

Sustainable Small Harbor Management Strategy Project

Pentwater Community Charrette Final Presentation June 8, 2015



Michigan Sea Grant helps to foster economic growth and protect Michigan's coastal, Great Lakes resources through research, education and outreach.



















David Larkin Knight, LLC

Core Question

What are the key barriers to small harbor economic, social and environmental sustainability and what tools would help small harbor managers create more stability?



Project Outcomes

- Development of a placemaking strategy and economic analysis for coastal communities to use to ascertain the financial viability of their harbor/waterfront
- Establishment of a toolkit for small harbors including four full case studies on how the model was developed and applied
- Summary report, presentation, case study fact sheets, and a website that will assist communities in their planning efforts

Pentwater Sustainable Small Harbor Design Charrette Process



Community Engagement Timeline

- Initial Community Vision Meeting March 25
- Three Day Community Charrette April 17 19
 - Public Input Workshop (April 17: 6pm 8pm)
 - Preferred Option Public Open House (April 18: 6pm 8pm)
 - "Work In Progress" Community Presentation: (April 19: 4pm 6pm)
- Final Community Presentation June 8
- Final Project Outcomes and Toolkit Dissemination 2016
- Project Concludes August 2016

Project Website



Overview

Michigan is home to more than 80 public harbors and marinas, run by the state, county or local government. Each year, Great Lakes boating infuses the Michigan economy with nearly \$2.4 billion through direct and secondary spending. The trend of fluctuating water levels across the Great Lakes, particularly persistent low water levels in the past 10 years, combined with economic downturn have taken their toll on local waterfront communities. In addition, state and federal funding for public harbors is increasingly limited.

The research team seeks to develop a sustainable small harbor management strategy for Michigan's coastal communities.

The team is hosting charrettes (facilitated community planning sessions) in New Baltimore, Au Gres, Ontonagon and Pentwater. The communities will undergo a six-month engagement process with the research team. The research team will identify strategies to improve economic, social and environmental sustainability of Michigan's harbor communities.



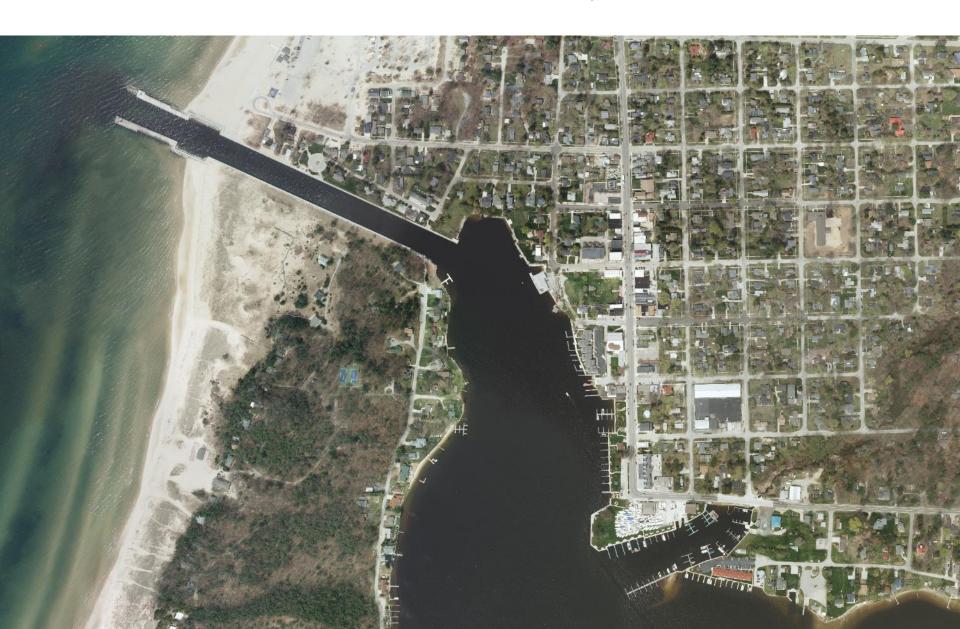
www.miseagrant.umich.edu/smallharborsustainability/
Presentations, Project Resources and Social Media

Social Media



114 likes, thoughtful comments on the process Engage people who couldn't attend in person (schedule/seasonal)

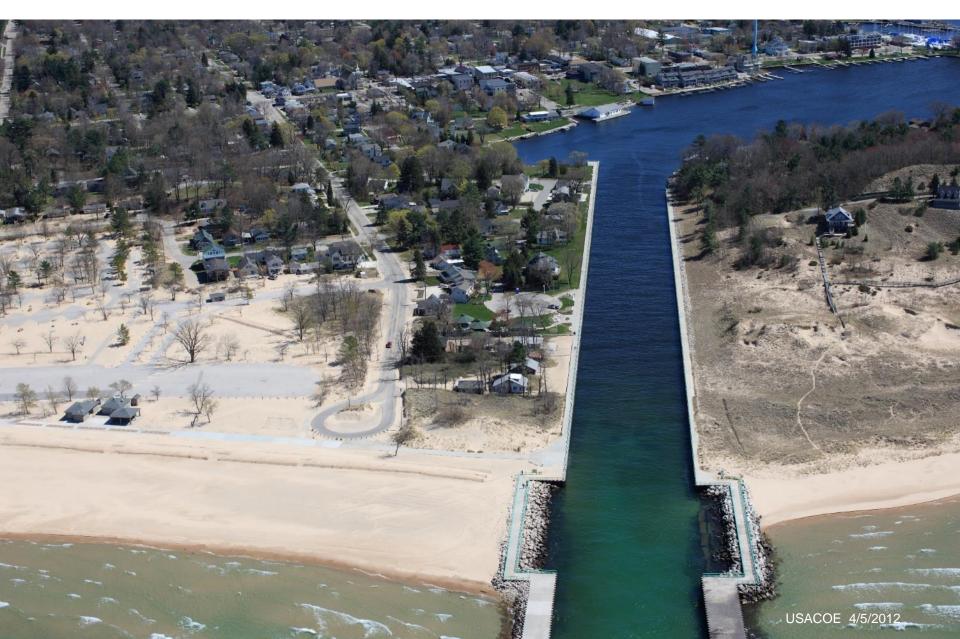
Pentwater Study Area



Pentwater Waterfront



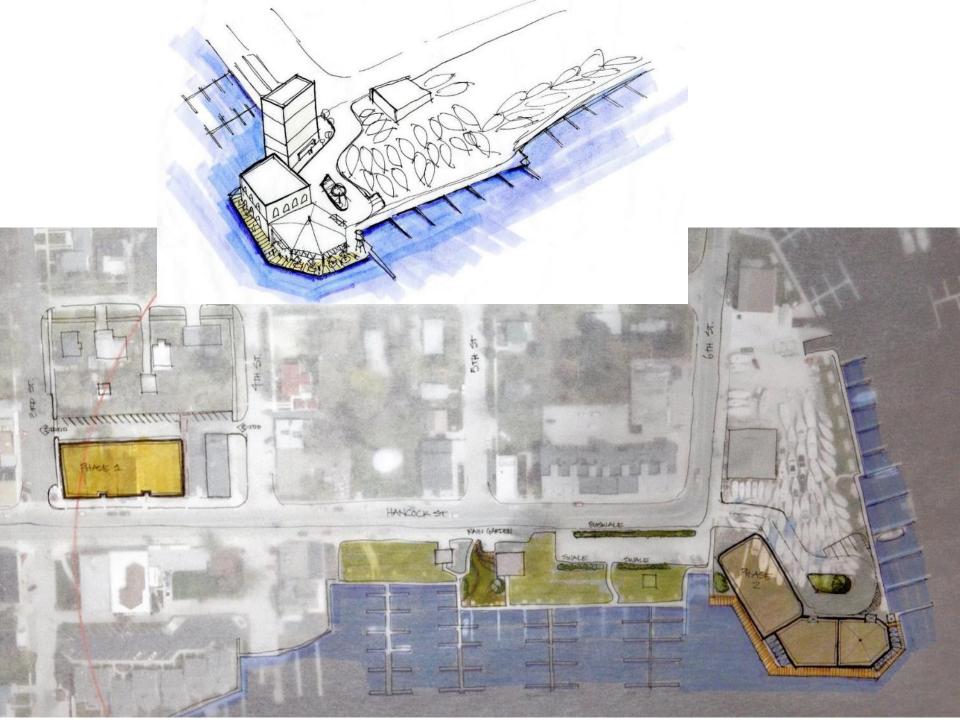
Harbor Entrance



Three Design Alternatives

Alternative 1: Pentwater Lake Systems Institute

Alternative 1: Pentwater Lake Systems Institute			
Harbor/Waterfront Edge Driver	Leveraging the local "Brain Trust" for Natural Systems, Create a NGO Institute in Downtown Pentwater for Generational Knowledge Transfer and Continuing Education; Serve as a hub for basin wide teaching and learning		
Land-use	 Phase 1: Hancock and 3rd street: Relocated Police Station/Ground Floor Retail/7200 sf of Institute and Parking Phase II: Snug Harbor Point: Destination Restaurant/Relocate Fuel Marina: Expanded Public Marina Downtown: Year Round Retail and Housing Options for Staff, Visiting Scholars and students 		
Economic Development	 Village: A Principal Mission/Mandate to Transfer Innovative Ideas into Business Models worthy of Investment and Production for Economic Development Marina Launch Fees; Slip Rentals Downtown: Mixed Use Downtown (Increased Tax Base; Increase Spending) 		
Natural Systems	Natural Stormwater Management Features on Hancock		
Local Precedent(s)	"Interlochen"; Chautauqua NY; SCORE		
Engineering Consideration	 New Building and Parking Lot Minor Underground Infrastructure Improvements (Water, Sanitary Sewer, Storm Sewer) to Site IT/Cable/Electrical Improvements 		



Alternative 2: Marine Craft and Technology School

Alternative 2: Marine Craft and Technology School			
Harbor/Waterfront Edge Driver	Leveraging the local Artisan Center and Patterson Marine; Create Private/Public Marine Based School Focused on Marine Craft and Technology at Public Boat Launch; Serve as a hub for basin wide teaching and learning		
Land-use	 Phase I: Investment at Public Boat Launch, New 20 Slip Marina, 12000 sf of Wooden Boat School and Water based Training Harbor Phase II: High Bay Large Boat Repair and Construction Marina: Expanded Public Marina near Boat Launch Downtown: Year Round Retail and Work Force Housing Options for Families 		
Economic Development	 Village: A Principal Mission/Mandate to Transfer Innovative Artisan and Maker Space Ideas into Business Models worthy of Investment and Production for Economic Development Marina: Launch Fees; Slip Rentals; Large Boat Repair and Construction; Tuition and Housing Downtown: Mixed-Use (Increased Tax Base; Increased Spending) 		
Natural Systems	Natural Stormwater Systems along Lake Road; Wetlands and Submerged Habitat; Creek Habitat & Pocket Park		
Local Precedent(s)	Bayfront Maritime Center (Erie, PA), The Wooden Boat School (Brooklin, ME), Northwest School of Woode Boat Building (Port Hadlock, WA)		
Engineering Considerations	 Major improvements to Marina with Floating Docks Major underground Infrastructure Improvements (Water, Sanitary Sewer, Storm Sewer) to New School Construction IT/Cable/Electrical Improvements to Public Marina and New School Construction 		

Alternative design led by: Andrew Bradford

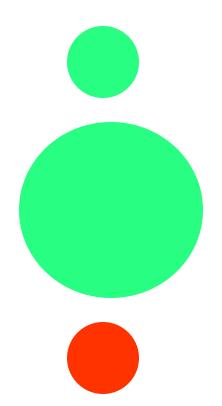


Alternative 3: Mears University Center

Alternative 3: Mears University Center			
Harbor/ Waterfront Edge Driver	Leveraging Pentwater's Natural location and assets to create a Public University center at Mears State Park for Research Practice and Economic Business Development around near shore lake processes; serve as a hub for basin wide teaching and learning		
Land-use	 Marina: Research Vessel Dock Station and Kayak Launch; Expanded Public Marina Downtown: Year Round Retail and Housing Options for Staff, Visiting Scholars and Students 		
Economic Development	 Village: A Principal Mission/Mandate to Transfer Research Ideas into Business Models worthy of Investment and Production for Economic Development Marina: Launch Fees; Slip Rentals; Large Boat Repair and Construction; Tuition and Housing Downtown: Mixed-Use (Increased Tax Base; Increased Spending) Local jobs; Increased Tourist Spending; Student Enrollment and Faculty Engagement 		
Natural Systems	Naturalization of Lake Michigan Shoreline; Longshore Sediment Maintenance and Extended Dredging Cycle		
Local Precedent(s)	Annis Water Resources Institute (Muskegon); Great Lakes Water Studies Institute (Traverse city); Great Lakes Research Center (Houghton)		
Engineering Considerations	 New Building construction New Parking Lot Minor Road Improvements to Site Major underground Infrastructure Improvements (Water, Sanitary Sewer, Storm Sewer) to Site 		



Dot Voting



Small green dot = Like this component

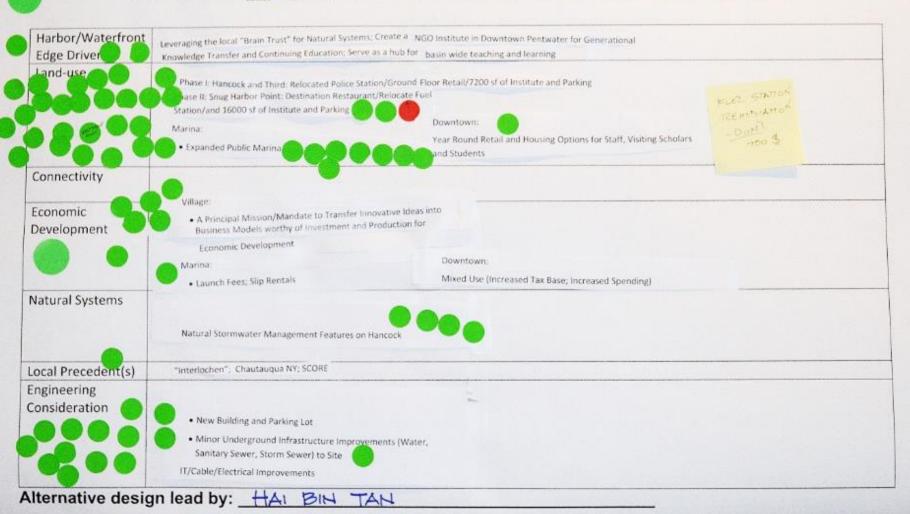
• Large green dot = Like this whole alternative

 Red dot = Uncomfortable with this component/alternative



Pentwater Small Harbor Sustainability Design Charrette April 17-19, 2015 Pentwater Yacht Club

Alternative 1 : PENTWATER LAKE SYSTEMS INSTITUTE





Pentwater Small Harbor Sustainability Design Charrette April 17-19, 2015 Pentwater Yacht Club



Alternative 2: MARINE CRAFT and TECHNOLOGY SCHOOL

Phase I: investment at Public Boat Launch, New 20 Slip Mari 12000 sf of Wooden Boat School and Water Based Training Harbor Phase II: High Bay Large Boat Repair and Construction	a. Merina: • Expanded Public Marina near Boat Launch Downtown: Year Round Retail and Work Force Housing Options for Families
and Maker Space Ideas into Business Models worth	of
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	Harbor Phase II: High Bay Large Boat Repair and Construction Village: • A Principal Mission/Mandate to Transfer Innovative and Maker Space Ideas into Business Models worthy investment and Production for Economic Development and Production for Economic Development Submerged Habitat; Creek Habitat & Pocket Park Bayfront Maritime Center (Erie, PA), The Wooden Boat Sci • Major Improvements to Marina with Floating Docks • Major Underground Infrastructure Improvements (Wat Sanitary Sewer, Storm Sewer) to New School Construction IT/Cuble/Electrical Improvements to Public Marina and New It/Cuble/Electrical Improvements III III III III II II II II II II II I

Applications

Applications

Applications

VALUE IT APPLICATION

VA



Pentwater Small Harbor Sustainability Design April 17-19, 2015 Pentwater Yacht Club







Alternative 3: MEARS UNIVERSITY CENTER

Leveraging Pentwater's natural location and assets to create a Public University Center at Means State Park for Research Practice

and Economic Business Development around nearshore lake processes; serve as a hub for basin wide teaching and learning

Land-use

Edge Driver

Harbor/Waterfront

Phase I: 16000 st of University Center and Parking

Phase II: On-site Housing for Students and Visiting Researchers

Marina:

· Research Vessel Dock Station and Kayak Launch: Expanded Public Marina

Downtown:

Year Round Retail and Housing Options for Staff, Visiting Scholars and Students

Connectivity

Economic Development Village:

A Principal Mission/Mandate to Transfer Research Ideas into Business Models worthy of Investment and Production for Economic Development

Marina:

. Launch Fees; Slip Rentals; Large Boat Repair and Construction: Tuition and Housing

Downtown

Mixed Use (Increased Tax Base; Increased Spending)

Local Jobs: Increased Tourist Spending; Student Enrollment and Faculty Engagement

Natural Systems

Naturalization of Lake Michigan Shoreline; Longshore Sediment Maintenance and Extended Dredging Cycle

Local Precedent(s)

Annis Water Resources Institute (Muskegon); Great Lakes Water Studies Institute (Traverse City): C. Cat Lakes Research Center (Houghton)

Engineering Consideration

. New Building Construction

IT/Cable/Electrical Improvements

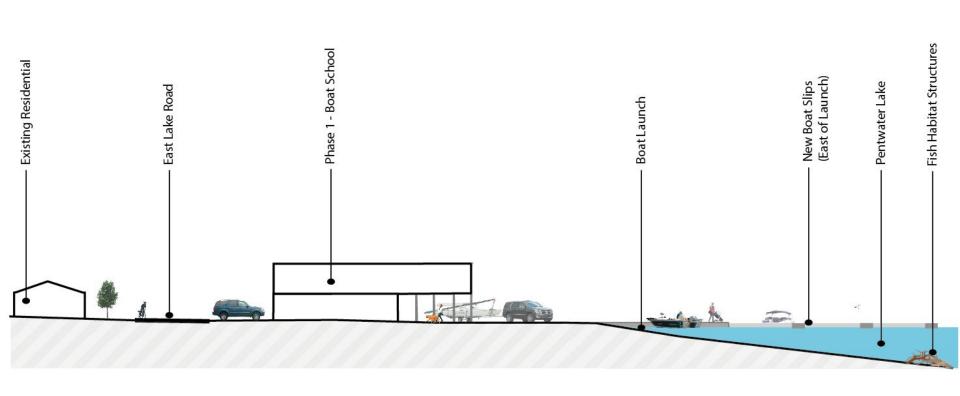
- . New Parking Lot
- · Minor Road improvements to Site
- Major Underground Infrastructure Improvements (Water, Sanitary Sewer, Storm Sewer) to Site

Alternative design lead by: RACHEL PIESCHEK

Pentwater 2035







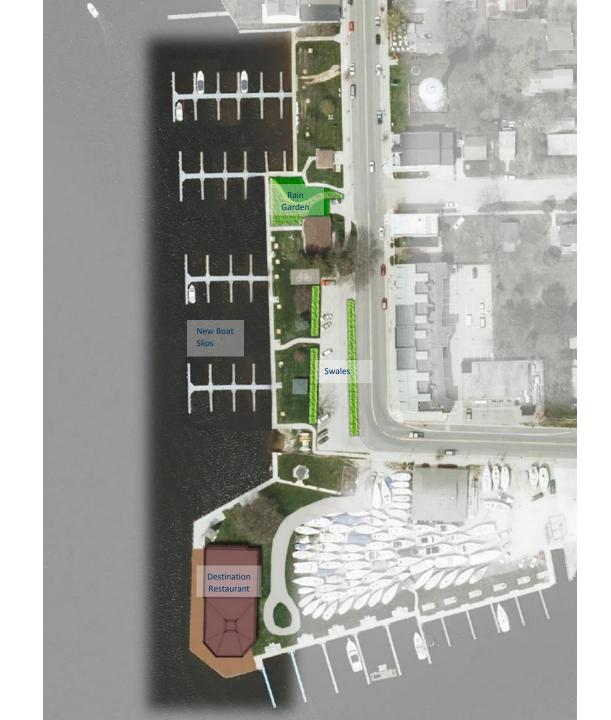


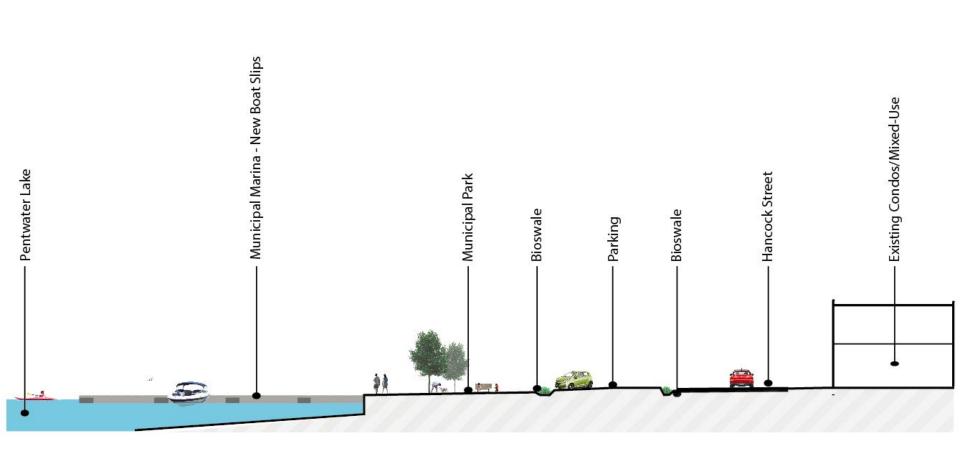


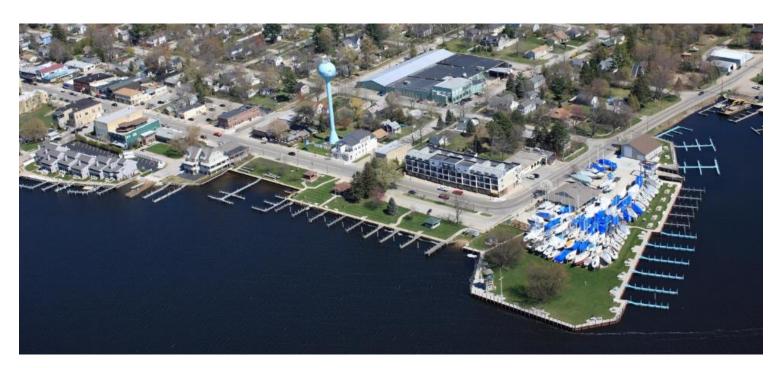
































Environmental

Fish Habitat Enhancement Structures



Stormwater Management: Rain Gardens and Swales



Dune Grass Habitat Restoration



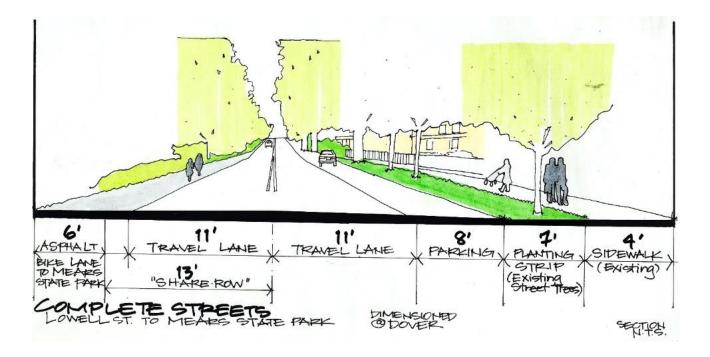
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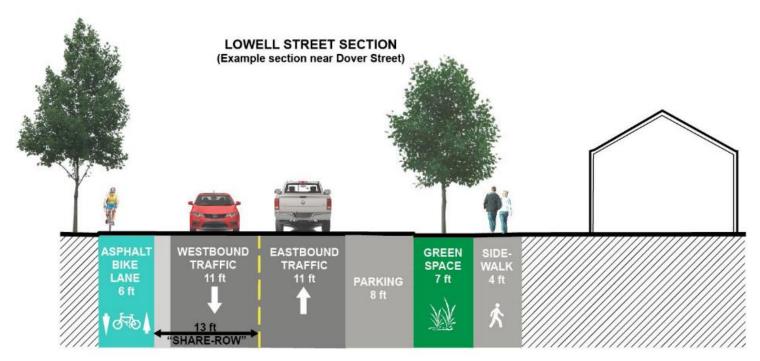
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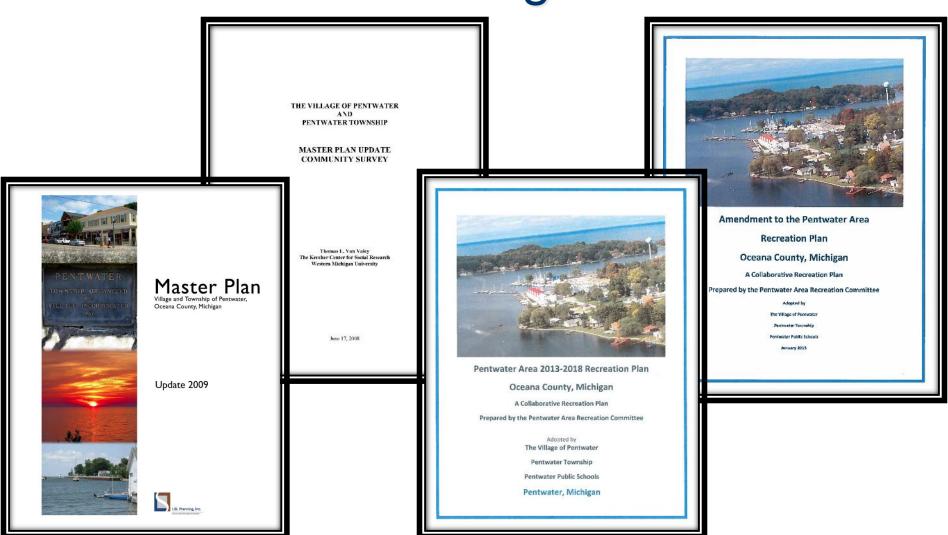
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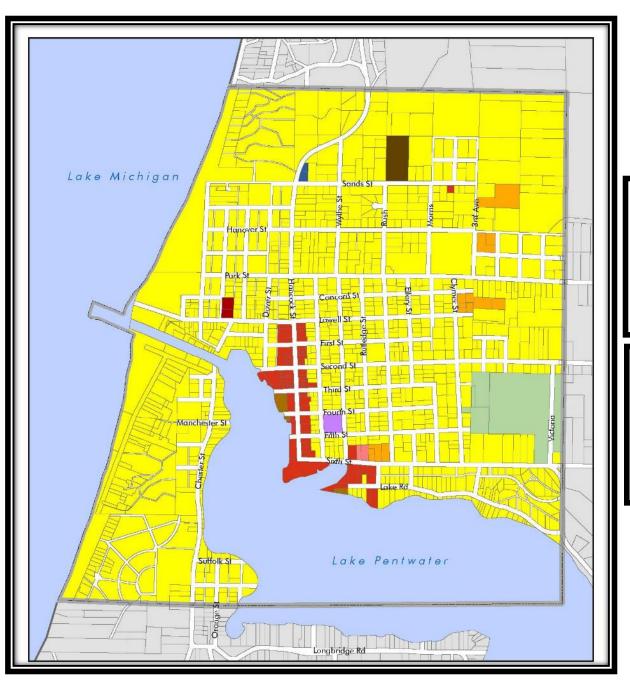






Synching New Waterfront Initiatives with Existing Plans









Village of Pentwater

Future Land Use Village of Pentwater

LDR

Low Density Residential

MDR

Medium Density Residential

HDE

High Density Residential

e

Central Business

0

Office



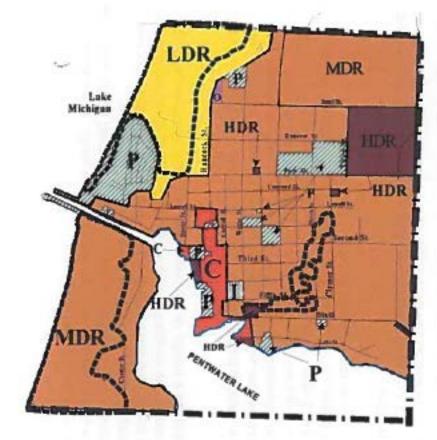
Industrial



Public/Semi-Public



Environmentally Sensitive Development Area



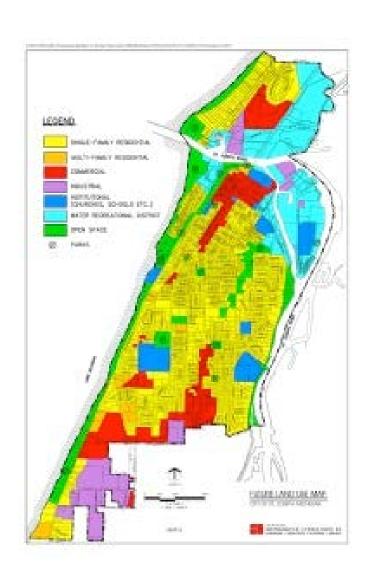




Zoning Options

- Future Land Use
 Category: Waterfront
 District (WD); new R-4
 Lakefront Multiple Family
 Residential District
 (multiple family
 developments)
 - Example: Future land use plan from St. Joseph, Mich. master plan. Light blue area is designated as water recreational district.

Source: City of St. Joseph



Zoning Options

Case Study - Portland, Maine:

- Balancing Maritime Uses and Waterfront Diversification Through Municipal Zoning
- Non-marine use overlay zone to ensure compatible use:
- Projects must meet performance standards to facilitate marine uses on the piers
- Must contribute to a marine investment fund to support infrastructure improvements in the central waterfront





As participants in the Michigan Clean Marina Program, marinas voluntarily pledge to maintain and improve Michigan's waterways by reducing or eliminating releases of harmful substances and phasing out practices that can damage aquatic environments.

To date, more than 40 marinas have been awarded certification. Since the program began in 2005, 30 marinas have been recertified, showing continued commitment to keeping Michigan waters clean.

Funding Mechanisms

Two Components:

- Funding the work suggested
- Capturing values to sustain maintenance of the public harbor

Grant Funding and Loans

LIST OF AVAILABLE MICHIGAN GRANT/LOAN FUNDING

FUNDING SOURCE	PROGRAM OBJECTIVE	ELIGIBILITY	CRITERIA	FUNDING LEVEL	ANNUAL DEADLINE	2015 CONTACT
DNR GRANTS						
Recreation Acquisition and Development Grants						
Land and Water Conservation Fund (LWCF)	To develop land for public outdoor recreation.	Any local unit of government that has an approved 5-year recreation plan submitted by March 1 of application year.	Some of the most important criteria are how closely the proposed project aligns with the 5-year recreation plan, as well as how well it aligns with the overall State Comprehensive Outdoor Plan (SCORP).	\$30k -\$100k 50% match	April 1	Christie Bayus 517-284-5923 bayusc@michigan.gov
Michigan Natural Resources Trust (MNRT)	To develop land for outdoor recreation or for the conservation of Michigan's significant natural resources.	Any state and local unit of government that has an approved 5-year recreation plan.	Criteria include the natural resource based recreation opportunities as well as the urban area recreation opportunities. Specific priorities for 2014 included Trails, Wildlife Corridors and projects located within urban lands.	\$15k - \$300k 25% match	April 1	Steven J. DeBrabander 517-284-5930 debrabanders@michigan.gov
Recreation Passport Grant Program	To develop public recreation facilities that have outlived their useful life expectancy.	Any local unit of government that has an approved 5-year recreation plan.	Generally this fund is for the redevelopment of parks that are dilapidated and in need of revitalization, new parks are also eligible but not the focus.	\$7.5k -\$45k 25% match	April 1	Steven J. DeBrabander 517-284-5930 debrabanders@michigan.gov

Possible Funding Sources

Federal

- Coastal Zone Mgt. Funds (Commerce/NOAA)
- Boating Infrastructure Grants (US Fish & Wildlife)
- Land and Water Conservation Fund State and Local Assistance Program (National Park Service)
- EPA Brownfields

State

- Natural Resource Trust Fund Grants DNR
- Recreation Passport Grants DNR
- Transportation Alternatives Program (Michigan DOT)
- DNR Waterways Program
- DEQ Brownfields
- Michigan Economic Development Corporation
- Aquatic Habitat Grand Program DNR
- Michigan Housing Development Authority

Possible Funding Sources

- County
 - Brownfield Authority
 - Oceana County
- Local
 - DDA district
 - Other
- Private
 - Family / local / statewide / national Foundations
 - Community Foundations
 - Other Corporations / Businesses

Waterways Program Grants



- Starting in 2015 all harbor grant applications for the Waterways program will require:
 - Five Year Recreation Plan (submitted to the Michigan Natural Resources Trust Fund)
 - Last three years of harbor traffic (harbor logs)
 - Last three years of financial summaries for the harbor (submitted with the community's Waterways grant application)

Support for Harbor Communities

- Seek out public-private partnerships to facilitate access to a wide range of funding sources.
- Establish non-profit organizations in support of working waterfronts to improve access to funding sources and reap tax benefits.
- Create new and use existing trade associations in support of working waterfront initiatives.
- Look for partners at the State:
 - MDNR, MDEQ, MSHDA and MEDC
 (e.g., Redevelopment Ready Communities program)

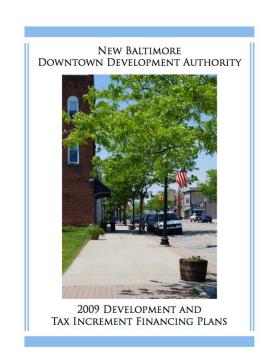
Capturing Values: Financing Harbors

Marine investment fund

 Non-marine users pay to help offset working waterfront infrastructure improvements

Taxes

- Water Resources Tax Increment Financing Authority (TIFA)
- Increase tax base
- Offer tax incentives to reward the type of development you seek
- Fee structure for public facilities



More to come – Look for Toolkit in 2016!

Questions?

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Amy Samples (asamples@umich.edu)