

# **Stormwater Action Plans Small Dam Inventory**



# Stormwater Action Plans

---

- Most pollutants enter watershed via stormwater (*sediment, nutrients, litter, chemicals, etc.*)
- Important to manage in small communities
- Added inputs make big impact
- Assist in identifying problems and seeking ways to improve
- Limited funding available, having a plan helps



# Stormwater Action Plans

---

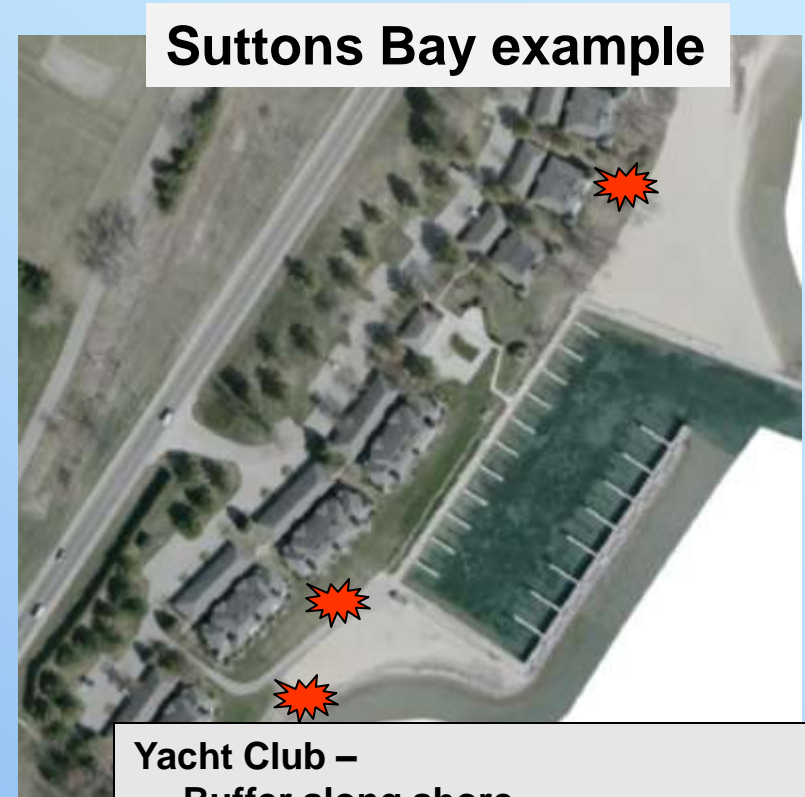
- Targeted communities: Elk Rapids, Ellsworth, Central Lake, Bellaire (incl. Shanty Creek), Alden
- Assess inputs and impacts (water quality, erosion, flooding, etc)
- ID major origin/entry points of runoff
- ID and prioritize sites for improvement



# Stormwater Action Plans

---

- Completed plans for Suttons Bay, Northport, Greilickville and Acme
- Results have already been used to apply for funding



**Suttons Bay example**

**Yacht Club –  
Buffer along shore  
Rain garden at bottom of driveway**

# Small Dam Inventory

---

- Thousands of small dams in MI (under 5ft high)
- Most have 50 yr lifespan, and by 2020 many will be much older than that
- If not strategically managed dams may begin to fail, wreaking havoc on natural resources
- Utilize form developed by USFWS, DNR, Huron Pines



# Small Dam Inventory

Assess and prioritize small dams for potential removal:

- Determine locations of small dams
- Utilize Great Lakes Basin Dam Inventory Sheet
- Produce map of locations
- Prioritize for possible removal

Site ID: _____	Inventoried by: _____	Date: _____
----------------	-----------------------	-------------

### Great Lakes Basin Dam Inventory Data Form


Site Location Information		
GPS Waypoint: _____	Latitude: _____	Longitude: _____
County: _____	T/R/Sec.: _____	
Access Road: _____	Dam or Impoundment name (if any): _____	
Dam/Property Owner(s): _____	<input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Local Gov. <input type="checkbox"/> Private <input type="checkbox"/> Abandoned <input type="checkbox"/> Unknown	
Stream Name: _____	Tributary to: _____	
Recent Precipitation (web source such as wunderground.com): Past 24 hours: _____ in   Past Week: _____ in		

Land Use Information		Impoundment or Dam Use Information	
(Check any that apply)		(Check all that apply)	
<b>Upstream:</b>	<b>Downstream:</b>	<input type="checkbox"/> Recreation	<input type="checkbox"/> Wildlife pond
<input type="checkbox"/> Forest	<input type="checkbox"/> Forest	<input type="checkbox"/> Waterfront development	<input type="checkbox"/> Hydropower
<input type="checkbox"/> Wetland	<input type="checkbox"/> Wetland	<input type="checkbox"/> Water supply	<input type="checkbox"/> Flood control
<input type="checkbox"/> Residential	<input type="checkbox"/> Residential	<input type="checkbox"/> Unknown	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Urban	<input type="checkbox"/> Urban		
<input type="checkbox"/> Agriculture	<input type="checkbox"/> Agriculture		
<input type="checkbox"/> Park	<input type="checkbox"/> Park		
<input type="checkbox"/> Industrial	<input type="checkbox"/> Industrial		
<input type="checkbox"/> Other: _____	<input type="checkbox"/> Other: _____		

Structural Information (check all appropriate):		
Barrier Type	Construction Materials	Other Site Features
<input type="checkbox"/> Earthen Berm	<input type="checkbox"/> Concrete	<input type="checkbox"/> Emergency Spillway
<input type="checkbox"/> Dam Wall (no overflow)	<input type="checkbox"/> Earth	<input type="checkbox"/> Stream Diversion or Canal
<input type="checkbox"/> Open Crest spanning stream	<input type="checkbox"/> Wood	<input type="checkbox"/> Retaining Walls
<input type="checkbox"/> Open crest channelizing flow	<input type="checkbox"/> Rock	<input type="checkbox"/> Low level outlet
<input type="checkbox"/> Debris Jam	<input type="checkbox"/> Metal	<input type="checkbox"/> Gates
<input type="checkbox"/> Stoplogs or Flashboards	<input type="checkbox"/> Screen	<input type="checkbox"/> Rip-Rap
<input type="checkbox"/> Beaver dam	<input type="checkbox"/> Other: _____	<input type="checkbox"/> Fish passage Structure
<input type="checkbox"/> Undersized culvert		<input type="checkbox"/> Vehicle access
<input type="checkbox"/> Natural Falls		<input type="checkbox"/> Attached or Adjacent Buildings
<input type="checkbox"/> Other: _____		<input type="checkbox"/> Other: _____

Upstream Conditions:		Is there evidence of erosion?		
(Mark evident changes to the stream caused by the barrier)		(Check all that apply)		
<input type="checkbox"/> Widening		<b>Upstream:</b>	<b>At Structure:</b>	<b>Downstream:</b>
<input type="checkbox"/> Deepening		<input type="checkbox"/> Overtopping	<input type="checkbox"/> Overflow/Breach	<input type="checkbox"/> Plunge Pool
<input type="checkbox"/> Loss of channel/Partially Lake		<input type="checkbox"/> Gullies	<input type="checkbox"/> Access Paths/Trails	<input type="checkbox"/> Scour
<input type="checkbox"/> Change to lake/pond		<input type="checkbox"/> Bare Soil	<input type="checkbox"/> Gullies	<input type="checkbox"/> Gullies
<input type="checkbox"/> Wetland/Flooding		<input type="checkbox"/> Bank Failure	<input type="checkbox"/> Bare Soil	<input type="checkbox"/> Bare Soil
<input type="checkbox"/> None		<input type="checkbox"/> Undercut Banks	<input type="checkbox"/> Bank Failure	<input type="checkbox"/> Bank Failure
			<input type="checkbox"/> Undercut Banks	<input type="checkbox"/> Undercut Banks

Can bankfull width upstream of impoundment be determined? If yes, please measure or estimate: \_\_\_\_\_ ft



Partial funding for this program is supported by a Cooperative Agreement from the US Department of the Interior, Fish and Wildlife Service. Data form was developed through a partnership of US Fish and Wildlife Service, Michigan Department of Natural Resources and Environment, and Huron Pines.

