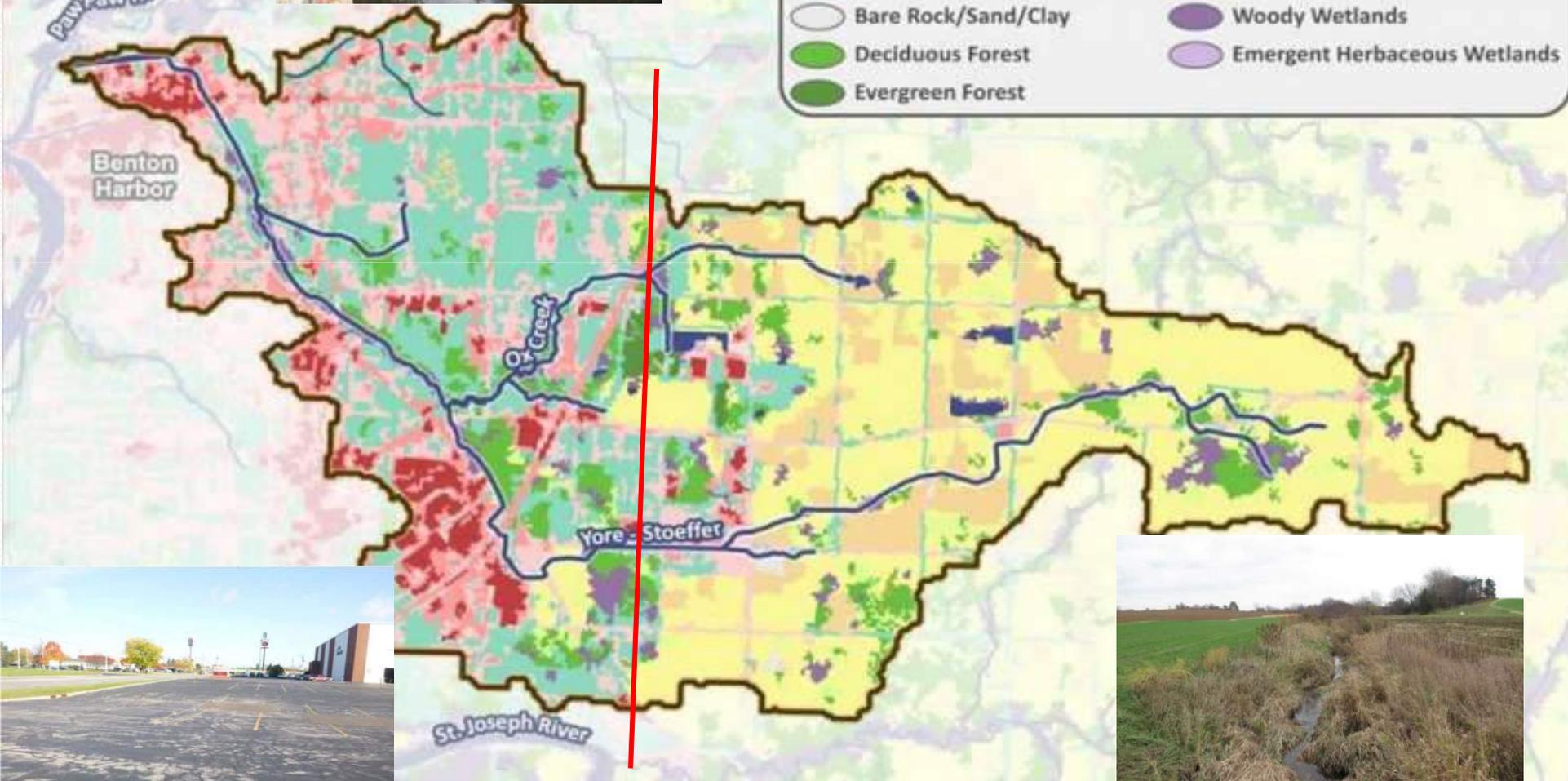
Note: Boxes depict measured or calculated key indicators



Lake Michigan



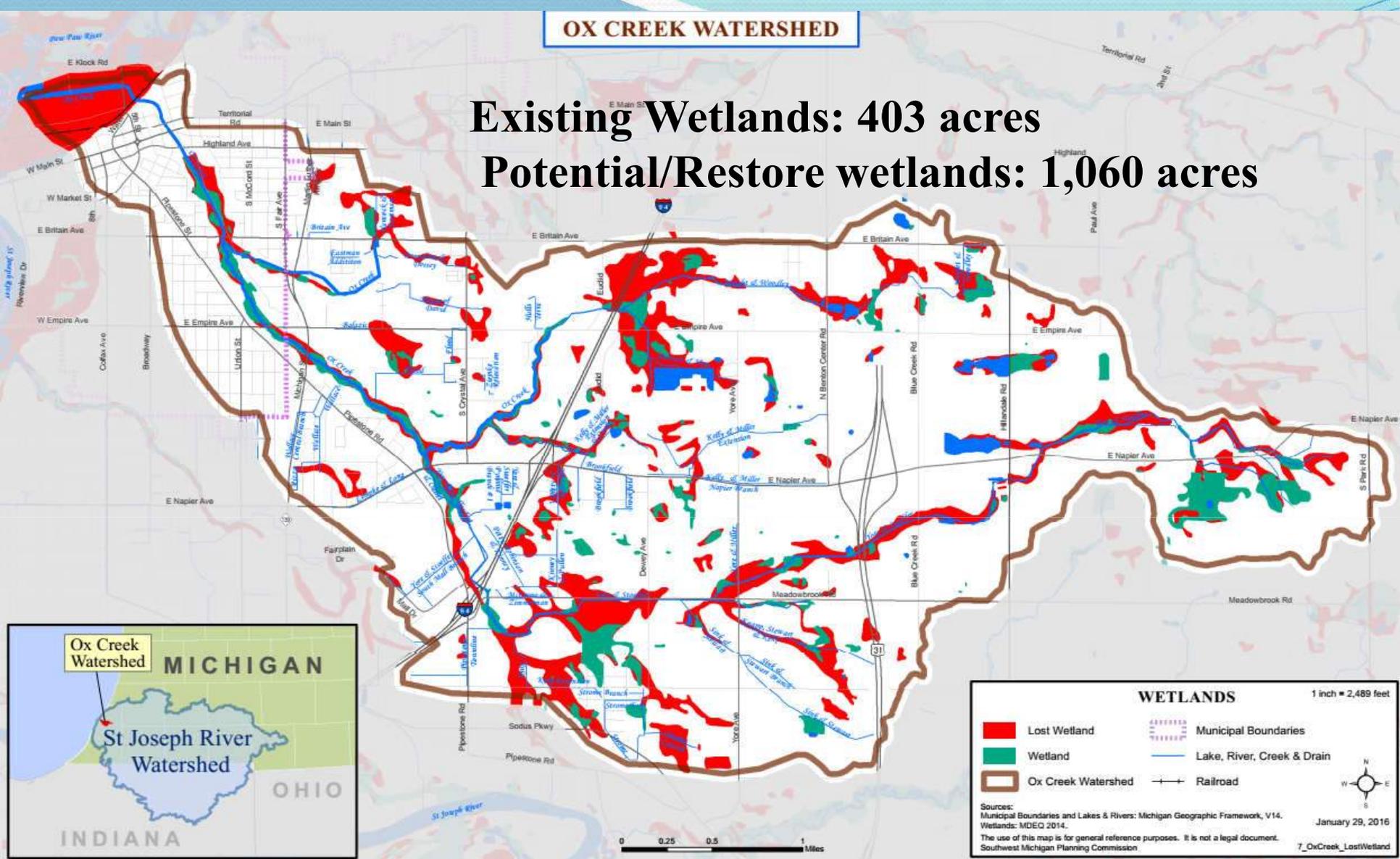
- | | |
|-----------------------------|------------------------------|
| Open Water | Mixed Forest |
| Developed, Open Space | Shrub/Scrub |
| Developed, Low Intensity | Grassland/Herbaceous |
| Developed, Medium Intensity | Pasture/Hay |
| Developed, High Intensity | Cultivated Crops |
| Bare Rock/Sand/Clay | Woody Wetlands |
| Deciduous Forest | Emergent Herbaceous Wetlands |
| Evergreen Forest | |



OX CREEK WATERSHED

Existing Wetlands: 403 acres

Potential/Restore wetlands: 1,060 acres



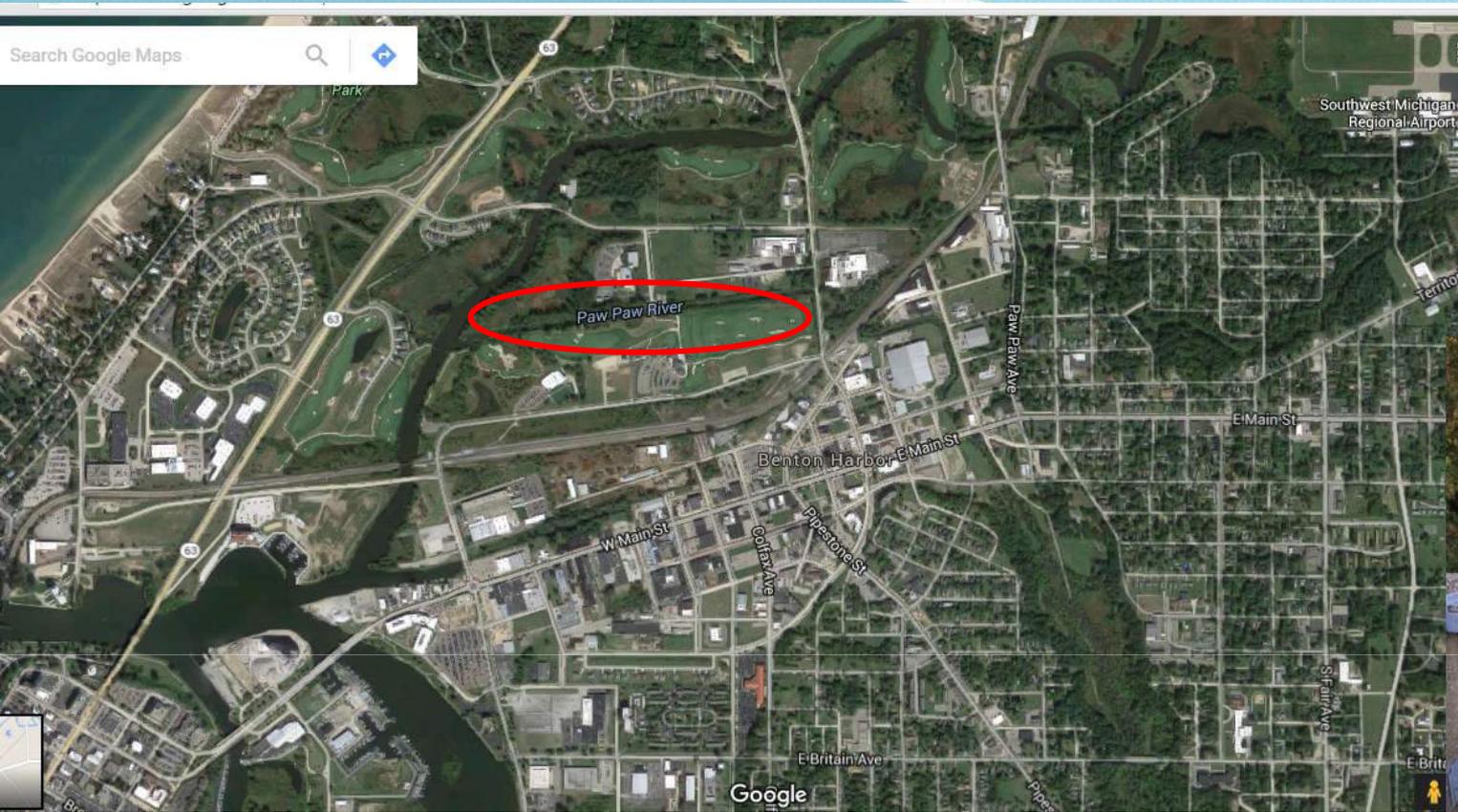
WETLANDS 1 inch = 2,489 feet

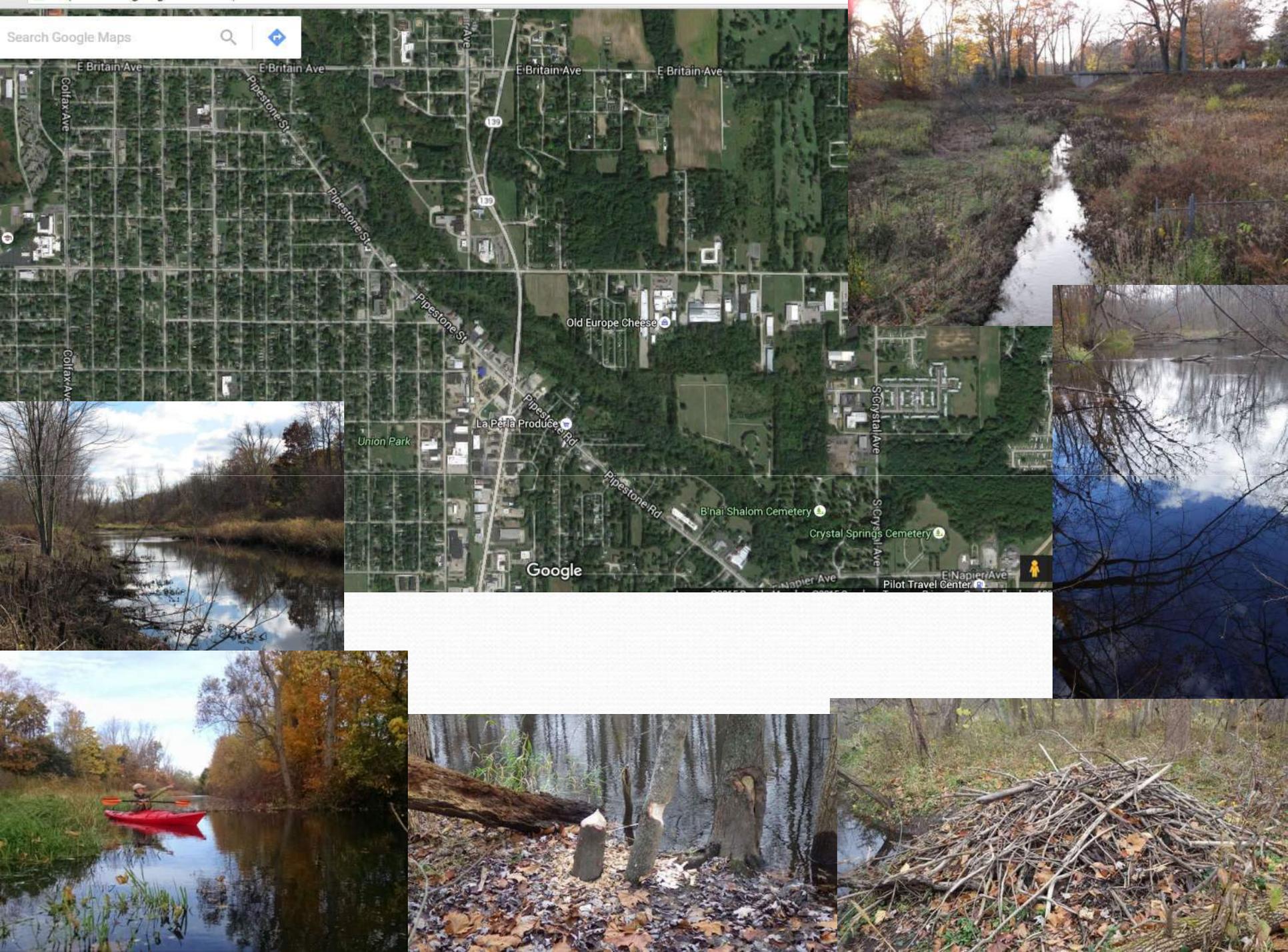
- Red square: Lost Wetland
- Green square: Wetland
- Brown outline: Ox Creek Watershed
- Dotted line: Municipal Boundaries
- Blue line: Lake, River, Creek & Drain
- Black line with cross-ticks: Railroad

Sources:
 Municipal Boundaries and Lakes & Rivers: Michigan Geographic Framework, V14.
 Wetlands: MDEQ 2014.
 The use of this map is for general reference purposes. It is not a legal document.
 Southwest Michigan Planning Commission

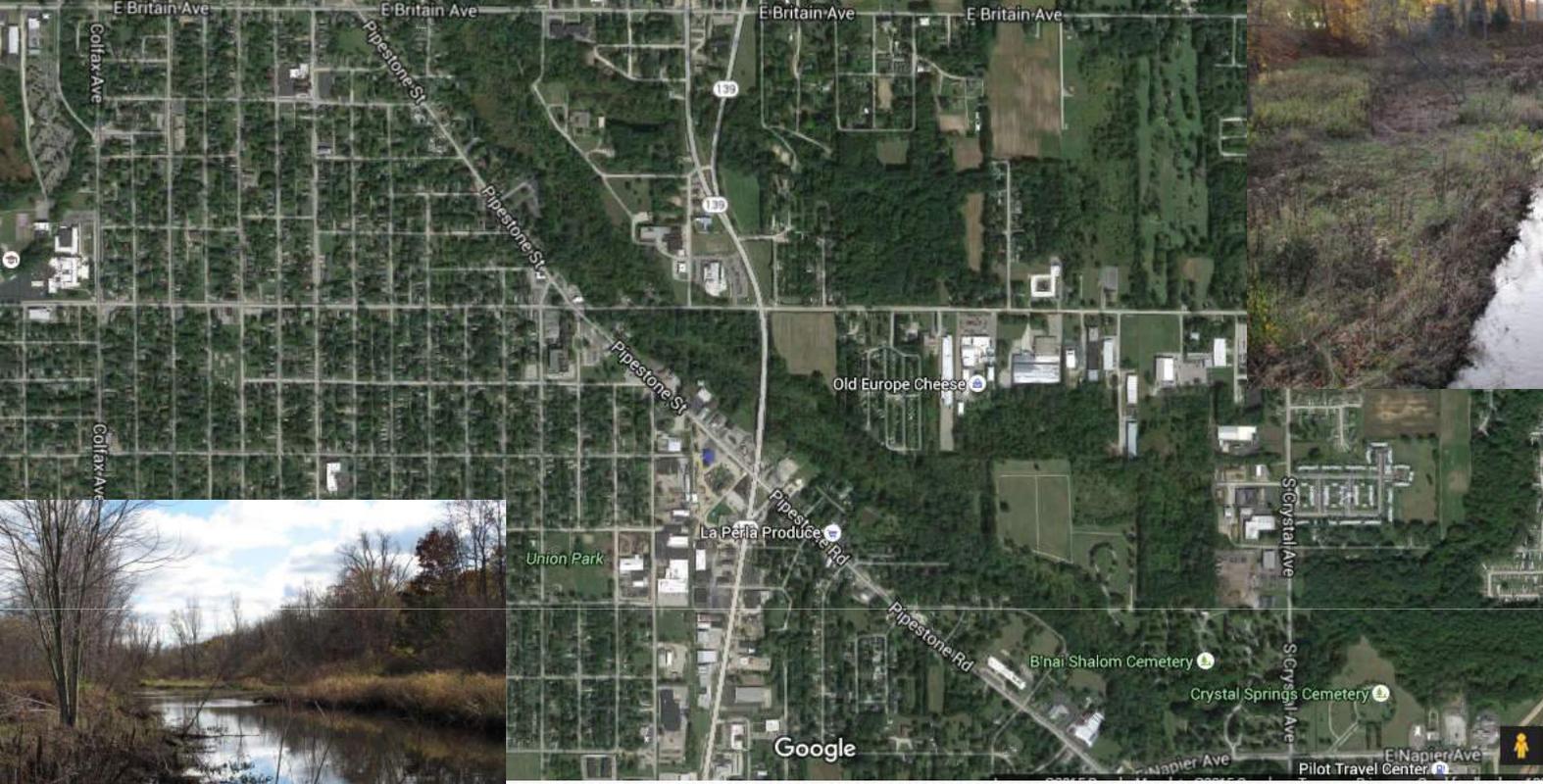
January 29, 2016
 7_OxCreek_LostWetland

Wetland Acres Loss	Sediment Retention Loss	Floodwater Mitigation Loss
72%	85%	78%

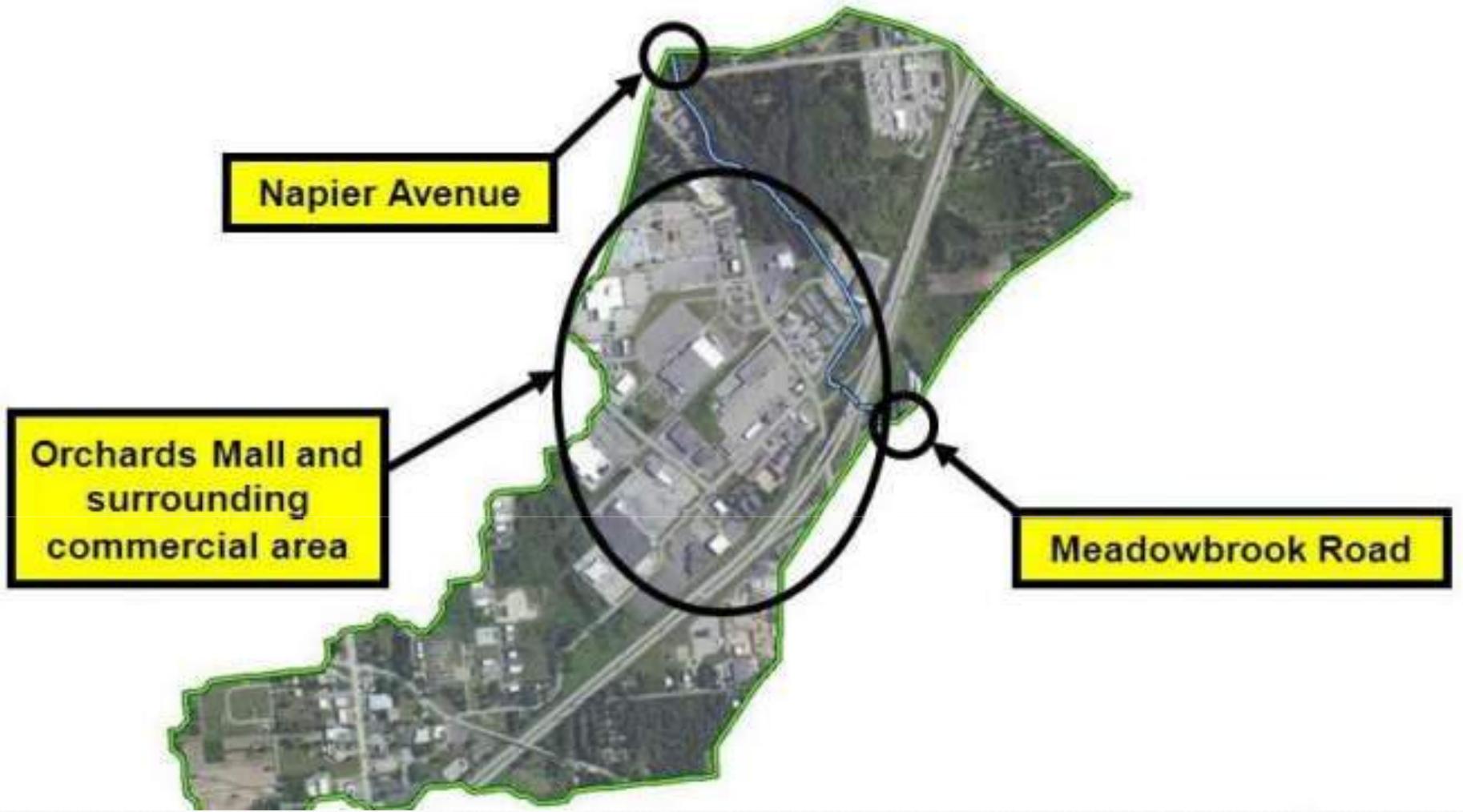




Search Google Maps







Napier Avenue

**Orchard Mall and
surrounding
commercial area**

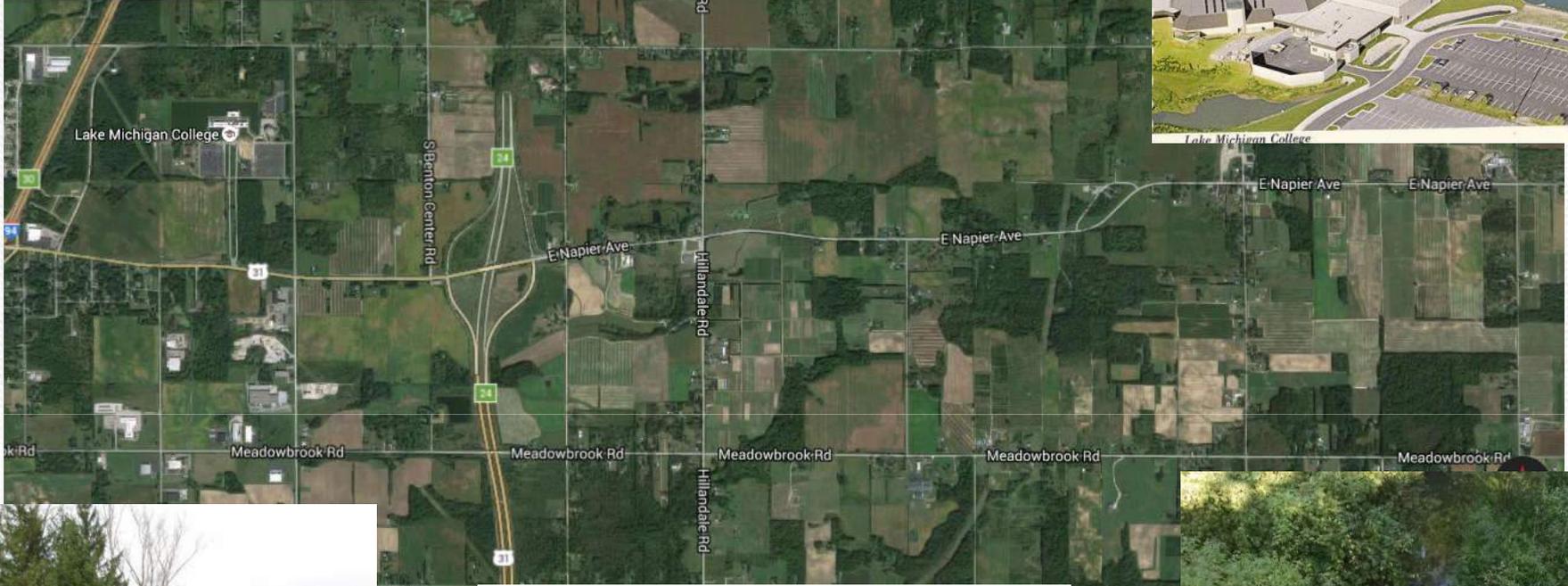
Meadowbrook Road



Lake Michigan College

Photo by John Pennard

Search Google Maps



What can we do to Improve Ox Creek?

- Implement **urban stormwater best management practices** including rain gardens, swales, green roofs, bioretention areas, and native plantings.
- Ensure **septic systems** and **sanitary sewer infrastructure** are being maintained.
- Restore **wetlands**.
- Implement **agricultural best management practices** to reduce sediment and nutrient runoff and restore hydrology. Practices include cover crop, no-till, filter strips, grassed waterways, wetland restoration and protection, drain tile management and two stage ditches.

Agricultural Landowners

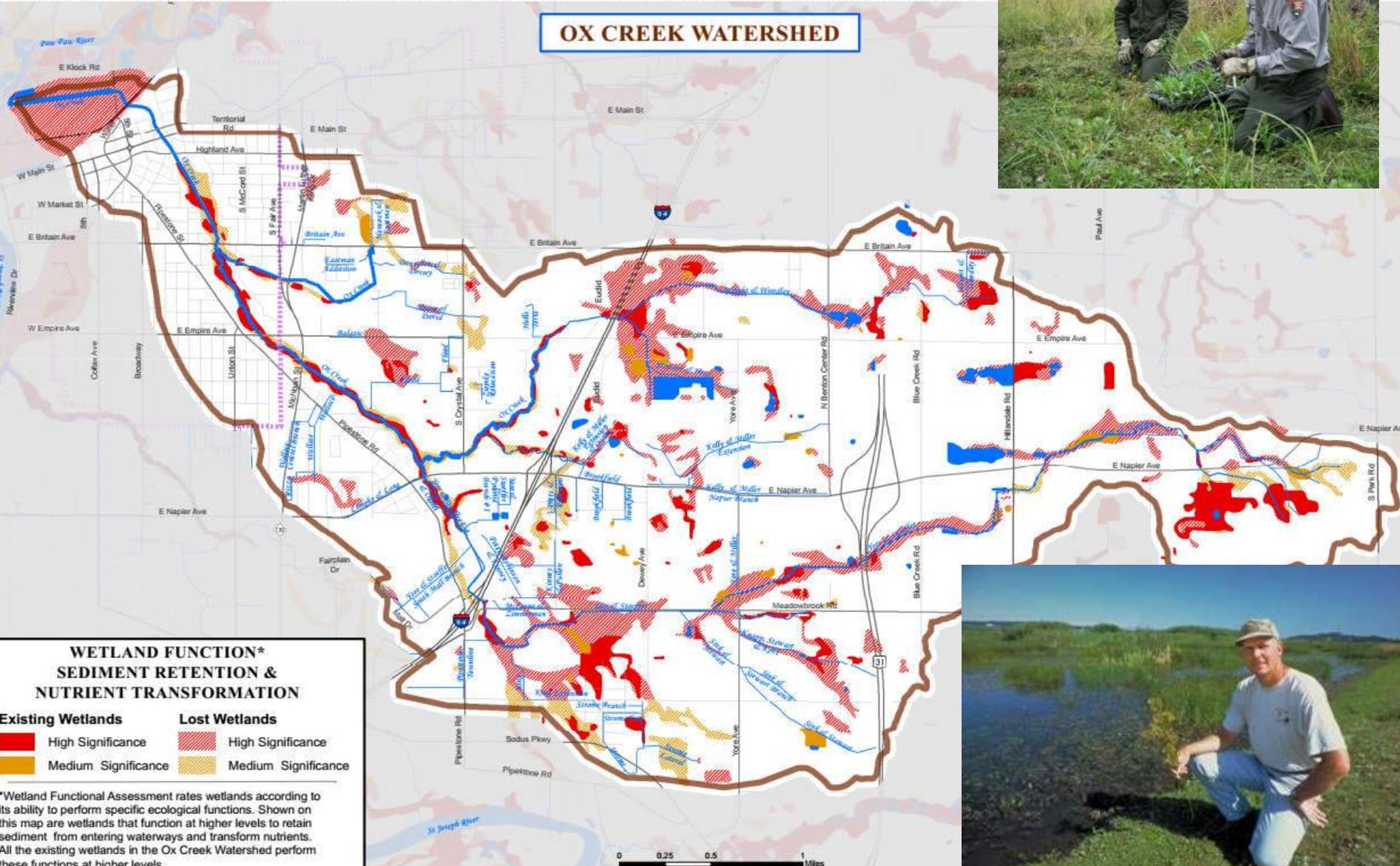


Best Management Practices

- Cover Crop
- No Till /Conservation Tillage
- Filter Strips
- Wetland Restoration

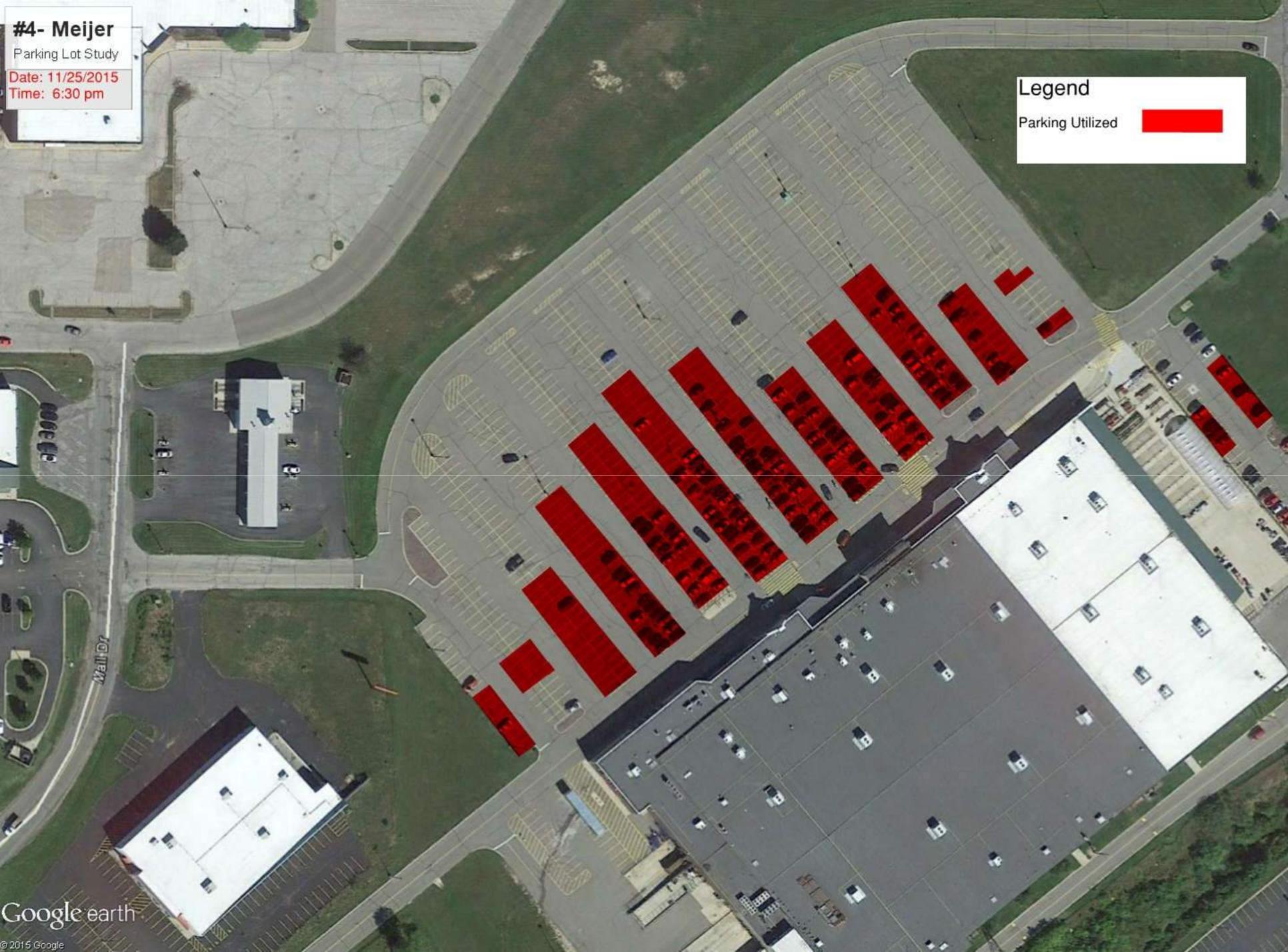
Wetlands

OX CREEK WATERSHED



#4- Meijer
Parking Lot Study
Date: 11/25/2015
Time: 6:30 pm

Legend
Parking Utilized 



Parking Day 2016



Low Impact Development

Water – slow it down, spread it out, soak it in



www.swmpc.org/lid.asp

Ox Creek

From Neglect to Opportunity



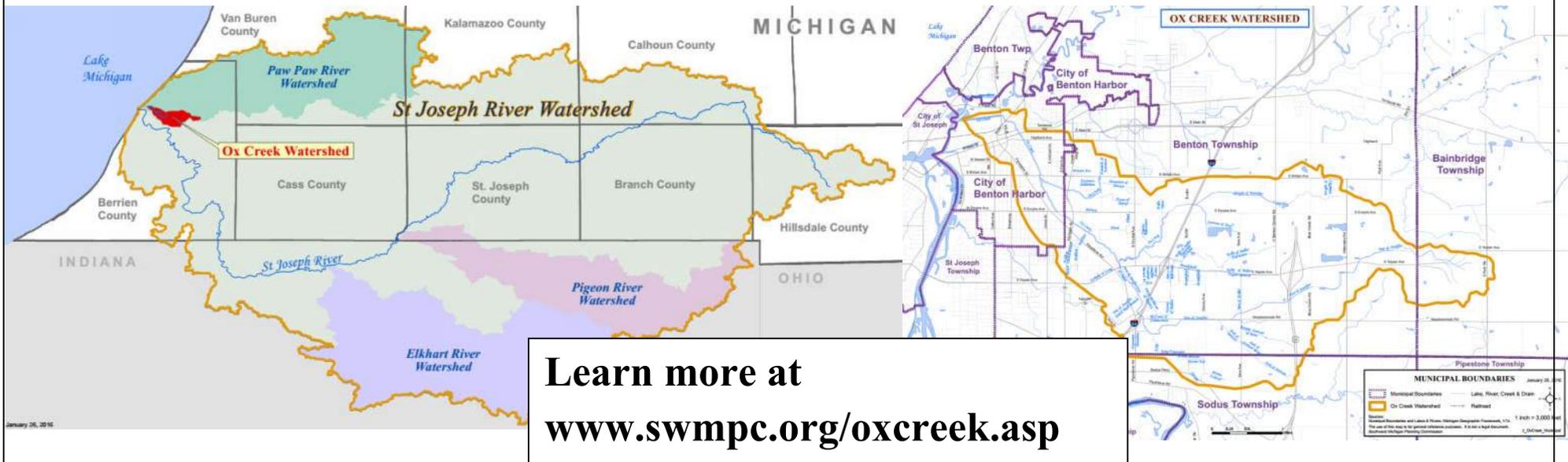
Ox Creek Watershed Overview

- Ox Creek is a warmwater stream that flows through Benton Harbor where it joins the Paw Paw River.
- It originates in agricultural lands east of the city and drains an area of 13 square miles.
- The lower portion of the watershed is heavily influenced by urbanization and stormwater runoff.
- Ox Creek is listed on Michigan's 303(d) list because it is not meeting water quality standards. Sedimentation, siltation and flashy flows are causing the impairments.



What can we do to improve Ox Creek?

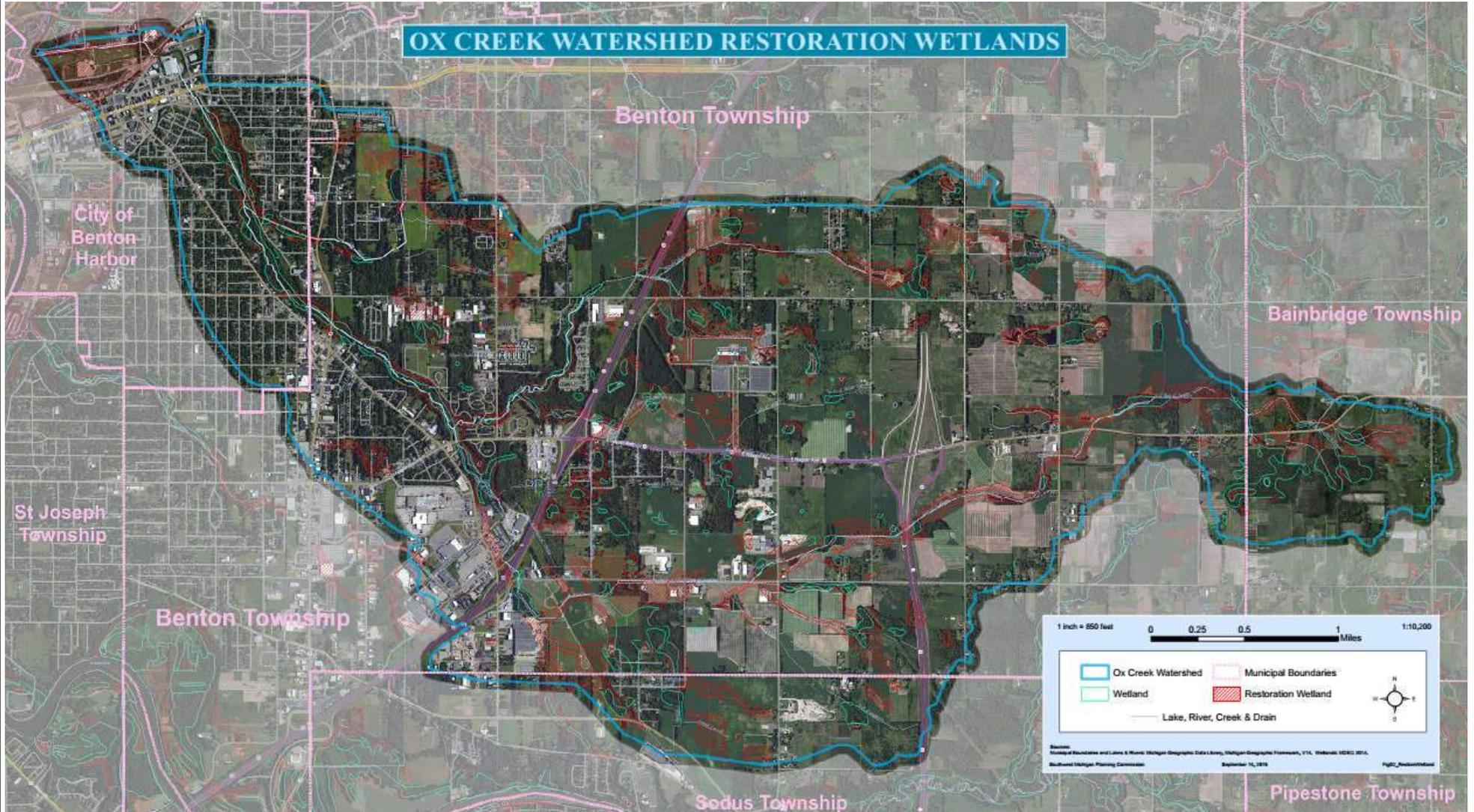
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- Ensure sanitary sewer infrastructure and **septic systems** are being maintained.



72% loss of wetlands in the Ox Creek Watershed

Existing Wetlands: 403 acres

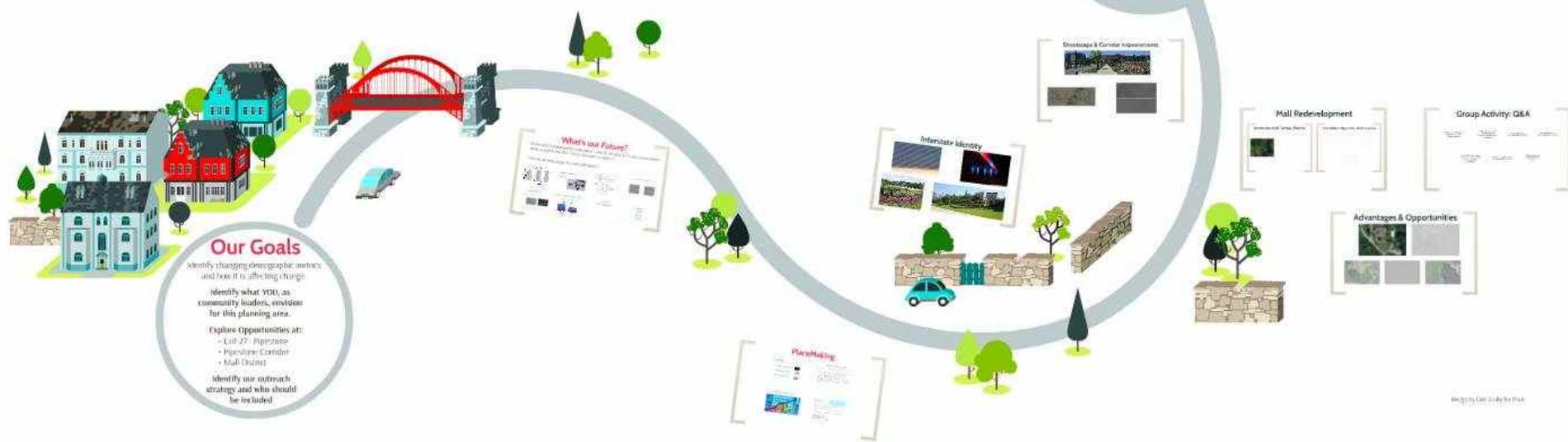
Lost/Potential Restoration Wetlands: 1,060 acres



Community Trends & The Ox Creek Vision Study

"Cities and landscapes are illustrations of our spiritual and material worth. They not only express our values but give them a tangible reality. They determine the way in which we use or squander our energy, time, and land resources."

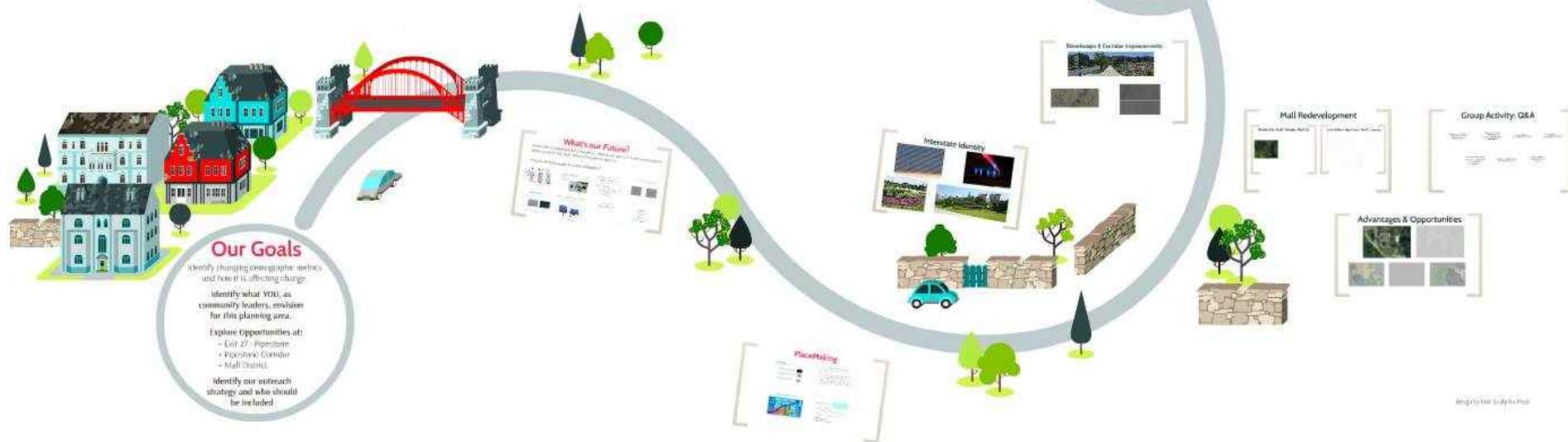
~Leon Krier, Author & Architect



Community Trends & The Ox Creek Vision Study

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~Leon Krier, Author & Architect





Our Goals

Identify changing demographic metrics and how it is affecting change.

Identify what *YOU*, as community leaders, envision for this planning area.

Explore Opportunities at:

- Exit 27 - Pipestone
- Pipestone Corridor
- Mall District

Identify our outreach strategy and who should be included

What's our Future?

Where will this development take place? How do we attract it to our communities?
 What should it look like? What's the path to success?

How do we help people live more efficiently!?



Miles Driven: 21-30 Year-Olds

1995: 20.8 %
 2001: 18.3 %
 2011: 13.7%



Today, less than 25% of households are considered "traditional" i.e. Mom, Dad, Kids under the same roof.

Household Type	1980	2000	2010	2050
Mom with Children	40%	26%	20%	20%
Mom without Children	51%	54%	71%	75%
Single / other HHI	12%	10%	20%	20%

Likely Movers Preference

- 62% - Close to shops, restaurants, and offices
- 59% - Shorter commute, but smaller home
- 52% - Available public transit
- 50% - Mix of homes
- 47% - Mix of incomes

Benefits of walkable and transit oriented development.

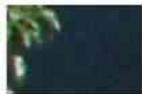


Generational Demands

The New Legal generations:

- The Boomers - Current ages of 50-69 years old
- The Millennials - Current ages of 18-30

How age groups demand similar housing types:



When they aged in and alone more, 50% are moving into either multi-family housing types.

Boomers and Millennials are changing the housing market.

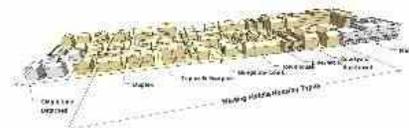
We have enough sprawling suburbs, it is time to respond to the demand for walkable, compact housing types that are affordable.

The younger generation behaviors reflect these desires.



The Missing Middle

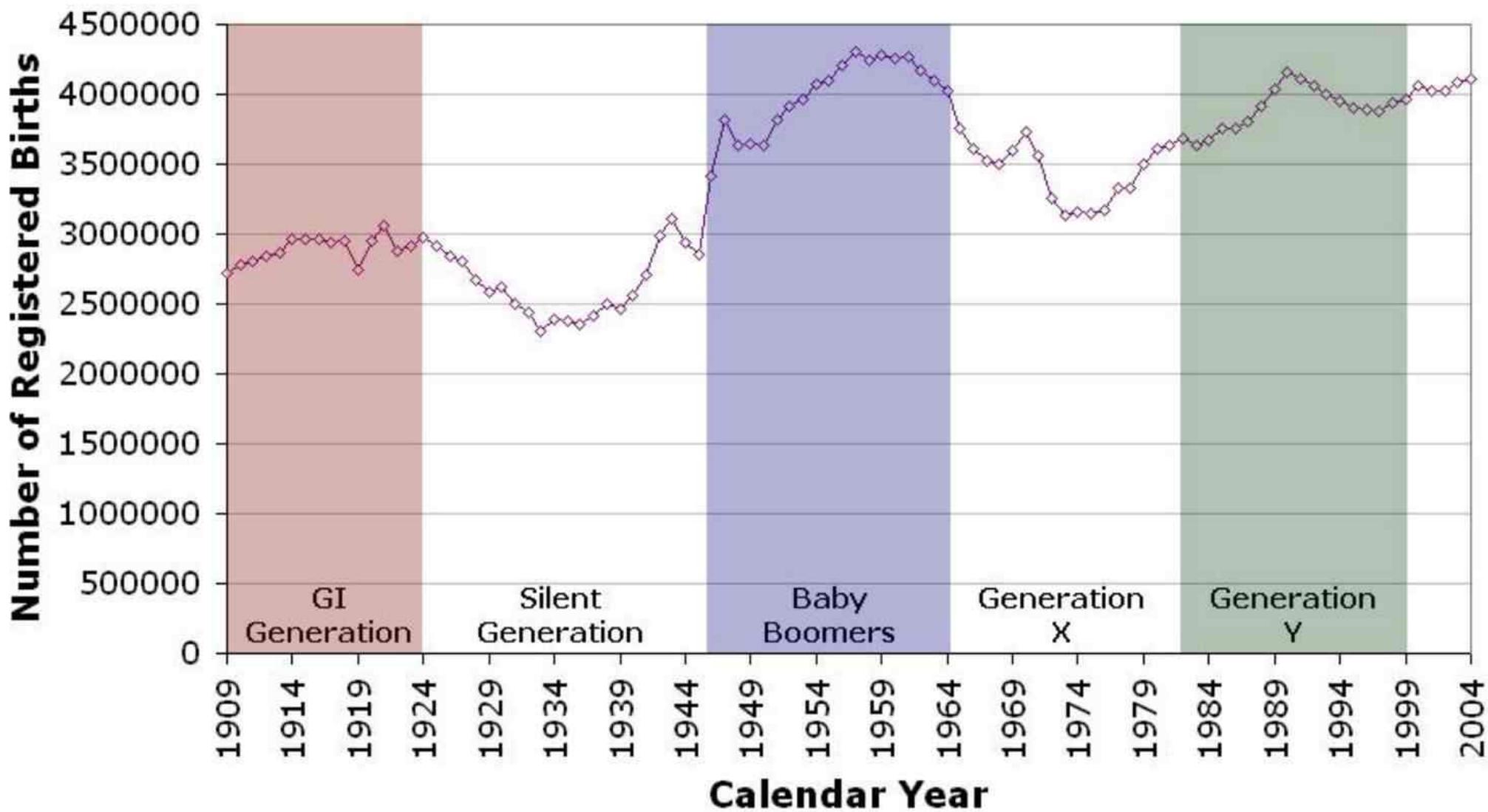
This type of development is characterized by **Compact Growth, Walkable Environments**



Economics of Place

- Compact Developments
- Reduce Infrastructure Costs **33% LESS**
- Ongoing Delivery of Services **10% LESS**
- Cost per Worker per Acre Compared to Suburban Development **10 x MORE**

Number of Registered Births in the United States 1909-2004



Generational Demands

The two largest generations

- The Boomers : Current ages at 50-68 years-old
- The Millennials: Current ages at 10-30

These age groups demand similar housing types.



Live-Work



Mixed-Use



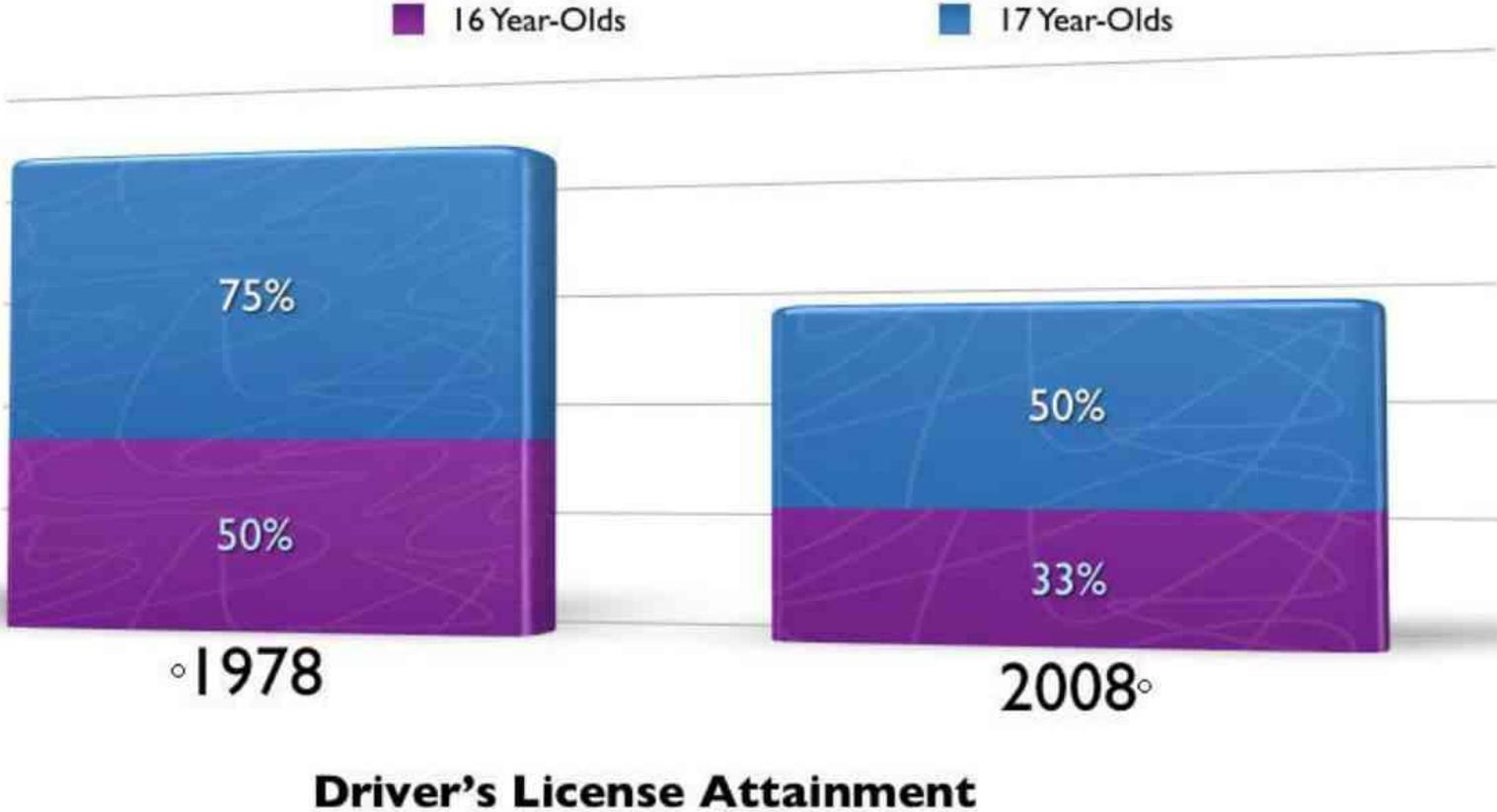
Mansion Flats

When those aged 65 and above move, 59% are moving into attached or multi-family housing types.

- Boomers and Millennials are changing the housing market.

We have enough sprawling suburbs, it is time to respond to the demand for walkable, compact housing types that are affordable.

The younger generation behaviors reflect these desires.



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Today, less than 25% of households are considered "traditional" i.e. Mom, Dad, Kids under the same roof.

<u>Household Type</u>	<u>1960</u>	<u>2000</u>	<u>2010</u>	<u>2040</u>
HH with Children	49%	36%	29%	25%
HH without Children	51%	64%	71%	75%
Single / other HH	12%	26%	28%	36%

2000, 2010 Census

Likely Movers Preference

National Realtor's Association

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- 59% - Shorter commute, but smaller home
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- 50% - Mix of homes
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The Missing Middle

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Economics of Place

Compact Developments

Upfront Infrastructure Costs

33% LESS

Ongoing Delivery of Services

10% LESS

Tax Revenue per Acre Compared to Suburban Development

10 x MORE

THE ROLE OF

Communities

IN PROMOTING PHYSICAL ACTIVITY

WALKABLE COMMUNITIES

People who live in walkable neighborhoods are

2
times

as likely to get enough physical activity as those who don't.

JOINT USE

The number of children who are physically active outside is

84%

higher when schoolyards are kept open for public play.

TRAILS

People who live near trails are

50%

more likely to meet physical activity guidelines.

RECREATIONAL FACILITIES

Teens who live in poor or mostly minority neighborhoods are

50%

less likely to have a recreational facility near home.

Active Living Research

www.activelivingresearch.org

Sources: TRAILS: Huston S, Evenson K, Bars P, et al. "Neighborhood Environment, Access to Places for Activity, and Leisure-Time Physical Activity in a Diverse North Carolina Population." *American Journal of Health Promotion*, 18(1): 58-69, September/October, 2003. WALKABLE COMMUNITIES: Frank LD, Schmid TL, Sallis JF, Chapman J, Saelens BE. Linking objectively measured physical activity with objectively measured urban form. Findings from SMARTRAQ. *American Journal of Preventive Medicine* 2005; 28(2S2):117-125. JOINT USE: Farley T, Meriwether R, Baker E, Watkins L, Johnson C, Webber L. Safe play spaces to promote physical activity in inner-city children: Results from a pilot study of an environmental intervention. *Am J Pub Health*. 2007;97:1625-1631. RECREATIONAL FACILITIES: Gordon-Larsen P, Nelson MC, Page P, Popkin BM. "Inequality in the Built Environment Underlies Key Health Disparities in Physical Activity and Obesity." *Pediatrics*. 117(2): 417-424, 2006.

THE ROLE OF

Transportation

IN PROMOTING PHYSICAL ACTIVITY

TRAFFIC CALMING
Medians, speed bumps and other traffic-calming efforts can reduce the number of automobile crashes with pedestrian injuries by up to

15%

PUBLIC TRANSPORTATION

Public transit users take

30%

more steps per day than people who rely on cars.

SIDEWALKS

People who live in neighborhoods with sidewalks on most streets are

47%

more likely to be active at least 30 minutes a day.

BIKE FACILITIES

In Portland, Ore., bicycle commuters ride

49% of their miles

on roads with bike facilities, even though these are only 8% of road miles.

Active Living Research

www.activelivingresearch.org

Sources: SIDEWALKS: Sallis J, Bowles H, Bauman A, et al. "Neighborhood Environments and Physical Activity among Adults in 11 Countries." *American Journal of Preventive Medicine*, 36(6): 484-490, June 2009. BIKE LANES: Dill J et al. "Bicycling for Transportation and Health: The Role of Infrastructure." *Journal of Public Health Policy* (2009) 30, S95-S110. doi:10.1057/jphp.2008.56). TRAFFIC CALMING: Bunn F, Collier T, Frost C, et al. "Area-Wide Traffic Calming for Preventing Traffic Related Injuries." *Cochrane Database of Systematic Reviews* (1), January 2003; Elvik R. "Area-Wide Urban Traffic Calming Schemes: A Meta-Analysis of Safety Effects." *Accident Analysis and Prevention*, 33(3): 327-336, May 2001. PUBLIC TRANSPORTATION: Edwards R. "Public Transit, Obesity, and Medical Costs: Assessing the Magnitudes." *Preventive Medicine*, 46(1): 14-21, January 2008.

PlaceMaking

PlaceMaking

The process of creating quality places that people want to live, work, play, and learn in.

Strategic Place-Making



Creative Place-Making



Tactical Place-Making



MI Place "PlaceMaking Strategy"

Part of the greater "10-Point Plan Directive" being implemented by Governor Rick Snyder's administration.

1. **Jobs** - Tackle Michigan's desperate unemployment rate through people, not government.
2. **Taxes** - Believe Michigan's oppressive business tax, the highest in the nation.
3. **Government** - More efficient, ethical, and accountable. Transparency.
4. **People** - Reclaim our young populations and reverse the trend of population loss.
5. **Cities** - Restore our cities and limit urban sprawl.
6. **Image** - Promote Michigan nationally as a heritage landscape and tourism mecca.
7. **Environment** - Encourage private/public partnerships to preserve our natural landscape.
8. **Education** - Currently 4th nationally, raise Michigan resident's access to quality education.
9. **Health Care** - Should be affordable and accessible to all, encourage preventative care.
10. **Positivity** - Less talk, more action.

MI Place "Place-Making Strategy"

Arts, Culture and Tourism as an Economic driver



MI PlaceMaking Goal



Building a stronger Michigan together.

What defines a community? It's the common ground where people gather—from beaches, streets, and plazas to parks, green spaces and waterfronts.

You believe that by revitalizing communities and rebuilding neighborhoods, we can strengthen the entire state.

Together with our many partners, we invest in Michigan communities to enhance the quality of life of our residents— and to attract and retain businesses, entrepreneurs, and workers, throughout the state.

The Michigan Municipal League (MML)
The Land Policy Institute at Michigan State University (LPI)
Green Michigan Institute (GMI)
Sense of Place Council (SOPC)
Michigan State Housing Development Authority (MSHDA)

PlaceMaking

The Process of creating quality places that people want to live, work, play, and learn in.

Strategic Place-Making

Creative Place-Making

Tactical Place-Making

Strategic Place-Making

A structural, targeted approach to a large-scale placemaking goal.



Creative Place-Making

A private/public partnership of cultural significance, bringing art, festivals, or music to otherwise neglected places.



Tactical Place-Making

A phased approach to place-making, beginning with short-term, low-cost solutions that are easy to remove/replace/improve. Provides the opportunity to experiment with solutions and adapt them into long-term strategies.



Strategic Place-Making

A structured, targeted approach to a large-scale place-making goal.



Dennis Allain

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MI Place "Place-Making Strategy"

Arts, Culture and Tourism as an Economic driver

MICHIGAN
DEPENDS ON THE
CREATIVE state
OF OUR ECONOMY.

JOBS
TAX REVENUE
VIBRANT COMMUNITIES
QUALITY OF LIFE
TALENT ATTRACTION
TECHNOLOGY
BUSINESS DEVELOPMENT

\$564,666,819
Annual direct expenditures by the creative community in Michigan

FISCAL
2011
YEAR

SALARIES: \$195,536,571
MICHIGAN JOBS: 26,064

Total annual arts & culture salaries

34%



34% of direct expenditures goes directly to Michigan workers

\$14M

PAYROLL TAXES
\$14,097,574 in payroll taxes

From 2006 - 2011, the number of arts related jobs (85,656) increased by 15%, and arts related businesses (28,072) increased by 65%. From 2010 - 2011 alone, jobs increased by 11% and arts related businesses increased by 16%.

Nearly **\$118 MILLION** already raised in

SUCCESSFUL CAPITAL CAMPAIGNS

3,059,813
SCHOOLCHILDREN
experienced arts and cultural venues and events

24,484 youth & school group visits
1,936 programs in schools

22,145,943
VISITS 68% FREE
to arts and cultural venues and events

\$362,516,147
Total Earned Income



56¢ of every \$1.00 is earned income

Individual Contributions \$64,589,708
Foundation Contributions \$55,738,878
Corporate Contributions \$21,978,460
Gov't Contributions \$49,384,084
Other \$93,226,043
UNRESTRICTED REVENUE \$646,893,320

MORE THAN \$2.081B
\$2B
IN TOURISM

Arts and culture represent 16% of the total \$13.1 Billion in tourism dollars spent in 2011, more than many popular tourist activities.

\$1.966B
Arts and culture account for more than all of the combined:
Playing Golf (\$289.8M)
Boating & Sailing (\$252.8M)
Wine & Spirits (\$252.8M)
Hunting & Biking (\$768.7M)
Numbers represent FY2011

CREATIVE state
MICHIGAN 2014 NONPROFIT REPORT

www.creativestateml.org



The data used for this report was provided by the Cultural Data Project ("CDP"), an organization created to strengthen arts and culture by documenting and disseminating information on the arts and culture sector. Any interpretation of the data is the view of ArtServe Michigan and does not reflect the views of the Cultural Data Project. For more information on the Cultural Data Project, visit www.culturaldata.org. The Michigan Economic Development Corporation, Michigan Council for Arts and Cultural Affairs, and Americans for the Arts also provided data. Creative State Michigan is produced by ArtServe Michigan with research support from Data Driven Detroit. www.creativestateml.org. Design by www.leftbankcreative.com. Published January 2014. © Copyright 2013-2014 ArtServe Michigan All Rights Reserved.

Interstate Identity



Streetscape & Corridor Improvements







Mall Redevelopment

University Mall: Tampa, Florida



Oak Hollow: High Point, North Carolina



University Mall: Tampa, Florida





Google earth

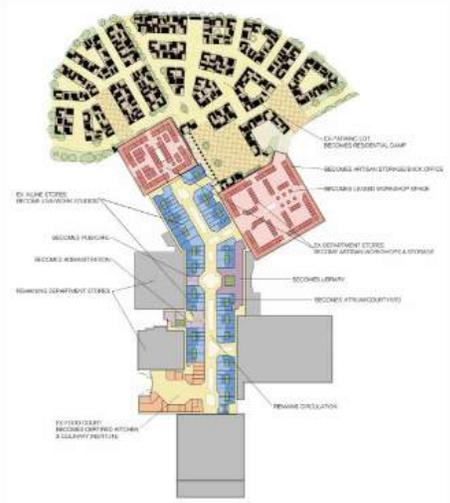
Image Landsat

LEGEND (Applies to all pages)

- Existing Retail / Restaurants
- Existing Studio Movie Grill
- New Retail / Restaurants
- New Anchor 1 Tenant (1st Floor)
- New Anchor 2 Tenant (2nd Floor)
- New Health Club (2nd Floor)



Oak Hollow: High Point, North Carolina





Oak Hollow Mall - Existing Conditions. Credit: Duany Plater-Zuherk & Co.

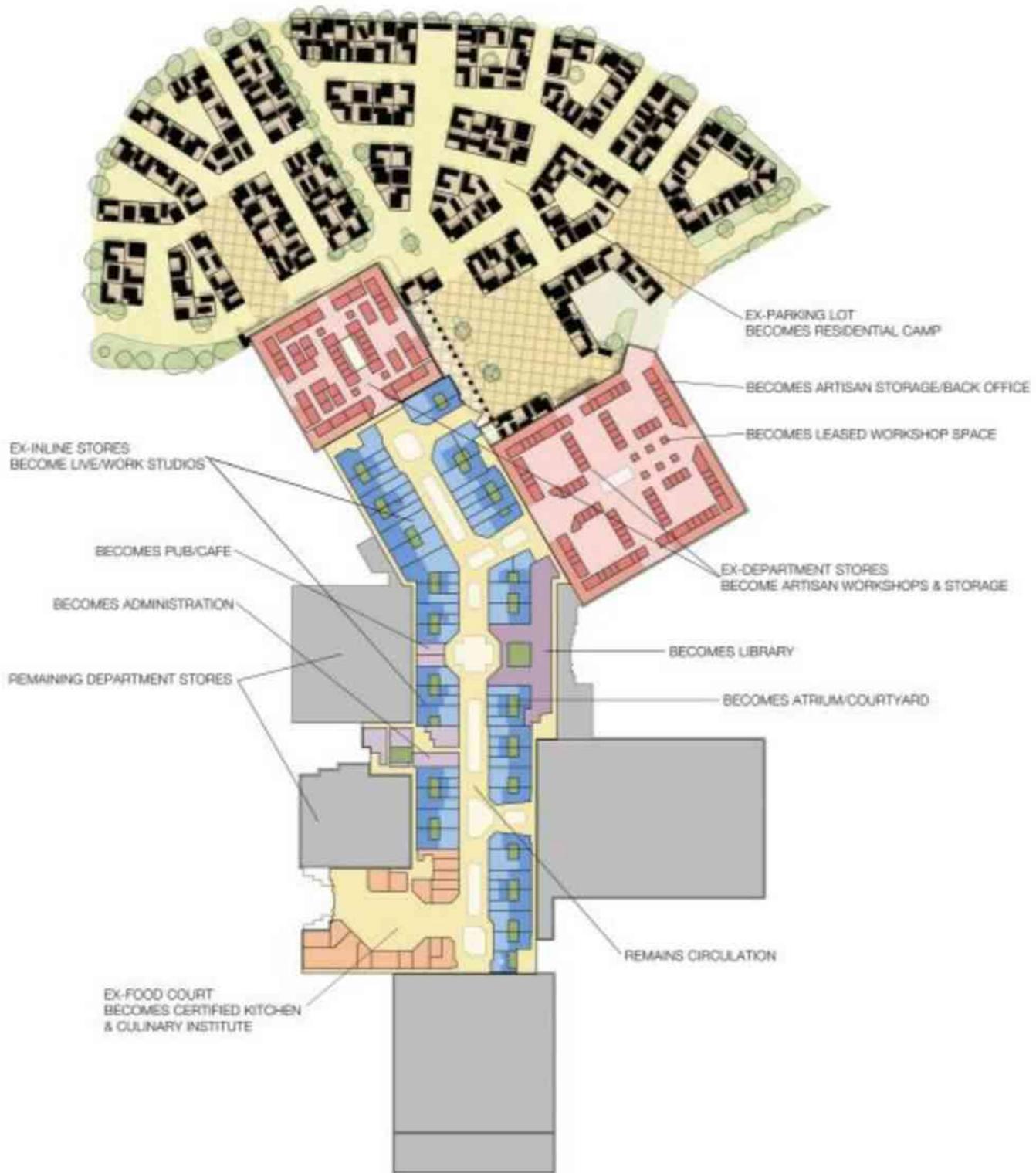


Proposed Conditions. Credit: Duany Plater-Zuherk & Co.



Approved Lay Out - Central Business District - 2018





Group Activity: Q&A

What role **does** this District play in the Southwest Michigan Region?

What role **should** this District play in the Southwest Michigan Region in the future?

Who should the target market be for **shop & play**?

Who should the target market be for **live & work**?

To attract the latter groups, what **improvements** to this District should be considered?

What is the identity of Exit 29 at Pipestone **today**?

What should be the identity of Exit 29 **tomorrow**?

What role **does this District
play in the Southwest
Michigan Region?**

What role **should this
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Advantages & Opportunities



W&A Watershed & Associates, Inc. **OX CREEK WATERSHED**
Benton Harbor, MI Planning Area Map www.wa.com



W&A Watershed & Associates, Inc. **OX CREEK PLANNING AREA**
Benton Harbor, MI Planning Area Map www.wa.com



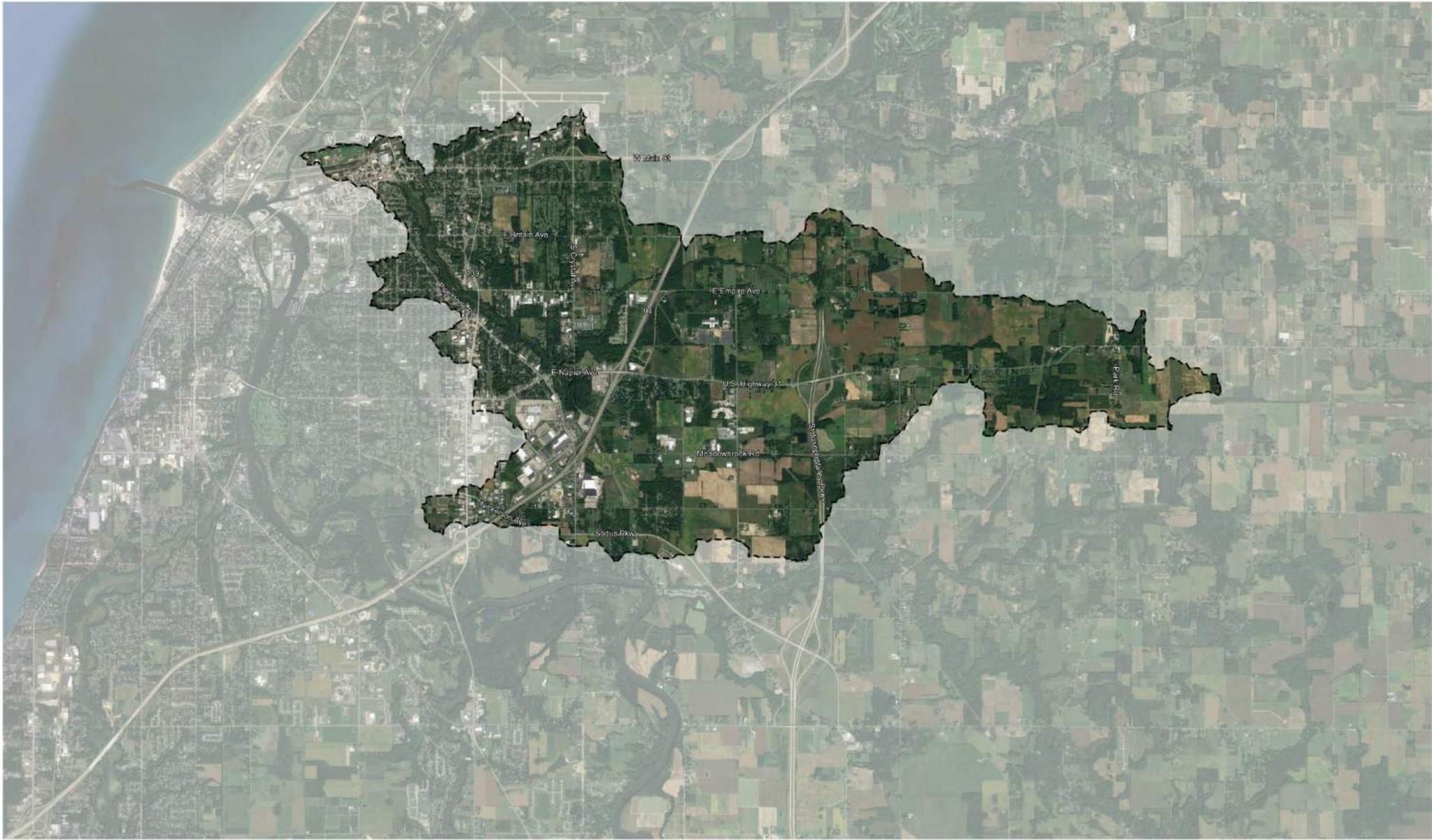
W&A Watershed & Associates, Inc. **PIPESTONE COMMON & DISTRICT**
Benton Harbor, MI Planning Area Map www.wa.com



W&A Watershed & Associates, Inc. **EAST SIDE PIPESTONE**
Benton Harbor, MI Planning Area Map www.wa.com



W&A Watershed & Associates, Inc. **MALL EAST**
Benton Harbor, MI Planning Area Map www.wa.com



OX CREEK WATERSHED

Benton Harbor, MI

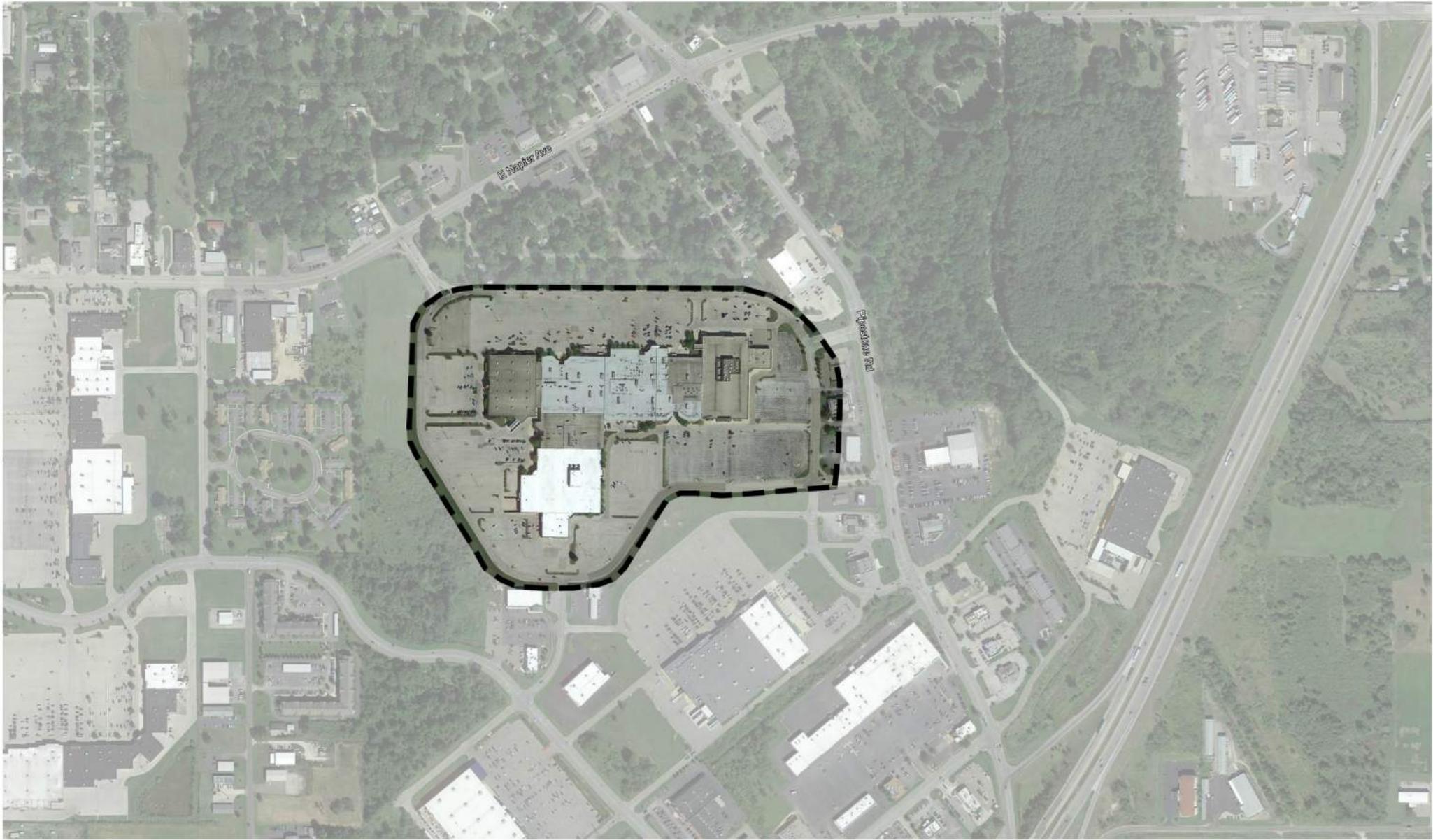


OX CREEK PLANNING AREA
Benton Harbor, MI



PIPESTONE CORRIDOR & DISTRICT
Benton Harbor, MI

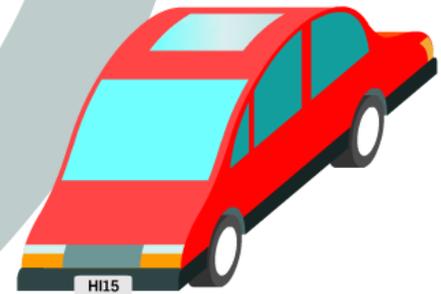






Schedule

- 1) **October 18th**.....Kick-Off w/ SWMPC and Form Steering Committee
- 2) **December 1st**.....Steering Committee Meeting #1 - Kick-Off Meeting & Engagement
- 3) **Early January**.....Stakeholder Meeting #1 - Issues and Opportunities
- 4) **Mid-January**.....Steering Committee Meeting #2 – Goals & Themes
- 5) **Late January**.....Design Charrette: Andrews University & Steering Committee
- 6) **Early February– Mid-March**.....Planning Phase #1: Develop Visioning Documents
- 7) **Late March**.....Steering Committee #3 – Review and Engagement Plan
- 8) **Mid April**.....Stakeholders Meeting #2 – Review
- 9) **Late April – Late May**.....Planning Phase #2: Develop Visioning Documents
- 10) **Early June**.....Public Workshop
- 11) **Mid-June**.....Steering Committee Meeting #4 – Review
- 12) **Late June – Late July**.....Planning Phase #3: Revise Visioning Documents
- 13) **Early August**.....Steering Committee Meeting #5 – Review & Action Plan
- 14) **Mid-August**.....Stakeholders Meeting #3 – Review & Action Plan
- 15) **Late August – Early October**.....Planning Phase #4: Develop Action Plan
- 16) **Mid-October**.....Steering Committee Meeting #6 – Review
- 17) **Early November**.....Stakeholders Meeting #4 – Champions
- 18) **Mid-November**.....Steering Committee Meeting #7 – The Beginning



- 1) **October 18th**.....Kick-Off w/ SWMPC and Form Steering Committee
- 2) **December 1st**.....Steering Committee Meeting #1 - Kick-Off Meeting & Engagement
- 3) **Early January**.....Stakeholder Meeting #1 - Issues and Opportunities
- 4) **Mid-January**.....Steering Committee Meeting #2 – Goals & Themes
- 5) **Late January**.....Design Charrette: Andrews University & Steering Committee
- 6) **Early February– Mid-March**.....Planning Phase #1: Develop Visioning Documents
- 7) **Late March**.....Steering Committee #3 – Review and Engagement Plan
- 8) **Mid April**.....Stakeholders Meeting #2 – Review
- 9) **Late April – Late May**.....Planning Phase #2: Develop Visioning Documents
- 10) **Early June**.....Public Workshop
- 11) **Mid-June**.....Steering Committee Meeting #4 – Review
- 12) **Late June – Late July**.....Planning Phase #3: Revise Visioning Documents
- 13) **Early August**.....Steering Committee Meeting #5 – Review & Action Plan
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