

Maumee Area of Concern Stage 2 Watershed Restoration Plan

Volume 2

January 2006

Approved by Maumee RAP on December 8, 2005 Approved by Duck and Otter Creeks Partnership on January 19, 2006

Stage 2 Approval Process Submitted to Ohio EPA for Stage 2 approval on January 31, 2006 Future submissions to US EPA and International Joint Commission in 2006

State of Ohio Endorsement Approval Process Submitted to Ohio DNR for State Endorsement Consideration on December 16, 2004 Submitted to Ohio DNR for State Endorsement Consideration on January 31, 2006

This plan has been developed by the Maumee RAP and the Duck and Otter Creeks Partnership, in conjunction with the Ohio Environmental Protection Agency, Toledo Metropolitan Area Council of Governments, and other partners for the use and benefit of the Maumee AOC Community.

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Volume 2 – Watershed Project Tables

The Stage 2 Watershed Plan focuses on the Maumee AOC, plus the headwaters of the Ottawa River and Swan Creek. Whenever the Maumee AOC is referred to throughout the document, it includes the headwaters unless otherwise noted. Although these areas are not officially within the Maumee AOC they are often addressed by RAP projects.

The formal boundaries of the Maumee AOC extend from the Bowling Green water intake near Waterville along the Maumee River (RM 22.8) downstream to Maumee Bay. This area includes direct drainage into the waters that are within Lucas, Ottawa, and Wood counties. The watersheds include Ottawa River (Ten Mile Creek), Swan Creek, Grassy Creek, Duck Creek, Otter Creek, Wolf Creek, Cedar Creek, Crane Creek, Turtle Creek, Packer Creek, and the Toussaint River. The entire Area of Concern drains ultimately to Lake Erie. The Maumee AOC is comprised of six 11-digit HUCs and one large river unit. For ease of use, this plan has put both Swan Creek HUCs into one chapter and addressed the large river unit with the HUC that it flows through. The map illustrates the Maumee AOC, 11-digit HUC areas, large river unit area, and watershed grouping used throughout this document.

Maumee Area of Concern plus Headwaters tawa olf Cedar Turtle MaumeerRive N

The Watershed Projects Tables (WPTs) are the portion of the report that will change and grow, as projects are implemented and goals are attained. These tables have been organized by Causes and Sources and include Projects, Potential Project Partners, Funding Sources, Timeline, Status, Performance/Environmental Measures, HUC/Stream Segment Addressed, and indicate the Beneficial Use Impairment (BUI) that could be effected by the project. Also incorporated into the table (where applicable) is a reference to the ODNR Coastal Management Measures that may benefit from the implementation of an identified project.

There are differing levels of detail in the WPTs, often depending on how soon a project will be implemented, what source will be funding it, or by the amount of data available for that watershed. The status of projects in the WPTs have been organized and color coded as follows:

- In progress projects have the text colored red in the WPTs.
- Planning: These projects may have a rough workplan or grant application developed, but are the WPTs.
- projects have the text colored blue in the WPTs.
- **Ongoing:** These projects are reoccurring projects that repeat usually annually. These are commonly public involvement, outreach or educational projects (i.e. cleanups, sampling, monitoring). Ongoing projects have the text colored green in the WPTs.
- design). Complete projects have the text colored black in the WPTs.

Fourteen beneficial use impairments (BUI) have been used to define the problems in Areas of Concern. These problems are negative changes in the physical, chemical or biological integrity sufficient to cause any of the following:

- BUI #1 Restrictions on fish and wildlife consumption; BUI #2 Tainting of fish and wildlife flavor; BUI #3 Degradation of fish and wildlife populations; BUI #4 Fish tumors and other deformities; Bird or animal deformities or reproduction problems; BUI #5 Degradation of benthos; BUI #6 BUI #7 Restrictions on dredging activities; Eutrophication or undesirable algae; BUI #8 BUI #9 BUI #10 Beach closings; BUI #11 Degradation of aesthetics; Added costs to agriculture or industry; BUI #12 BUI #13 Degradation of phytoplankton and zooplankton populations; and
- Loss of fish and wildlife habitats. BUI #14

• **In Progress:** These projects are currently funded, have a detailed workplan, and are underway.

lacking some component to make it implementable (i.e. project coordinator, funding, project site). These are usually shorter range projects. *Planning* projects have the text colored pink in

• **Concept:** These project maybe something that is needed or desired, but a plan or method for implementation has not been developed. These are usually longer range projects. Concept

Complete: These projects are those that have been finished. Many past activities have been recorded in previous reports. Some of them have been kept here to explain past steps that are leading/developing to future projects. (i.e. hot spot delineation to risk assessment to remedial

Restrictions on drinking water consumption, or taste and odor problems;

When the Maumee Area of Concern was defined in the late 1980s, the Maumee RAP Public Advisory Council determined which beneficial uses were impaired based on the entire AOC. This was done because the only way of delisting an AOC was a comprehensive one; all listed or all delisted. Now that there are alternative methods for incrementally delisting an AOC by watershed or impairment, the Maumee RAP will maintain a record of the status of each BUI in each major watershed of the Maumee AOC. The status of the BUIs in each watershed is summarized in the adjacent table.

The staff for the Maumee RAP (Ohio EPA and TMACOG) and Duck and Otter Creeks Partnership facilitated the creation of the Stage 2 Watershed Plan. They will also be responsible for maintaining this as a living document, which includes updating completed projects and adding any new projects being planned or implemented. If there are additions, changes, or updates to the plan please contact one of the following:

Ohio EPA – Northwest District Office Maumee RAP Coordinator 347 N. Dunbridge Road Bowling Green, Ohio 43401 (419)352-8461

Toledo Metropolitan Area Council of Governments (TMACOG) Lower Maumee River Coordinator PO Box 9508 Toledo, Ohio 43697-9508 (419)241-9155

Duck & Otter Creeks Partnership, Inc. Watershed Coordinator UT Lake Erie Center 6200 Bayshore Road Oregon, Ohio 43618-1024 (419)530-8366

Beneficial Use Impairments In 2005 for the Maumee Area of Concern

(last updated 12/1/05)

	Ottawa	Swan	Maumee	Grassy	Duck	Otter	Wolf	Cedar	Crane	Turtle	Packer	Toussaint
BUI 1: Restriction on fish and wildlife consumption	Impaired	Not impaired	Impaired	Not impaired	Impaired	Impaired	Impaired	Not impaired	Impaired	Impaired	Impaired	Impaired
BUI 2: Tainting of fish & wildlife flavor	Unknown	Not impaired	Unknown	Not impaired	Unknown	Unknown	Not impaired	Not impaired	Not impaired	Not impaired	Not impaired	Not impaired
BUI 3: Degradation on fish and wildlife populations	Impaired											
BUI 4: Fish tumors or other deformities	Impaired	Not impaired	Impaired	Unknown	Impaired							
BUI 5: Bird or animal deformities or reproductive problems	Unknown	Unknown	Unknown	Not impaired	Unknown	Impaired						
BUI 6: Degradation of benthos	Impaired											
BUI 7: Restriction on dredging activities	Impaired	Not impaired	Impaired	Not applicable	Impaired							
BUI 8: Eutrophication or undesirable algae	Unknown	Impaired	Impaired									
BUI 9: Restrictions on drinking water consumption, or taste and odor	Not impaired	Not impaired	Not impaired	Not applicable								
BUI 10: Beach closings	Impaired	Impaired	Impaired	Impaired	Not impaired	Not impaired	Impaired	Not impaired	Impaired	Not impaired	Not impaired	Not impaired
BUI 11: Degradation of aesthetics	Impaired											
BUI 12: Added cost to agriculture and industry	Impaired	Not impaired	Unknown	Unknown	Not impaired	Not impaired	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
BUI 13: Degradation of phytoplankton & zooplankton populations	Not applicable											
BUI 14: Loss of fish and wildlife habitat	Impaired											

											BU	Color	Code:	[Impair	ed	Not	mpaired	Unkn	own	Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant		Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete,)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI #1									BUI BI #13 #1	4 Misc. Info.
AI	All	Conduct a TMDL	 Design watershed survey, 2) Collect water quality data, 3) Assess waterbodies, 4) Identify target conditions, 5) Develop restoration projects,6) Select restoration scenerio, 7) Prepare implementation plan, 8) Submit TMDL report, 9) Implement TMDL (inside Ohio EPA), 10) Implement TMDL (outside OEPA), 11) Annual validation activities, and 12) Validate water quality status 	OEPA	OEPA	2011-2013	concept				x	x	x	x	×	×	×	×	x x	x>	Source: OEPA
.II	All	GIS Water Quality database (Phase 1)	1) Create relational database from OEPA water resources inventory data for Maumee AOC	Universitry of Toledo Maumee RAP	, US EPA GLNPO	2004-2005	complete				x	х	x	x >	x	x	x	x	x x	×	
	All	• • • •	2) Export LE Tribs data to a GIS format				complete				x	х	х	x >	x	x	x	х	x x	>	
.11	All	GIS Water Quality database (Phase 1)	3) Publish relational database and GIS online				complete				х	Х		x >	x	х	x		х х	×	
d	All	GIS Water Quality database (Phase 2)	Expand GIS to entire AOC				in progress				Х	Х	Х	X)		X	X	X	X X	×	
Flow Alterations	Changing Land Uses	Lucas County Floodplain Map	 Determine waterways to study and map versus redelinate 	Lucas County Engineer and Audito Offices, FEMA	Lucas County, FEMA r	2005-2010	in progress	Study 60+ miles of stream to determine the current floodplain			x	x	x		x				x		
Tow Alterations	Changing Land Uses	Lucas County Floodplain Map	2) Conduct new studies			2005-2008	in progress				Х	Х	Х		Х				Х	×	
Flow Alterations Flow Alterations	Changing Land Uses Changing Land Uses	Lucas County Floodplain Map Lucas County Floodplain Map	3) Redelinate existing studies4) Request public comment on draft			2005-2008 2009	in progress in progress				X X	X X	X X		X	H			x x		
Flow Alterations	Changing Land Uses	Lucas County Floodplain Map	maps 5) Finalize maps and release electronically			2010	in progress				x	X	X		X				x	×	
Flow alterations	Channelization	Install Flood Control structure (detention/retention systems)		SWC and its partners, Maumee RAP Urban Runoff Action Group	SWC and its partners	2006-2010	concept			RM 24 to headwaters			x		x				x	>	
low alterations	dams	Ottawa Hills Dam Removal and Restoration Project	1) Develop plans and specs for dam removal	Village of Ottawa Hills; University of Toledo; Maumee RAP; TMACOG	Ohio EPA 319	2006-2008	planning	# of fish species found upstream of removed dam - sediment movement results	n Chapter 7	RM 11.5 to RM 11.9			x		x				x	x	
Flow alterations	dams	Ottawa Hills Dam Removal and Restoration Project	 Develop plans and specs for restoration in near dam areas 				planning						x		х				x	x >	
Flow alterations	dams	Ottawa Hills Dam Removal and Restoration Project	3) Hire contractor(s)				planning						х		x				x	x x	
Flow alterations	dams	Ottawa Hills Dam Removal and Restoration Project	4) Remove dam				planning						х		х				х	x	
Flow alterations	dams	Ottawa Hills Dam Removal and Restoration Project	5) Install restoration practices				planning						x		x				x	x	
Flow alterations	dams	Ottawa Hills Dam Removal Study	-	Village of Ottawa Hills; University of Toledo	ODNR - CZM, University of Toledo, Village of Ottawa Hills	2003-2004	complete	study report		RM 11.5 to RM 12.0			x		x				x	x >	
Flow alterations	dams	Ottawa Hills Dam Removal Study	2) Conduct sediment survey for quantity and quality transport concerns				complete		7.5.1; 7.5.2				х		x				x	x x	
Flow alterations	dams	Ottawa Hills Dam Removal Study	3) Conduct fisheries study/survey			-	complete					_	х		Х	⊢			х	X X	
Flow alterations	dams	Remove Camp Miakonda Dam	1) Conduct sediment sampling for possible transport of contaminants upon removal of dam	Boy Scouts of America, Hull & Associates, ORKA,	Boy Scouts of America, US Fish and Wildlife Foundation, ORKA,	2003	complete	study report	7.5.1; 7.5.2	RM 17.25			x		x				x	x x	
Flow alterations	dams	Remove Camp Miakonda Dam	2) Remove dam			2003	complete	dam removed					Х		Х				Х	XX	
low alterations	Streambank modification	Jermain Meadow/Park Restoration (Phase 1)		City of Toledo	City of Toledo	mid 1980's- 1999	complete	37 acres of natural area restored and hydrology of floodplain restored to improve wildlife habitat	d 5.5.1; 8.3.2	RM 8.5 to RM 9.5			x							x	
Flow alterations	Streambank modification	Jermain Meadow/Park Restoration (Phase 1)	2) Allow area to naturalize			mid 1980's- 1999	complete						х							xx	
low alterations	Streambank modification	Jermain Meadow/Park Restoration (Phase 2)	1) Reestablish non-mowing and naturalization practices (Phase 1)	City of Toledo	Ohio EPA 319, Clear Ohio Fund	2005	concept	Improved hydrology, sediment retention, and enrich soil and seed bank	5.5.1, 8.3.2; Chapter 10.5	RM 9.5 to RM 10.5			x							x	
Flow alterations	Streambank modification	Jermain Meadow/Park Restoration (Phase 2)	2) Improve access for educational purposes with access drive and system of mowed trails			2005-06	concept						x							x	
low alterations	Streambank modification	Jermain Meadow/Park Restoration (Phase 2)	3) Excavate the streambank and build earthen embankments to direct floodwaters into the floodplain during storm events			2005-06	concept						x							x >	
Flow alterations	Streambank modification	Jermain Meadow/Park Restoration (Phase 2)	4) Grade bottomland to create seasonal impoundments			2005-06	concept						х							x	
Flow alterations	Streambank modification	Jermain Meadow/Park Restoration (Phase 3)	1) Manage site for biological diversity	City of Toledo	City of Toledo	2007	concept	Improved hydrology, sediment retention, and enrich soil and seed bank	5.5.1, 8.3.2; Chapter 10.9				x							x	
labitat modification	Changing land uses	Hoffman Road Boardwalk (Phase 1)	1) Design Boardwalk	City of Toledo	City of Toledo	2000	complete	number of annual visitors	Chapter 10.5; Chapter 7, Recom. 3a, 3b	RM 3.4 to RM 3.8			х						x	>	

											BU	Color	Code:	Im	paired	No	t Impaired		nknown	Not Appl	plicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete,)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI	BUI I	3UI BUI	ви в	UI BUI	BUI B	и ви	BUI B	BUI BUI #12 #13	BUI Com	nments & isc. Info.
Habitat modification	Changing land uses	Hoffman Road Boardwalk (Phase 1)	3) Develop educational signage				complete						X					Х		X	
Habitat modification Habitat modification	Changing land uses Changing land uses	Hoffman Road Boardwalk (Phase 1) Hoffman Road Boardwalk (Phase 2 -	4) Install signs1) Identify pathway and partner with	DaimlerChrysler, Ani	n		complete			RM 3.4 to RM 3.8			X					Х		X	
		extend the current walk from the landfill toward Stickney Avenue)	landowners	Arbor RR			concept						x					X		x	
Habitat modification	Changing land uses	Hoffman Road Boardwalk (Phase 2 - extend the current walk from the landfill toward Stickney Avenue)	2) Design Boardwalk				concept						x					x		x	
Habitat modification	Changing land uses	Hoffman Road Boardwalk (Phase 2 - extend the current walk from the landfill	3) Construct Boardwalk				concept						x					x		x	
Habitat modification	Changing land uses	toward Stickney Avenue) Hoffman Road Boardwalk (Phase 2 - extend the current walk from the landfill	4) Develop educational signage				concept						x					x		x	
Habitat modification	Changing land uses	toward Stickney Avenue) Hoffman Road Boardwalk (Phase 2 - extend the current walk from the landfill	5) Install signs				concept						x					×		x	
Habitat Modification	Changing Land Uses	toward Stickney Avenue) Oak Openings Corridor- Biological and		Metroparks, The	Ohio EPA through					HUC 04100009 07	0		^		+			~		Awaiting	ng 2005
		Recreational Connection between Oak Openings Preserve and Secor Metropar	prairie headwaters of Swan Creek and	Nature Conservancy and City of Toledo	WPCLP Program	2005-2009	in progress			and 04100009080	x		x	:	x x		x	x		award g acquire in Kitty 1 X Preserve Nature	grant to e 184 acres Todd ve, The rvancy Site
Habitat Modification	Changing Land Uses	Oak Openings Corridor Acquisition	1) Apply criteria for acquistion	Metroparks, Clean	Metroparks, Clean				8.3.1; 8.3.2; 8.3.3	Wiregrass Ditch					_		+				ass Ditch
				Ohio Fund, US ACE	Ohio Fund, US ACE	2003 -2013	in progress	headwater buttonbush thickets and wet prairies as natural and functioning biological Oak Openings Region corridors within the watershed of Ottawa River		north of Dorr St RM 26 (portion of site is also located within Swan Creek watershed)	×		x		x x		x	x		x	
Habitat Modification	Changing Land Uses	Oak Openings Corridor Acquisition	2) Contact landowner to purchase their				in progress				x		x		x x		X	X		x	
Habitat Modification	Changing Land Uses	Oak Openings Corridor Acquisition	3) Conduct appraisal for fair market				in progress				x		x	:	x x		x	Х		x	
Habitat Modification	Changing Land Uses	Oak Openings Corridor Acquisition	4) Purchase property				in progress				Х		X		x x		Х	Х		X	
Habitat Modification	Changing Land Uses	Ottawa River Corridor Acquisition	Acquire 200 additional acres of floodplair lands as natural and functioning biological corridor along mainstem and headwater areas of Ottawa River	Metroparks, Clean Ohio Fund Round 3, US ACE	Metroparks, Clean Ohio Fund, US ACE	2003 -2013	in progress	Monitor Loadings through Research study	8.3.1; 8.3.2; 8.3.3		x		x		x x		x	x		acres of	2004: 400 of watershed acquired
Habitat modification	Changing land uses	Stream restoration demonstration project	tt 1) Identify potential partners	Maumee RAP Rural Runoff Action Group SWCD [Lucas, Wood, Ottawa Co]		2005-2010	concept				x		x		x x		x	x		x	
Habitat modification	Changing land uses	Stream restoration demonstration project	ct 2) assess possible stream restoration projects				concept				x		x	:	x x		x	Х		х	
Habitat modification	Changing land uses	Stream restoration demonstration project	ct 3) Select demonstration sites				concept				х		x	:	x x		X	Х		x	
Habitat modification	Changing land uses	Stream restoration demonstration project					concept				x		x	:	x x		X	Х		x	
Habitat modification	Changing land uses	Stream restoration demonstration project	,				concept				х		x		< X		x	Х		X	
Habitat modification Habitat modification	Changing land uses Changing land uses	Stream restoration demonstration project	· · · ·				concept				X		X		x x		X	X		X	
							concept				X		Х		x x		X	X		X	
Habitat modification	Changing land uses	Wetlands Inventory and Mapping (Phas 1) (Lucas Co.)	 Indentify and evaluate existing wetlands using remote sensing 	University of Toledo, Maumee RAP, TMACOG, Lucas Co.	OEPA 319	1999-2003	complete			portion on watershed in Lucas Co	6		x							x	
Habitat modification	Changing land uses	Wetlands Inventory and Mapping (Phas 1) (Lucas Co.)	e 2) create GIS map of wetlands and potential wetlands				complete						x							х	
Habitat modification	Changing land uses	Wetlands Inventory and Mapping (Phas 1) (Lucas Co.)					complete						x							х	
Habitat modification	Removal of riparian vegetation	Centennial Grove	1) Define boundaries of corridor	City of Toledo, Toledo Urban Forestry Commission	City of Toledo, Toledo Urban Forestry Commission, Ottawa/Jermain Park Board, Private Donations, Arts Commission of Greater Toledo		complete	Connect smaller wildlife tracts to create a 1500 foot wildlife corridor of native trees and woodland plants	5.5.1; 8.3.2; 8.3.3				x							x	
Habitat modification	Removal of riparian vegetation	Centennial Grove	 Install split-rail fencing to protect plantings 				complete						х							х	
Habitat modification	Removal of riparian vegetation	Centennial Grove	3) Discontinue mowing and allow area to naturalize				complete						х							х	
Habitat modification	Removal of riparian vegetation	Centennial Grove	4) Plant native trees and wildflowers				complete						х							х	

											BUI Co	lor Code:		Impair	ed	Not !	mpaired	Unki	nown	Not Ap	.pplicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete,)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI BU	-	BUI BUI #4 #5			BUI BUI #8 #9					omments & Aisc. Info.
	Removal of riparian	Centennial Grove	5) Install granite markers to identify and				complete					х								х	
	vegetation Removal of riparian vegetation	Habitat Restoration Plan	interpret project 1) Develop habitat restoration inventory	TMACOG, US Fish Wildlife, ODNR, Maumee RAP	& GLNPO, US Fish & Wildlife		concept	river miles of bank restored		all of watershed		x								x	
Habitat modification	Removal of riparian vegetation Removal of riparian	Habitat Restoration Plan Habitat Restoration Plan	 Prioritize project areas based on restorability and community support Conduct restoration projects 				concept					x								x	
	vegetation		· · · ·				concept					X								x	
	Removal of riparian vegetation	Jermain Meadow/Park Restoration (Phase 1)	1) Discontinue mowing	City of Toledo	City of Toledo	mid 1980's- 1999	complete	37 acres of natural area restored and hydrology of floodplain restored to improve wildlife habitat	d 5.5.1; 8.3.2	RM 8.5 to RM 9.5		х		х					×	x	
	Removal of riparian vegetation	Jermain Meadow/Park Restoration (Phase 1)	2) Allow area to naturalize			mid 1980's- 1999	complete					х		х					х	х	
	Removal of riparian vegetation	Jermain Meadow/Park Restoration (Phase 2)	1) Reestablish non-mowing and naturalization practices (Phase 1)	City of Toledo	Ohio EPA 319, Clean Ohio Fund	2005	concept	Improved hydrology, sediment retention, and enrich soil and seed bank	5.5.1, 8.3.2; Chapter 10.5	RM 9.5 to RM 10.5	5	x		x					x	x	
Habitat modification	Removal of riparian vegetation	Jermain Meadow/Park Restoration (Phase 2)	2) Improve access for educational purposes with access drive and system of mowed trails			2005-06	concept					x		x					x	x	
Habitat modification	Removal of riparian vegetation	Jermain Meadow/Park Restoration (Phase 2)	3) Excavate the streambank and build earthen embankments to direct floodwaters into the floodplain during storm events			2005-06	concept					×		x					×	x	
Habitat modification	Removal of riparian	Jermain Meadow/Park Restoration (Phase 2)	4) Grade bottomland to create seasonal impoundments			2005-06	concept					х		х					x	x	
Habitat modification F	Removal of riparian vegetation	Jermain Meadow/Park Restoration (Phase 3)	1) Manage site for biological diversity	City of Toledo	City of Toledo	2007	concept	Improved hydrology, sediment retention, and enrich soil and seed bank	5.5.1, 8.3.2; Chapter 10.5	RM 9.5 to RM 10.5	5	x		x					x	x	
Habitat modification	Removal of riparian vegetation	ORKA tree planting	Plant native trees along river bank and Hoffman Road Boardwalk	ORKA	ORKA	2004-2005	complete	Number of trees planted	7.6.1; 8.3.3	RM 5		х								х	
	Cropland or pasture where manure is spread	Educate Horse owners on proper disposal of manure	Implement Equine Environmental Assurance and Liability Program for Fulton, Lucas and Wood Counties	LSWCD,WSWCD Ohio Livestock Coalition, Farm	Ohio Livestock Coalition, Farm Bureau, ODRN-	2006	concept				x	x		x		x	x	x			
Nutrients f	Erosion and runoff from fertilized fields	Tillage Transect	Drive the transect points and mark in GPS and note land use.	Bureau USDA-NRCS, ODNR-SWCD, LSWCD	DSWC NRCS, ODNR- SWCD	2006-07	concept	Ability to calculate no-till acres and developed acres.			x			x						x	
nutrients t	urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	1) Design new Drains are for Rain storm drain stencils and companion door hangers	Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete	# of supplies ordered; # of households given educational materials; # of purchasing	Chapter 10.5; 5.7.	1 all of watershed	x	x		x	x			x	x	x	
nutrients	urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	2) Place bulk order for local jurisdictions	organizations	organizations	Jun-05	complete				х	x		х	х			х	х	х	
nutrients (urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	and organizations 3) Distribute stencils and door hangers for local jurisdictions and organizations to use	>		Jul-05	complete				x	x		x	x			x	x	x	
nutrients u	urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	1) Design new Drains are for Rain storm drain stenciling Field Manuals		OEEF; 319 grants; ODNR/CZM grants; foundations; local donations; cities	year round	ongoing	# of stenciling manuals sold	Chapter 10.5; 5.7.	1 all of watershed	x	x		х	x			x	x	x	
nutrients	urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	 Fill orders for local jurisdictions and organizations as placed 				ongoing				x	Х		Х	х			х	×	х	
nutrients t	urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 3)		Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF, ODNR/CZM grants; foundations, Maumee RAP, TMACOG, local jurisdictions, organizations	April - Oct	ongoing	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating			x	x		х	x			х	x	x	
organic enrichment (urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	1) Design new Drains are for Rain storm drain stencils and companion door hangers		Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete	# of supplies ordered; # of households given educational materials; # of purchasing	Chapter 10.5; 5.7.	1 all of watershed	x	x		x	x			x	×	x	
organic enrichment	urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	2) Place bulk order for local jurisdictions and organizations			Jun-05	complete				х	х		х	х			х	х	х	
organic enrichment	urban runoff			3		Jul-05	complete				x	х		x	x			x	x	x	
organic enrichment	urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	1) Design new Drains are for Rain storm drain stenciling Field Manuals	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local	OEEF; 319 grants; ODNR/CZM grants; foundations; local donations; cities	year round	ongoing	# of stenciling manuals sold	Chapter 10.5; 5.7.	1 all of watershed	x	x		x	x			x	×	x	
				jurisdictions, organizations																	

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Causes of Impairment (Pollutant or Stressor)	t Sources of Pollutant	-	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete,)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI B #1 #				5UI BUI #6 #7	BUI BUI E		II BUI 0 #11		BUI BUI #13 #14	Comments & Misc. Info.
organic enrichment	urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 3)	Conduct public Storm Drain Stenciling events	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF, ODNR/CZM grants; foundations, Maumee RAP, TMACOG, local jurisdictions, organizations	April - Oct	ongoing	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating		all of watershed	x	x)	x x			×		x x	
Pathogens	Human & animal excreta	Educate Horse owners on proper disposal of manure	Implement Equine Environmental Assurance and Liability Program for Fulton, Lucas and Wood Counties	LSWCD,WSWCD Ohio Livestock Coalition, Farm Bureau	Ohio Livestock Coalition, Farm Bureau, ODRN- DSWC	2006	concept				x	x)	x	x	x	x			
Pathogens	Septic systems	Expand Student Watershed Watch Program into additional schools		Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	year round	ongoing			all of watershed		x					x	х		x x	
Pathogens	Septic systems	Extend sewer system to eliminate seption systems	c Identify areas needing sewer system, conduct necessary sampling and sewer upgrades	Ohio EPA, local cities, townships, county and villages	Ohio EPA, US Rural Development		concept	septic systems eliminated, bacteria level in river		all of Ottawa River Watershed in Lucas/Fulton	×	x					×	x		x x	
pathogens	Septic systems	GIS Septic System Inventory (Phase 1	 f) Scan paper copies to create electronic files of existing septic systems 	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office	Lake Erie Protection Fund, TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office	2002-2005	complete	electronic database completed	5.6.2;	all of Ottawa River Watershed in Lucas County	5	x					x	x		x x	
pathogens	Septic systems	GIS Septic System Inventory (Phase 1) 2) Convert electronic data into GIS map			2002-2005	complete					x					x	x		x x	
pathogens	Septic systems	GIS Septic System Inventory (Phase 1	tiles 3) Intergrate with AERIS data			2002-2005	complete					x					x	x		x x	
pathogens	Septic systems	GIS Septic System Inventory (Phase 1	 4) Train Health Dept personnel to input data and use GIS system 			2005	in progress					х					x	Х		x x	
Pathogens	Septic systems	Install sewers in Berkey		Ohio EPA, Village of Berkey	Village of Berkey, US Rural Development		planning	septic systems eliminated, bacteria level in river decreases		RM 31.5 to 34	x	x					x	x		x x	
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	1) Identify stream sampling locations	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept		2004	complete	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage	5.6.2; Chapter 11	all of Ottawa River Watershed in Lucas County	5	x					x	x		x x	
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	 Identify septic system dye testing locations 			2004	complete					х					x	х		x x	
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	3) Conduct stream sampling and dye testing			2004	complete					х					x	х	:	x x	
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	 4) Prioritize areas for enforcement based on testing results 	1		2004	complete					х					x	х	:	x x	
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	5) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems			2004	complete					x					x	x		x x	
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	1) Conduct additional stream sampling and dye testing	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept		2005 - ?	concept	Sample additional 50 stream sites and dye test additional 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage		all of Ottawa River Watershed in Lucas County		x					x	x		x x	
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	2) Modify priority areas (if necessary)			2005- ?	concept					х					X	x		x x	1
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	 Pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) 			2005- ?	concept					x					×	×	:	x x	
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 3)	1) Continue to sample and dye test to identify problem areas	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept		2006 - ?	concept	Sample stream sites and dye test septic systems as needed per county to reduced discharges of unmeasurable amounts of inadequately treated sewage	5.6.2; Chapter 11	all of Ottawa River Watershed in Lucas County	5	x					x	x		x x	
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 3)	2) Continue to pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) until priority areas are addressed		WRDA 401, Ohio EPA 319	2006 - ?	concept					×					x	×		x x	
Pathogens	Septic systems	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	August - November	ongoing	annual data collection that documents water quality changes throughout the watershed; # of teachers/schools participating	5	all of watershed		x					x	x		x x	
Pathogens	Septic systems	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)			Sept	ongoing					x					x	х		x x	

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s) Timeline	Status (in progress, planning, concept, ongoing, complete,)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI BUI #1 #2	BUI BUI B #3 #4 #	UI BUI BUI 5 #6 #7	BUI BU #8 #9	I BUI #10	BUI BL #11 #1	JI <mark>BUI</mark> E .2 #13 #	UI Comm 14 Misc	ments & sc. Info.
Pathogens	Septic systems	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 		Sept	ongoing					х			х	х	x	x	
Pathogens	Septic systems	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools		Sept	ongoing					х			Х	Х	X	x	
Pathogens	Septic systems	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)		mid-Oct	ongoing					х			х	х	x	x	
Pathogens	Septic systems	Student Watershed Watch	 6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector) 	1	late Oct- early Nov	, ongoing					x			×	х	x	x	
Pathogens	Septic systems	Student Watershed Watch	7) Student share data and finding at Student Summit		mid-Nov	ongoing					х			Х	Х	x	x	
Pathogens	Septic systems	SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD	2006	concept	annual reporting of data collected to Ohio EPA; percentage of teachers reporting data		all of watershed		x			x	x	x	x	
Pathogens	Septic systems	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training			concept					x			x	х	x	x	
Pathogens	Septic systems	SWW Teacher Training/Creditable Data Certification				concept					x			x	x	x	x	
Pathogens	Wastewater treatment plants	Conduct Sanitary Sewer Evaluation Study (SSES) of collection system	1) Evaluate capacity and related problems	City of Toledo City of Toledo	1997	complete	Submission of approved plan		RM 0 to RM 3.0		x			x	x	x	Part of To X Waterway	
Pathogens	Wastewater treatment plants	Conduct Sanitary Sewer Evaluation Study (SSES) of collection system	2) Develop a plan for complete elimination of SSOs		1997	complete					x			x	x	x	Part of To X Waterway	
Pathogens	Wastewater treatment plants	Develop Long Term Control Plan for Combined Sewer Overflows	1) Develop public & regulatory agency participation plan	City of Toledo City of Toledo	2002-2004	complete	Submission of approved plans/models		RM 0 to RM 23.5		x			x	x	x	X Part of To Waterway	
Pathogens	Wastewater treatment plants	Develop Long Term Control Plan for Combined Sewer Overflows	2) Develop flow characterization plan		2004	complete					x			x	x	x	Part of To X Waterway	
	Wastewater treatment plants	Develop Long Term Control Plan for Combined Sewer Overflows	3) Develop water quality study		2004	complete					x			x	х	x	Part of To X Waterway	
	Wastewater treatment plants	Develop Long Term Control Plan for Combined Sewer Overflows	4) Develop hydraulic model		2003	complete					x			x	x	x	Part of To X Waterway	
•	Wastewater treatment plants	Develop Long Term Control Plan for Combined Sewer Overflows	5) Develop water quality model		2003	complete					x			x	x	x	Part of To X Waterway	
Pathogens	Wastewater treatment plants	Expand Student Watershed Watch Program into additional schools		Maumee RAP, private donations TMACOG, Ohio EPA, public and private schools	year round	ongoing			all of watershed					×	х	x		
Pathogens	Wastewater treatment plants	Implement Long Term Control Plan	1) Implement public & regulatory agency participation plan	City of Toledo City of Toledo	2005-2016	concept	reduction in volume of CSO discharges		RM 0 to RM 23.5		x			×	x	x	Part of To X Waterway	
Pathogens	Wastewater treatment plants	Implement Long Term Control Plan	2) Implement flow characterization plan		2005-2016	concept					x			x	x	x	X Part of To Waterway	Foledo ays Initiative
Pathogens	Wastewater treatment plants	Implement Long Term Control Plan	3) Implement water quality study		2005-2016	concept					x			x	x	x	Part of To X Waterway	Foledo ays Initiative
Pathogens	Wastewater treatment plants	Implement Long Term Control Plan	4) Implement hydraulic model		2005-2016	concept					x			x	x	x	Part of To X Waterway	Foledo ays Initiative
Pathogens	Wastewater treatment plants	Implement Long Term Control Plan	5) Implement water quality model		2005-2016	concept					x			x	x	x	X Part of To Waterway	Foledo ays Initiative
	Wastewater treatment plants	Implement recommendations in SSES (Phase 1)	1) Construct Pt. Place Relief Pump Station	City of Toledo City of Toledo	1997-2001	complete	elimination of SSO discharges / reduction in bacteria in river		RM 0 to RM 2.5		x			x	x	x	X Part of To Waterway	
•	Wastewater treatment plants	Implement recommendations in SSES (Phase 1)	2) Eliminate cross connections		1997-2001	complete					x			x	x	x	X Part of To Waterway	
•	Wastewater treatment plants	Implement recommendations in SSES (Phase 1)	3) Clean all sewers in Pt. Place		1997-2001	complete					x			x	x	x	Part of To X Waterway	
	Wastewater treatment plants	Implement recommendations in SSES (Phase 1)	4) Line 15,000 feet of sewers in poor condition		1997-2001	complete					x			x	x	x	Part of To X Waterway	
Pathogens	Wastewater treatment plants	Implement recommendations in SSES (Phase 2)	1) Construct two pump stations in Pt. Place	City of Toledo City of Toledo	2002-2006	in progress	elimination of SSO discharges / reduction in bacteria in river		RM 0 to RM 2.5		x			x	x	x	X Part of To Waterway	
Pathogens	Wastewater treatment plants	Implement recommendations in SSES (Phase 2)	2) Construct 2 relief sewers		2002-2006	in progress			1		x			x	x	x	Part of To X Waterway	

Causes of Impairment																		U 🗌			Not Applicable
(Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete,)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed						BUI BU #8 #9					
Pathogens V	Wastewater treatment plants	Implement recommendations in SSES (Phase 2)	3) Install a force main from new pumps stations to Phase 1 pump station			2002-2006	in progress					;	ĸ				x	x	x	x	Part of Toledo Waterways Initiative
U U	Wastewater treatment plants	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	August - November	ongoing					;	ĸ				х	x	x	x	
U U	Wastewater treatment plants	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)			Sept	ongoing					2	ĸ				х	х	x	х	
•	Wastewater treatment plants	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 	5		Sept	ongoing					;	ĸ				x	х	x	x	
Pathogens V	Wastewater treatment	Student Watershed Watch	4) Supplies are distributed to			Sept	ongoing					2	K				х	Х	X	Х	
U U	plants Wastewater treatment plants	Student Watershed Watch	participating teacher/schools 5) Teachers conduct student training and sampling on designated sampling day (perferably)	1		mid-Oct	ongoing					2	ĸ				х	х	x	x	
U U	Wastewater treatment plants	Student Watershed Watch	 B) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector) 	3		late Oct- early Nov	ongoing					3	K				х	х	x	х	
Pathogens V	Wastewater treatment plants	Student Watershed Watch	7) Student share data and finding at Student Summit			mid-Nov	ongoing					2	K				х	Х	x	Х	
Pathogens V	Wastewater treatment plants	SWW Teacher Training/Creditable Data Certification		Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept					;	ĸ				x	x	x	x	
Pathogens V	Wastewater treatment plants	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training				concept					;	<				x	x	x	x	
	Wastewater treatment plants	SWW Teacher Training/Creditable Data Certification	3				concept					;	ĸ				x	x	x	x	
	Sites of historical usage (old landfills)	Cap Dura Landfill	1) Install engineered base and liners	PRP's	PRP's	1999-2000	complete	percentage reduction of leachate)	RM 5.6	х	2	x x	х	x			х	х		
Pesticides	Sites of historical usage (old landfills)	Cap Dura Landfill	2) Install monitoring wells				complete				x	3	x x	х	х			Х	х		
Pesticides	Sites of historical usage (old landfills)	Cap Dura Landfill	3) Install protective cap & seed				complete				х	2	x x	х	х			Х	х		
Pesticides	Sites of historical usage (old landfills)	Cap Dura Landfill	4) Conduct Remedial Investigation				complete				х	2	x x	Х	x			Х	х		
	Urban/Suburban	Organic Lawn Care Clinic	Less fertilizer in urban/suburban runoff	SWCD/Black Swamp Conservancy	SWCD	Annual	ongoing					2	ĸ	х							
Pesticides L	Urban/suburban areas	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	1) Develop project	Maumee RAP, TMACOG, local Jurisdictions, US F&WS, ODNR	OEEF, local jurisdictions, US F&WS, ODNR, Maumee RAP, TMACOG	2003-2006	complete	Educate public on sources/pathways of nonpoint and point source pollution; pre- and post-campaign surveys show increased awareness of citizens	5.6.2; 5.7.1; Chapter 10.5	Sylvania & Washington Twp		;	ĸ	x		x	x	x	x	x	
Pesticides L	Urban/suburban areas	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	2) Release RFP/Hire contractors			9/3/04	complete)	ĸ	х		х	х	х	х	х	
		Give Water a Hand Campaign) (Residential Campaign) Give Water a Hand Campaign (Phase 1)	newspaper ads			10/03-4/05	complete					;	ĸ	х		x	х	х	х	Х	
		(Residential Campaign)	bonus items			10/03-4/05	complete					;	κ	Х		X	х	Х	X	Х	
	Urban/suburban areas	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	campaign phone survey			12/03 & 5/05	complete					3	K	Х		х	х	Х	Х	Х	
Pesticides L	Urban/suburban areas	Give Water a Hand Campaign (Phase 2) (Business Campaign)	1) Develop project	Maumee RAP, TMACOG, local jurisdictions	Maumee RAP, TMACOG, local jurisdictions	2004-2006	in progress	Educate business owners, manager and employees on sources/pathways of nonpoint and point source pollution; show increased awareness of through the # of businesses voluntarily participating in campaign		Sylvania & Washington Twp		;	ĸ	x		x	x	x	×	x	
Pesticides L	Urban/suburban areas	Give Water a Hand Campaign (Phase 2) (Business Campaign)	2) Create and distribute 4 Guidebooks for local businesses			8/05-12/06	in progress					;	<	х		x	х	x	x	Х	
Pesticides L	Urban/suburban areas	Give Water a Hand Campaign (Phase 2) (Business Campaign)	3) Create and distribute print ads (newspaper, magazines, newsletters, bulletins)			10/05-12/06	in progress					;	<	x		x	x	x	x	x	
Pesticides L	Urban/suburban areas	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	24104110)	Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete			Sylvania & Washington Twp		:	ĸ	x		x	x	x	х	x	
Pesticides L	Urban/suburban areas	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	2) Place bulk order for local jurisdictions and organizations			Jun-05	complete)	ĸ	х		x	х	х	х	х	
Pesticides L	Urban/suburban areas	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)				Jul-05	complete			1		;	ĸ	х		x	х	х	х	х	
Pesticides L	Urban/suburban areas	Give Water a Hand Campaign and educational materials	Distribute info at events, programs and presentations	Maumee RAP; Lucas, Ottawa and and Wood SWCDs	Maumee RAP; Lucas, Ottawa and and Wood SWCDs	year round	ongoing			all of watershed		3	ĸ	×		x	х	х	x	x	
	Illegal dumping of solid wastes	Pursue enforcement of existing litter or illegal dumping laws/ordinances		Local authorities with jurisdiction			concept	reduction in illegal litter/dumping		all of watershed								x			

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete,)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI BU	BUI	BUI B	JI BUI	I BUI I		I BUI	BUI BI		ви	Comments & Misc. Info.
Refuse, litter, etc	litter	CYS Day	1) Establish planning team	Maumee RAP; Duck and Otter Creeks Partnership; ORKA; Cities of Oregon, Northwood, Toledo; TMACOG; Lake Erie Commission; various other community partners	Solicit private and public contributions, grants when available	April - Sept (annually)	ongoing	Relative to previous years: 1) tons of garbage and debris removed from area streams; 2) number of volunteers that participate; 3) # of sites/RM cleaned 4) amount of support received for planning and funding the event	Chapter 10.5	RM 0 to RM 25								x			
Refuse, litter, etc	litter	CYS Day	2) Solicit contributions and site captain support			April - Sept	ongoing		Chapter 10.5									х			
Refuse, litter, etc	litter	CYS Day	3) Distribute promotional materials			June - Sept	ongoing											Х			
Refuse, litter, etc	litter	CYS Day	 Select waterways and sites to be cleaned 			Aug	ongoing								1 1			х			
Refuse, litter, etc	litter	CYS Day	5) Conduct site captain training			Sept	ongoing											Х			
Refuse, litter, etc Refuse, litter, etc	litter litter	CYS Day ORKA clean-up	6) Hold event and appreciation picnic Hold event cleaning streambank and		ORKA	Sept	ongoing	tons of garbage and debris	Chapter 10.5					4	+			Х		<u> </u>	
reluse, inter, etc	inter	Orres clean-up	river			May (annually)	ongoing	removed										Х			
Sediment/Siltation	Construction	Develop and Implement Stormwater Management Programs (Phase I and II)	1) Develop Pre-and post-construction standards	MS4s; Maumee RAF Urban Runoff Action Group	P Lake Erie Protection Fund; Local jurisdictions	2003-2007	in progress	80% watershed jurisdictions with standards developed	5.3.1?	RM 0 To RM 23.5		x		x				x	x	×	
Sediment/Siltation	Construction	Develop and Implement Stormwater Management Programs (Phase I and II)	2) Develop and adopt pre- and post- construction ordinances				in progress	80% watershed jurisdictions with ordinances adopted				х		x				x	x	x	
Sediment/Siltation	Construction	Develop and Implement Stormwater Management Programs (Phase I and II)	3) Manage program and enforce ordinances				in progress	80% watershed jurisdictions with active stormwater management programs				x		x				x	x	×	
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 1)	1) Determine contents for manual	RAP Urban Runoff Action Group, MRRSWC	Lake Erie Protection Fund	2002	complete	Implement a regional/watershed management program: a) control increases in runoff rates, b) prevent losses in infiltration, c) prevent runoff pollution		all of AOC		x		x				x	x	x	
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 1)	ll2) Write manual				complete					х		х		+		х	X	X	
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 1)	 3) Identify alternative development designs/layouts that protect water quality 	,			complete					х		x				x	x	х	
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 1)	 I4) Encourage local jurisdications to adop manual as their standards 	t			complete					х		х				х	x	х	
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 2)	I1) Review existing manual	Maumee RAP Urban Runoff Action Group SWC	GLC	2005-2007	in progress	Completion and distribution of revised manual	Chapter 10.5; 5.7.1	all of watershed		x		x				x	x	x	
Sediment/Siltation	Construction	(Phase 2)	 2) Update chapters with new content and regulations 	k		2005-2006	in progress					х		x				x	X	x	
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 2)	3) Conduct workshops and site visits for consultants, developers, contractors on stormwater plan preparation and post- construction BMPs			2006-2007	in progress	50 percent of consultants, developers, contractors that work in the area participate				x		×				x	×	×	
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 3)	Maintain and update manual as needed				ongoing					Х		X				Х	X	x	
Sediment/Siltation	Construction	Require BMPs on smaller developments less than one acre					concept			all of watershed		х		x				x	x	x	
Sediment/Siltation	Cropland	Develop potential project list based on Cropland Inventory Project Results					concept			all of watershed		х		X				X	×	x	
Sediment/Siltation	Cropland	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed					concept		Chapter 11	all of watershed		×		x				x	×	×	
Sediment/Siltation	Cropland	Incentive programs for implementation of	Continue to promote and support the implementation of these programs	Ohio Lake Erie Commission USDA - NRCS SWCDs (Fulton & Lucas in Ohio, Monroe & Lenawee in MI)	Ohio Lake Erie Commission USDA - NRCS SWCDs (Fulton & Lucas in Ohio, Monroe & Lenawee in MI)		concept		3.3.1	all of watershed		x		x				x	x	x	
Sediment/Siltation	Cropland	Inventory watershed for amount of acreage in cropland	1) Develop inventory methodology utilizing existing AERIS system and othe available resources	Maumee RAP Ag	U.S. ACE, Section 319, NatureWorks (ODNR)		concept		3.3.1	all of watershed		x		x				x	×	x	
Sediment/Siltation	Cropland	Inventory watershed for amount of	2) Convert electronic data into GIS map		T		concept					х		х				x	x	x	
Sediment/Siltation	Cropland	acreage in cropland Inventory watershed for amount of acreage in cropland	3) Integrate with AERIS data				concept					x		x				x	x	x	
Sediment/Siltation	Cropland	Inventory watershed for amount of acreage in cropland	4) Determine impact on watershed and possible projects to reduce or eliminate				concept					x		x				x	x	x	

											BUI	Color Co	de:	Im	paired		ot Impaired	u 🗌 u	Inknown		Not Applicable
Causes of Impairmen (Pollutant or Stressor	r) Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete,)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI E		I BUI	виі в		BUIE		BUI	BUI <mark>BUI</mark> #12 #13	BUI	Comments & Misc. Info.
Sediment/Siltation	Cropland	Reduce the impact of erosion of water quality	Educate watershed landowners of their impact on water quality and of the benefits of riparian habitat protection or restoration	Maumee RAP Ag Runoff Action Group, SWCDs (Fulton & Lucas in Ohio, Monroe & Lenawee in MI), ODNR - SWC, Ohio EPA 319	Ohio EPA 319		concept		3.3.1; 10.5	all of watershed		×		,	(x	x	x	
Sediment/Siltation	land clearing and infillling for development	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	 Indentify and evaluate existing wetlands using remote sensing 	University of Toledo, Maumee RAP, TMACOG, Lucas	OEPA 319	1999-2003	complete			portion on watershed in Luca Co	6	x								x	
Sediment/Siltation	land clearing and infillling for development	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	2) create GIS map of wetlands and potential wetlands	Co.			complete					x								х	
Sediment/Siltation	land clearing and infillling for development	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	3) Identify restoration needs				complete					x			\square					x	
Sediment/Siltation	Pasture	Cost share to install all-weather paddocks for horse owners	Install demonstration paddock in Lucas	ODNR-DSWC, SWCD, NRCS	NRCS, ODNR- SWCD		concept				x	×)	x	x	X	x			
Sediment/Siltation	Pasture	Develop potential project list based on Pasture Inventory Project Results	County	SWCD, NRCS	SWCD		concept					x)	x 📃			x	x	x	
Sediment/Siltation	Pasture	Identify extent & benefit of BMPs used by farmers in watershed		Ohio Lake Erie Commission USDA - NRCS SWCDs (Fulton & Lucas in Ohio, Monroe & Lenawee in MI)	Ohio Lake Erie Commission USDA - NRCS SWCDs (Fulton & Lucas in Ohio, Monroe & Lenawee in MI)		concept		Chapter 11)	<			×	x	x	
Sediment/Siltation	Pasture	Incentive programs for implementation of agricultural BMPs such as filter strips, manure management, pesticide	Continue to promote and support the implementation of these programs				concept		3.3.1					;	<			x	x	x	
Sediment/Siltation	Pasture	management Inventory watershed for amount of acreage in pasture	1) Develop inventory methodology utilizing existing AERIS system and othe available resources	RAP Ag Runoff rr Action Group, SWCDs (Fulton & Lucas in Ohio, Monroe & Lenawee in MI), ODNR - SWC	U.S. ACE, Section 319, NatureWorks (ODNR)		concept		Chapter 11	all of watershed		×		,	<			x	x	x	
Sediment/Siltation	Pasture	Inventory watershed for amount of acreage in pasture	2) Convert electronic data into GIS map files				concept					x)	x 👘			x	×	x	
Sediment/Siltation	Pasture	Inventory watershed for amount of acreage in pasture	3) Integrate with AERIS data				concept					x)	<			x	x	x	
Sediment/Siltation	Pasture	Inventory watershed for amount of acreage in pasture	4) Determine impact on watershed and possible projects to reduce or eliminate				concept					x)	<			x	x	x	
Sediment/Siltation	Pasture	Reduce the impact of erosion of water quality	Educate watershed landowners of their impact on water quality and of the benefits of riparian habitat protection or				concept		3.3.1; Chapter 10.	5				;	<			x	×	x	
Sediment/Siltation	Streambanks	ORKA tree planting	restoration Plant native trees along river bank and Hoffman Road Boardwalk	ORKA	ORKA	2004-2005	complete	Number of trees planted	7.6.1; 8.3.3	RM 5		×			+					x	
Sediment/Siltation	Streambanks	Shoreland Ave. Stabilization	1) Define problem	City of Toledo	US ACE [WRDA sec. 14]	2000-2005	complete		7.6.1			x						x		x	
Sediment/Siltation Sediment/Siltation	Streambanks Streambanks	Shoreland Ave. Stabilization Shoreland Ave. Stabilization	2) Request US ACE assistance 3) Develop plans & specs			2003	complete					X						XX		X X	
Sediment/Siltation	Streambanks	Shoreland Ave. Stabilization	4) Implement plans			2004 2005	complete in progress					X						X		X	
Sediment/Siltation	Streambanks	Streambank Restoration Plan	1) Develop streambank restoration inventory	TMACOG, US Fish 8 Wildlife, ODNR, Maumee RAP	& GLNPO, US Fish & Wildlife		concept	river miles of bank restored				x						x		x	
Sediment/Siltation	Streambanks	Streambank Restoration Plan	2) Prioritize project areas based on restorability and community support				concept					×						x		×	
Sediment/Siltation	Streambanks	Streambank Restoration Plan	3) Conduct restoration projects	00115			concept					X						Х		Х	
Sediment/Siltation	Urban/Suburban	Pond Clinic	Educate landowners on proper application of herbicides and alternate approaches to pond management; proper construction techniques including storm water BMPs.	OSU Extension Sea Grant, Fulton OSU Extension, Progressive Fisherman's Club		Annual	ongoing					×	х	x >	¢		х	х			
Sediment/Siltation	Urban/suburban areas	Expand Student Watershed Watch Program into additional schools	STORENT WORLD DIVIL S.	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	year round	ongoing					×					×	x	x	x	
Sediment/Siltation		Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	August - November	ongoing	annual data collection that documents water quality changes throughout the watershed; # of teachers/schools participating	s			×					x	×	x	x	
Sediment/Siltation	Urban/suburban areas	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)			Sept	ongoing					x					x	х	x	x	

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	ce(s) Timeline	Status (in progress, planning, concept, ongoing, complete,)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI B #1 #					UI <mark>BUI</mark> 7 #8						Comments & Misc. Info.
Sediment/Siltation	Urban/suburban areas	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 		Sept	ongoing					х						x >	x	x	x	
Sediment/Siltation	Urban/suburban areas	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools		Sept	ongoing					Х						X >	x	x	Х	
Sediment/Siltation	Urban/suburban areas	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)		mid-Oct	ongoing					х						x >	×	x	х	
Sediment/Siltation	Urban/suburban areas	Student Watershed Watch	 b) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector) 		late Oct- early Nov	ongoing					х						x >	×	x	х	
Sediment/Siltation	Urban/suburban areas	Student Watershed Watch	7) Student share data and finding at Student Summit		mid-Nov	ongoing					Х						X >	x	x	х	
Sediment/Siltation	Urban/suburban areas	SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD	2006	concept	annual reporting of data collecte to Ohio EPA; percentage of teachers reporting data	d			х						x	x	×	х	
Sediment/Siltation	Urban/suburban areas	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training			concept					Х						x	×	×	х	
Sediment/Siltation	Urban/suburban areas	SWW Teacher Training/Creditable Data Certification	3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC) certification			concept					х						x	x	x	х	
thermal stress/sunlight	riparian corridor destruction	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	1) Indentify and evaluate existing	University of Toledo, OEPA 319 Maumee RAP, TMACOG, Lucas Co.	1999-2003	complete			portion on watershed in Lucas Co		x									x	
thermal stress/sunlight	riparian corridor destruction	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	 create GIS map of wetlands and potential wetlands 			complete					х									х	
thermal stress/sunlight	riparian corridor destruction	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	3) Identify restoration needs			complete					х									х	
Toxic substances	Industrial discharges (current or old)	Continue to Implement remediation activities for other sites and sources (i.e. capping. etc.)	Develop Projects	PRPs, US EPA, Ohio PRPs, US EPA EPA		ongoing				x	х	х		x x	c		x >	x x	x	х	
Toxic substances	Industrial discharges (current or old)	NPDES permit GIS inventory (Phase 1)	1) Collect GIS coordinates for all current NPDES permits	Ohio EPA DSW Ohio EPA	2005-07	in progress	Coodinates for all permits collected			х	х	х	:	x x	(x >	x x	x	x	
Toxic substances	Industrial discharges (current or old)	NPDES permit GIS inventory (Phase 1)	2) Convert electronic data into GIS map			in progress	oonoolog			x	х	x	:	x x	(x >	x x	x	x	
Toxic substances	Industrial discharges (current or old)	NPDES permit GIS inventory (Phase 2)	Intergrate with AERIS data	TMACOG, Lucas Maumee RAP County Auditor's Office		planning				x	x	х		x x	(x >	x x	x	x	
Toxic substances	Industrial discharges (current or old)	NPDES permit inventory	Identify existing point sources	Ohio EPA DERR Ohio EPA	1992	complete	# of sources identified			х	х	х		x x	(х)	x x	х	x	Data in RAP locuments
Toxic substances	Industrial discharges (current or old)	PCB contaminated sediment removal	1) Submit application to GLNPO	US EPA, GLNPO Great Lakes Le	gacy April 2004	planning	tons/cubic yards of contaminated soil removed	d		x	х	x		x x	(x >	x x	x	X	bounionto
Toxic substances	Industrial discharges (current or old)	PCB contaminated sediment removal	2) Present project plan for remediation to GLNPO		Sept 2004	planning				x	х	x		x x	(x	x x	×	x	
Toxic substances	Industrial discharges (current or old)	PCB contaminated sediment removal	3) Sampling of proposed project area		May 2005	planning				x	х	х	:	x x	c 👘		x	x x	x	x	
Toxic substances	Industrial discharges (current or old)	PCB contaminated sediment removal	4) Implement Remedial Action			planning				x	х	x	:	x x	:		x	x x	×	х	
Toxic substances	Industrial discharges (current or old)	Remediation of Royster Property (SWIP) (Phase 1)	1) Raze buildings	Hemisphere Ltd. Hemisphere Lt City of Toledo	l., 2000-2001	complete				х	х	х	:	x x	:		x >	х х	х	х	
Toxic substances	Industrial discharges (current or old)	Remediation of Royster Property (SWIP) (Phase 1)	2) Remove fertilizer piles, pallets, junk cars			complete		5.7.1?		х	х	х		x x	:		x >	x x	x	х	
Toxic substances	Industrial discharges (current or old)	Remediation of Royster Property (SWIP) (Phase 1)	3) Remove used tires			complete				х	х	х		x x	:		x >	х х	x	х	
Toxic substances	Industrial discharges (current or old)	Remediation of Royster Property (SWIP) (Phase 1)	4) Remove old gas tanks			complete				х	х	х		x x	:		x >	х х	x	х	
Toxic substances	Industrial discharges (current or old)	Remediation of Royster Property (SWIP) (Phase 1)	5) Remove impacted soils			complete				х	х	х		x x	:		x >	х х	x	х	
Toxic substances	Industrial discharges (current or old)		1) Remediate other on-site contamination	City of Toledo, Toledo SEP wi Hemisphere Ltd. EPA	h US 2002-??	in progress				x	x	х	1	x x	:		x	x x	x	x	
Toxic substances	Industrial discharges (current or old)	Remediation of Royster Property (SWIP) (Phase 2)	2) Operate/Close CDD Facility			in progress				x	х	Х		x x	:		х	x x	X	x	
Toxic substances	Industrial discharges (current or old)	Remediation of Royster Property (SWIP) (Phase 2)	3) Develop Stickney West Industrial Park			in progress				x	х	Х		x x	:		х	x x	X	x	
Toxic substances	Industrial discharges (current or old)	Toledo Tie Facility	Investigate recurring discharges	Ohio EPA DERR	summer 2005	5 in progress				х	х	х		x x	:		x >	х х	х	х	
Toxic substances	Industrial discharges (current or old)	Toledo Tie Time Critical Removal Action (Phase 1)	1) Excavate/dredge Williams Ditch	PRP(Kerr-McGee) PRP(Kerr-McG	ee) 1998-1999	complete			SW corner of Arco Dr and Frenchman Rd (Toledo) RM 10	x	х	х		x x	:		x >	x x	x	x	
Toxic substances	Industrial discharges (current or old)	Toledo Tie Time Critical Removal Action (Phase 1)	2) Excavate 2 waste lagoons			complete			,	х	х	х		x x	:		x x	х х	х	х	
Toxic substances	Industrial discharges (current or old)	Toledo Tie Time Critical Removal Action (Phase 1)	3) Backfill and regrade site			complete		1		х	х	х	:	x x	:		x >	x x	х	х	
Toxic substances	Industrial discharges (current or old)	Unnamed Tributary Remediation Project		US EPA, GLNPO, Ohio EPA, City of Toledo, Rep. Kaptur Office	of 1007-1008	complete			RM 5.9	x	x	x		x x	:		x >	x x	x	x	
Toxic substances	Industrial discharges (current or old)	Unnamed Tributary Remediation Project				complete				х	x	х		x x	:		x >	x x	X	х	

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete,)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI BUI #1 #2	BUI			I BUI			BUI E	BUI BU		
Toxic substances	•	Unnamed Tributary Remediation Project	3) Identify data gaps				complete				x	х	x	x	x		x	х	x x	x x	
Toxic substances	0	Unnamed Tributary Remediation Project	4) Collect additional samples				complete				x	X	x	X			x		x x	x x	
Toxic substances		Unnamed Tributary Remediation Project	5) Analyze results				complete				x	х	х	x	x		x		x x	x x	
Toxic substances	(current or old) Industrial discharges	Unnamed Tributary Remediation Project	6) Determine remedial options				complete				x	X	x	X		+	x		x x	x x	<u> </u>
Toxic substances	(current or old) Industrial discharges	Unnamed Tributary Remediation Project	7) Select remedial option				complete				x	x	x	X		+	x		x x	x x	<u> </u>
Toxic substances		Unnamed Tributary Remediation Project	8) Implement remediation activities				complete				x	X	x	X		+	x		x x		<u> </u>
Toxic substances	(current or old) Industrial discharges	Unnamed Tributary Remediation Project	9) Regrade and seed site				complete				x	X	x	x			x		x x		
Toxic substances	(current or old) Landfills (current or old)	Cap Dura Landfill	1) Install engineered base and liners	PRP's	PRP's	1999-2000	complete	percentage reduction of leachate		RM 5.6	x	x	x	X	x		x		x x		
Toxic substances	Landfills (current or old)	Cap Dura Landfill	2) Install monitoring wells			1999-2000	complete				x	×	x	x	×		×		x x		
Toxic substances	Landfills (current or old)	Cap Dura Landfill	3) Install protective cap & seed				•				x	×	x	x	-		×		x x		
Toxic substances	Landfills (current or old)	Cap King Road Landfill	1) Conduct Remedial Investigation	Lucas County, PRPs	Lucas County, PRPs		complete	percentage reduction of leachate		RM ?? (King Rd.		^		<u> </u>		+				· _ ^	
							complete			between Central Ave and Sylvania Ave)	x	x	x	х	x		×	x	xx	x	
Toxic substances	Landfills (current or old)	Cap King Road Landfill	2) Conduct Feasibility Study			2003	complete				х	х	x	х	x		x	х	x x	< x	
Toxic substances	Landfills (current or old)	Cap King Road Landfill	3) Develop Preferred Plan			2004	in progress				x	х	x	x	x		x	х	x x	< X	
Toxic substances	Landfills (current or old)	Cap King Road Landfill	4) Release Decision Document			2006	in progress				x	х	x	x	x		x	х	x x	< X	
Toxic substances	Landfills (current or old)	Cap King Road Landfill	5) Determine Remedial Design				in progress				x	х	x	×	x		x	х	x x	< x	
Toxic substances	Landfills (current or old)	Cap King Road Landfill	6) Implement Remedial Action				in progress				х	х	x	x	x		x	х	x x	< x	
Toxic substances	Landfills (current or old)	Cap North Cove Landfill	1) Conduct Remedial Investigation	City of Toledo	City of Toledo	? - 2005	complete	percentage reduction of leachate		RM 7.5 to RM 8.0	х	х	х	х	х		х	х	x x	x x	
Toxic substances	Landfills (current or old)	Cap North Cove Landfill	2) Conduct Feasibility Study				complete				х	х	х	х	х		х	х	x x	< X	
Toxic substances	Landfills (current or old)	Cap North Cove Landfill	3) Develop Preferred Plan				complete				х	х	х	х	х		х	х	x x	< X	
Toxic substances	Landfills (current or old)	Cap North Cove Landfill	4) Release Decision Document				complete				х	х	х	х	х		х	х	x x	< X	
Toxic substances	Landfills (current or old)	Cap North Cove Landfill	5) Determine Remedial Design				complete				х	х	х	х	х		х	х	x x	< X	
Toxic substances	Landfills (current or old)	Cap North Cove Landfill	6) Implement Remedial Action				complete				х	х	х	х	х		х	х	x x	< X	
Toxic substances	Landfills (current or old)	Cap Stickney & Tyler Landfills (and part of XXKem)	1) Grub and regrade site	STAG	STAG	1998-1999	complete	percentage reduction of leachate		RM 5 to RM 6.3	х	х	х	х	х		х	х	x x	x x	
Toxic substances	. ,	Cap Stickney & Tyler Landfills (and part of XXKem)	2) Install engineered base and liners				complete				х	х	х	х	х		х	х	x x	< X	
Toxic substances		Cap Stickney & Tyler Landfills (and part of XXKem)	3) Install leachate collection/extraction systems & monitoring wells				complete				х	х	х	х	х		х	х	x x	< X	
Toxic substances		Cap Stickney & Tyler Landfills (and part of XXKem)	4) Install protective cap & seed				complete				х	х	х	х	х		х	х	x x	x x	
Toxic substances	Landfills (current or old)	Continue to Implement remediation activities for other sites and sources (i.e. capping, etc.)	Develop Projects	PRPs, US EPA, Ohio EPA	PRPs, US EPA		ongoing				х	х	х	х	х		x	х	x x	x x	
Toxic substances	Landfills (current or old)		1) Collect samples (sediment & biological)	City of Toledo, Hull & Associates	City of Toledo, LEPF	1998-2000	complete			RM 5.5 To RM 6.3	x	x	x	x	x		x	x	x x	< x	Final report expected after 5 year benthic study is conducted in 2004
Toxic substances	Landfills (current or old)	Ottawa River AquaBlok Demonstration Proj.	2) Apply AquaBlok			Aug-99	complete				х	х	х	х	х		х	х	x x	x x	
Toxic substances		Ottawa River AquaBlok Demonstration Proj.	3) Monitor & sample site			2004	complete				х	х	х	х	x		х	х	x x	x x	
Toxic substances	Urban Runoff	-1	1) Identify illicit connections	MS4, Ohio EPA DSW	MS4		in progress			RM 0 to RM 23.5	x	х	х	х	x		X	х	x x	< X	
Toxic substances	Urban Runoff		2) Eliminate illicit sources				in progress				x	х	х	х	x		x	х	x x	< X	
Toxic substances		Give Water a Hand Campaign (Phase 1) (Residential Campaign)	1) Develop project	Maumee RAP, TMACOG, local Jurisdictions, US F&WS, ODNR	OEEF, local jurisdictions, US F&WS, ODNR, Maumee RAP, TMACOG	2003-2006	complete		5.6.2; 5.7.1; Chapter 10.5	Sylvania & Washington Twp		x		x		x	x	x	x	x x	
Toxic substances		Give Water a Hand Campaign (Phase 1) (Residential Campaign)	2) Release RFP/Hire contractors			9/3/04	complete					х		х		х	х	х	X	x x	
Toxic substances	Urban Runoff	Give Water a Hand Campaign (Phase 1)	 Create and distribute TV, cinema and newspaper ads 			10/03-4/05	complete					х		х		x	х	х	X	x x	
•																					

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete,)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed					UI <mark>BUI</mark> 7 #8					
Toxic substances	Urban Runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	5) Create and Implement pre-/post- campaign phone survey			12/03 & 5/05	complete					;	(х	x	;	x x	(х	x
Toxic substances	Urban Runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)		Maumee RAP, TMACOG, local jurisdictions	Maumee RAP, TMACOG, local jurisdictions	2004-2006	in progress	Educate business owners, manager and employees on sources/pathways of nonpoint and point source pollution; show increased awareness of through the # of businesses voluntarily participating in campaign				;	(x	x	;	x x		x	x
Toxic substances	Urban Runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)	2) Create and distribute 4 Guidebooks for local businesses			8/05-12/06	in progress					;	(x	×	;	x x	(x	×
Toxic substances	Urban Runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)	 Create and distribute print ads (newspaper, magazines, newsletters, bulletins) 			10/05-12/06	in progress					;	(x	x	;	x x	(x	x
Toxic substances	Urban Runoff	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	1) Design watershed signs for 4 streams (Ottawa, Swan, Maumee & Lake Erie)	Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete					;	<	x	x	;	x x		x	x
Toxic substances	Urban Runoff	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	 Place bulk order for local jurisdictions and organizations 			Jun-05	complete					;	(х	х)	x x	(х	x
Toxic substances	Urban Runoff	(Watershed Awareness Campaign)	 Distribute signs for local jurisdictions and organizations to use 			Jul-05	complete)	<	х	x)	x x	(х	×
Toxic substances	Urban Runoff	Give Water a Hand Campaign and educational materials	Distribute info at events, programs and presentations	Maumee RAP; Lucas, Ottawa and and Wood SWCDs	Maumee RAP; Lucas, Ottawa and and Wood SWCDs	year round	ongoing					2	(х	x	3	x x	(×	×
Toxic substances	Urban Runoff	Stormwater Coalition (fka. Stormwater Policy Board, Maumee River Regional Stormwater Coalition)	 Establish a voluntary regional partnership to facilitate collaboration 	Toledo & other local governments, Maumee RAP Urban Runoff Action Group			complete	percent of entities participating		RM 0 to RM 23.4	x	;	(x	x	:	x x	(x	×
Toxic substances	Urban Runoff	Stormwater Coalition (fka. Stormwater Policy Board, Maumee River Regional Stormwater Coalition)	 Evaluate the feasibility of establishing a regional stormwater utility 		Lake Erie Protection Fund, local iurisdictions		complete	percent of entities participating			x	;	<	x	×	;	x x	:	x	×
Toxic substances	Urban Runoff	Stormwater Coalition (fka. Stormwater Policy Board, Maumee River Regional Stormwater Coalition)	 Develop framework and steps to establishing a regional utility 		Lake Erie Protection Fund, local jurisdictions		complete	percent of entities participating			x	;	(х	×	;	x x	:	x	x
Toxic substances	Urban Runoff	Stormwater Coalition (fka. Stormwater Policy Board, Maumee River Regional Stormwater Coalition)	 Continue to collaborate on regional projects 				ongoing	percent of entities participating			x	2	(х	x	2	x x		x	x

											BUI	Color C	code:		Impa	ired	N	lot Impa	ired	Unkn	own	N	ot Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	•	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI #1	BUI B #2 #	UI B #3 #	8UI BU #4 #5	II BUI #6	BUI #7	BUI #8	BUI BI	UI BU 10 #1 [.]	II BUI 1 #12	BUI #13	3UI #14	Comments & Misc. Info.
All	All	Conduct a TMDL	 Design watershed survey, 2) Collect water quality data, 3) Assess waterbodies, 4) Identify target conditions, 5) Develop restoration projects,6) Select restoration scenerio, 7) Prepare implementation plan, 8) Submit TMDL report, 9) Implement TMDL (inside Ohio EPA), 10) Implement TMDL (outside OEPA), 11) Annual validation activities, and 12) Validate water quality status 	OEPA	OEPA	2006-2008	planning				×	x	×	×	×		x)	x x		×	S	ource: OEPA
ll	All	GIS Water Quality database (Phase 1)	1) Create relational database from OEPA water resources inventory data for Maumee AOC	Universitry of Toledo Maumee RAP	, US EPA GLNPO	2004-2005	complete				x	x	x	x x	х	х	х	>	x x	х		x	
All	All	GIS Water Quality database (Phase 1)	2) Export LE Tribs data to a GIS format				complete				х	x	X	x x	х	х	х	>	x x	х		х	
All	All	GIS Water Quality database (Phase 1)	3) Publish relational database and GIS online				complete				х	x	X	x x	х	х	х	>	x x	х		х	
All	All	GIS Water Quality database (Phase 2)	Expand GIS to entire AOC				in progress				Х	X	X	X X	Х	Х	Х)	х х	Х		Х	
Flow Alterations	Changing Land Uses	Lucas County Floodplain Map	1) Determine waterways to study and map versus redelinate	Lucas County Engineer and Audito Offices, FEMA	Lucas County, FEMA	2005-2010	in progress	Study 60+ miles of stream to determine the current floodplain			x	×>	x		x				×			x	
Flow Alterations	Changing Land Uses	Lucas County Floodplain Map	2) Conduct new studies			2005-2008	in progress				X	X	X		Х				X			x	
Flow Alterations Flow Alterations	Changing Land Uses	Lucas County Floodplain Map Lucas County Floodplain Map	3) Redelinate existing studies4) Request public comment on draft			2005-2008	in progress				Х		X		Х				Х			Х	
	Changing Land Uses		maps			2009	in progress				X	X	x		Х				X			X	
Flow Alterations	Changing Land Uses	Lucas County Floodplain Map	5) Finalize maps and release electronically			2010	in progress				x	X	x		х				x			x	
Flow alterations	Channelization	Install Flood Control structure (detention/retention systems)		SWC and its partners, Maumee RAP Urban Runoff Action Group	SWC and its partners	2006-2010	concept			RM 24 to headwaters		;	x		x				x			x	
Flow Alterations	Dams	Anderson Property Dam Removal (Phase 1)	Conduct Feasibility Study	Metroparks, ODNR, USFWS, City of Toledo	Metroparks		concept		7.5.3	RM 12.5	x	;	x	x	x	x	x		×			×	
Flow Alterations	Dams	Anderson Property Dam Removal (Phase 2)	1) Develop plans & specs	Metroparks, ODNR, USFWS, City of Toledo	US F&W Foundation		concept				x)	x	x	x	x	x		x			x	
Flow Alterations	Dams	Anderson Property Dam Removal (Phase 2)	2) Implement plans			2010	concept				x)	x	x	х	x	х		х			x	
Flow Alterations	Dams	Anderson Property Dam Removal (Phase 2)	3) Restoration of area's impact by dam removal				concept																
Flow Alterations	Dams	Highland Park Dam Removal (Phase 1)	Conduct Feasibility Study	City of Toledo, ODNR, USFWS,	City of Toledo	2008	concept		7.5.3	RM 4.5	x)	X	x	х	x	х		x			x	
Flow Alterations	Dams	Highland Park Dam Removal (Phase 2)	1) Develop plans & specs	Metroparks, ODNR, USFWS, City of Toledo	US F&W Foundation	2009	concept				×	;	x	x	x	x	x		x			x	
Flow Alterations	Dams	Highland Park Dam Removal (Phase 2)	2) Implement plans			2010	concept				x)	x	x	х	x	х		x			x	
Flow Alterations	Dams	Highland Park Dam Removal (Phase 2)	3) Restoration of area's impact by dam removal				concept																
Habitat Modification	Changing Land Uses	Northwest Ohio Regional Greenways Plan	1) Connect Swan Creek Corridor with the Oak Openings Corridor	National Park Service, TLC Plan Commission, Townships, ODNR- DNAP, TNC, Lucas County, City of Toledo	Metroparks 2003- 2013 Land Levy; USACE, OEPA, LWCF	2005-2013	in progress	Adoption of a Greenways Plan for Lucas, Fulton, Henry, Wood, Williams, Defiance, and Paulding Counties by 2007		RM 23-33	x	,	x	x	x	x		>	x x			x	
Habitat Modification	Changing Land Uses	Northwest Ohio Regional Greenways Plan	2) Connect Swan Creek Corridor with the Wabash-Cannonball Trail Corridor				in progress			RM 19-30.5	x)	X	x	x	x)	x x			x	
Habitat Modification	Changing Land Uses	Northwest Ohio Regional Greenways Plan	 Connect Swan Creek Corridor with the proposed West Side Corridor Trail, Maumee River and Ottawa River Corridors 				in progress			RM 6.0	x	;	x	x	x	x)	x x			x	
Habitat Modification	Changing Land Uses	Northwest Ohio Regional Greenways Plan	4) Connect Swan Creek/Blue Creek/Ai Corridor with the Oak Openings Region lands in Fulton and Henry County				in progress			Swan Creek RM 23.5-45.8, Blue Creek RM 0-14.6	x	;	x	x	x	x)	x x			x	
Habitat Modification	Changing Land Uses	Oak Openings Corridor Acquisition	1) Apply criteria for acquistion	Metroparks, Clean Ohio Fund, US ACE	Metroparks, Clean Ohio Fund, US ACE	2003 -2013	in progress	Acquire 1,800 additional acres of headwater buttonbush thickets and wet prairies as natural and functioning biological Oak Openings Region corridors withir the watershed of Swan Creek		Swan Creek rm 27.5-33 and Wolf Crk RM 4.5 -7.4 (portion of site is also located within Ottawa River watershed)	x	;	×	x	x	x		>	x x			ac	003-2004: 400 cres of watershe cres acquired

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding So	ource(s) Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Management S	C/Stream egment ddressed	BUI BUI #1 #2	BUI BUI #3 #4	BUI BUI #5 #6	BUI #7	3 <mark>UI</mark> BUI ! #8 #9	BUI BUI #10 #11	BUI BU #12 #13	BUI 3 #14	Comments & Misc. Info.
Habitat Modification	Changing Land Uses	Oak Openings Corridor Acquisition	2) Contact landowner to purchase their property			in progress				x	x x	х	x		x x		x	
Habitat Modification	Changing Land Uses	Oak Openings Corridor Acquisition	3) Conduct appraisal for fair market value			in progress				x	x x	х	x		x x		x	
Habitat Modification	Changing Land Uses	Oak Openings Corridor Acquisition	4) Purchase property			in progress				x	x x	Х	X		X X		Х	
Habitat Modification	Changing Land Uses	Swan Creek Corridor Acquisition	Acquire 200 additional acres of floodplair lands as natural and functioning biological corridor along mainstem and headwater areas of Swan Creek	Metroparks, Clean Metroparks, Ohio Fund Round 3, Ohio Fund, U US ACE		in progress	Monitor Loadings through Research study	8.3.1; 8.3.2; 8.3.3 RM 5.5	5 -33	x	x x	×	x		x x			2003-2004: 400 acres of watershed acres acquired
Habitat Modification	Changing Land Uses	Swan Creek Watershed Pilot Project	 Enlist the participation of a majority of the jurisdictions in the watershed 	TMACOG, more than LEPF 75% of the jurisdictions in the Swan Creek watershed	2006-2008	in progress	State of Ohio and a majority of the participating jurisdiction endorses PCA/PDA	all of th	ne watershe	x	x	x		x	x		x	
Habitat Modification	Changing Land Uses	Swan Creek Watershed Pilot Project	2) Determine priority conservation areas (PCA) and priority development areas (PDA)			in progress				x	x	x		x	x		×	
Habitat Modification	Changing Land Uses	Swan Creek Watershed Pilot Project	3) Encourage local jurisdictions to adopt PCAs and PDAs			in progress				x	x	х		x	Х		х	
Habitat Modification	Changing Land Uses	Wetland Reserve Program Designation for 120 acres at Blue Creek Conservation Area	Implement WRP along Blue Creek in Waterville Township	USDA-NRCS, Lucas USDA-Wetla SWCD, Lucas Co. Engineer, Metroparks		in progress			14100009 07 1100009080	0	x	×		×	×		Xf	Awaiting award- Fall 2005 to provide funds for implementation of program
Habitat Modification	Changing Land Uses	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	e 1) Indentify and evaluate existing wetlands using remote sensing	University of Toledo, OEPA 319 Maumee RAP, TMACOG, Lucas Co.	1999-2003	complete		portion watersi Co	i on hed in Luca	5	x	x		x	x		x	nogram
Habitat Modification	Changing Land Uses	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	e 2) create GIS map of wetlands and potential wetlands			complete					х	х		×	х		х	
Habitat Modification	Changing Land Uses	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)				complete					х	х		x	х		х	
Habitat Modification	Removal of riparian vegetation	Oak Openings Corridor- Biological and	prairie headwaters of Swan Creek and	Metroparks , The Ohio EPA th Nature Conservancy, WPCLP Prog and City of Toledo		in progress			14100009 07 1100009080	0	x	x		x	x		XI	Awaiting 2005 award grant to acquire 184 acres in Kitty Todd Preserve, The Nature Conservancy Site adjacent to Wiregrass Ditch
Habitat Modification	Removal of riparian vegetation	Swan Creek Watershed Pilot Project	 Enlist the participation of a majority of the jurisdictions in the watershed 	TMACOG, more than LEPF 75% of the jurisdictions in the Swan Creek watershed	2006-2008	in progress	State of Ohio and a majority of the participating jurisdiction endorses PCA/PDA	all of th	ne watershe	X	x	×		x	×		x	
Habitat Modification	Removal of riparian vegetation	Swan Creek Watershed Pilot Project	2) Determine priority conservation areas (PCA) and priority development areas (PDA)			in progress				x	x	x		x	x		x	
Habitat Modification	Removal of riparian vegetation	Swan Creek Watershed Pilot Project	 3) Encourage local jurisdictions to adopt PCAs and PDAs 			in progress				x	x	х		x	x		х	
Habitat Modification	Streambank modification	Swan Creek Metropark Floodplain (Phase 1)	1) Conduct scheduled mowing on three year cycle	Metroparks Metroparks	Mid 1980's to 2004	complete	100 acres of Swan Creek Floodplain meadows maintained for biodiversity and floodwater storage		5 - 10.5 and 5	x	x x	×	x		x x		x	
Habitat Modification	Streambank modification	Swan Creek Metropark Floodplain (Phase 1)	2) Allow area to naturalize			in progress				X	x x	х	х		x x		x	
Habitat Modification	Streambank modification	Swan Creek Metropark Floodplain (Phase 2)	1) Conduct invasive removal in rare- endangered species sites	Metroparks, Division Metroparks, Natural Areas and EPA 319, Cle Preserves Fund		in progress	Improved hydrology, sediment retention, and enrich soil and seed bank. Increased populations of Prenanthes crepidinea Nodding Rattlesnake- root Ohio (T) in Swan Creek Metropark			x	x x	x	x		x x		x	
Habitat Modification	Streambank modification	Swan Creek Metropark Floodplain (Phase 2)	2) Maintain access for educational purposes by maintaining boardwalk along Green Trail	Metroparks Metroparks		in progress				x	x x	x	x		x x		x	
Habitat Modification	Streambank modification	Swan Creek Metropark Floodplain (Phase 2)	3) Conduct stream bank stabilization at key sites: Heilman Ditch, Lucas SWCD Demonstration Site, Log Jam Removal Sites	Metroparks, Division USFWS Natural Areas and Preserves		in progress				x	x x	x	x		x x		x	
Habitat Modification	Streambank modification	Swan Creek Metropark Floodplain (Phase 3)	Manage site for biological diversity	Metroparks, Division Metroparks, I Natural Areas and Preserves Preserves		ongoing				x	x x	x	x		x x		x	
Habitat Modification	Streambank modification	Swan Creek Watershed Pilot Project	 Enlist the participation of a majority of the jurisdictions in the watershed 	TMACOG, more than LEPF 75% of the jurisdictions in the Swan Creek watershed	2006-2008	in progress	State of Ohio and a majority of the participating jurisdiction endorses PCA/PDA	all of th	ne watershe	x	x	x		×	x		x	

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Coastal Indicator/Environmental Manageme Results (Loadings) Measure	ht HUC/Stream Segment Addressed	BUI #1	BUI #2	BUI B #3 #	JI <mark>BUI</mark> 4 #5	BUI #6	BUI E #7	3 <mark>UI</mark> BU #8 #9	BUI BU #10 #1	JI <mark>BUI</mark> 11 #12	BUI B #13 #	8UI (Comments & Misc. Info.
Habitat Modification	Streambank modification	Swan Creek Watershed Pilot Project	2) Determine priority conservation areas (PCA) and priority development areas (PDA)				in progress			x		x		x		×	>	<		x	
Habitat Modification	Streambank modification	Swan Creek Watershed Pilot Project	3) Encourage local jurisdictions to adopt PCAs and PDAs				in progress			x		Х		x		x	>	<		x	
nutrients	Cropland or pasture where manure is spread	Educate Horse owners on proper disposal of manure	Implement Equine Environmental Assurance and Liability Program for Fulton, Lucas and Wood Counties	LSWCD,WSWCD Ohio Livestock Coalition, Farm Bureau	Ohio Livestock Coalition, Farm Bureau, ODRN- DSWC	2006	concept			×		x		x		x	x x	(
Nutrients	Erosion and runoff from fertilized fields	Tillage Transect	Drive the transect points and mark in GPS and note land use.	USDA-NRCS, ODNR-SWCD, LSWCD	NRCS, ODNR- SWCD	2006-07	concept	Ability to calculate no-till acres and developed acres.			x			×						x	
Nutrients	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	1) Design new Drains are for Rain storm drain stencils and companion door hangers	Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete	# of supplies ordered; # of households given educational materials; # of purchasing	5.7.1	×		x		x	x		×	<	×	x	
Nutrients	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	2) Place bulk order for local jurisdictions and organizations	organizationo	organizationo	Jun-05	complete			x		х		x	х		X	<	x	х	
Nutrients	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	 Distribute stencils and door hangers for local jurisdictions and organizations to 			Jul-05	complete			x		х		x	x		×	<	x	x	
Nutrients	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	use 1) Design new Drains are for Rain storm drain stenciling Field Manuals	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF; 319 grants; ODNR/CZM grants; foundations; local donations; cities	year round	ongoing	# of stenciling manuals sold Chapter 10.5; !	5.7.1	×		x		x	x		×	<	x	x	
Nutrients	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	2) Fill orders for local jurisdictions and organizations as placed	organizationo			ongoing			x		х		x	х		×	<	x	х	
Nutrients	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 3)	- gan	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions,	OEEF, ODNR/CZM grants; foundations, Maumee RAP, TMACOG, local jurisdictions,	April - Oct	ongoing	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating		x		x		x	x		×	<	x	x	
Organic Enrichment	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	1) Design new Drains are for Rain storm drain stencils and companion door hangers	organizations Maumee RAP, TMACOG, local jurisdictions, organizations	organizations Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete	# of supplies ordered; # of Chapter 10.5; # of households given educational materials; # of purchasing	5.7.1	x		x		x	x		×	<	×	x	
Organic Enrichment	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	2) Place bulk order for local jurisdictions and organizations			Jun-05	complete			x		х		х	х		X	< (x	х	
Organic Enrichment	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	 Distribute stencils and door hangers for local jurisdictions and organizations to use 			Jul-05	complete			x		х		x	х		×	<	x	x	
Organic Enrichment	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	 Design new Drains are for Rain storm drain stenciling Field Manuals 	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF; 319 grants; ODNR/CZM grants; foundations; local donations; cities	year round	ongoing	# of stenciling manuals sold Chapter 10.5;	5.7.1	x		x		x	x		×	<	×	x	
Organic Enrichment	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	2) Fill orders for local jurisdictions and organizations as placed	organizatorio			ongoing			x		х		х	х		>	x	x	х	
Organic Enrichment	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 3)	Conduct public Storm Drain Stenciling events	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF, ODNR/CZM grants; foundations, Maumee RAP, TMACOG, local jurisdictions, organizations	April - Oct	ongoing	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating		x		x		x	x		×	<	x	x	
Pathogens	Human & animal excreta	Educate Horse owners on proper disposal of manure	Implement Equine Environmental Assurance and Liability Program for Fulton, Lucas and Wood Counties	LSWCD,WSWCD Ohio Livestock Coalition, Farm Bureau	Ohio Livestock Coalition, Farm Bureau, ODRN- DSWC	2006	concept			x		x		x		x	x x	(
Pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	 Scan paper copies to create electronic files of existing septic systems 	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office	LEPF, TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office	2002-2005	complete	5.6.2;	all of Otter Creek watershed							x	x				
Pathogens	Septic systems		2) Convert electronic data into GIS map files			2003	complete									x	х				
Pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	3) Integrate with AREIS data			2004	complete									X	х				
Pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	4) Train Health Dept personnel to input data and use GIS system			2005	in progress									x	х				
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	1) Identify stream sampling locations	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's	US ACE [WRDA sec. 401]	2004	complete	Sample 50 stream sites and dye 5.6.2; Chapter test 100 septic systems per county to reduced discharges of unmeasurable amounts of	11 RM 2.0							x	x				
				Office, Wood County Health Dept				inadequately treated sewage													

									BUI Co	olor Code:		Impaire) bé	Not Ir	npaired	Unkn	nown	Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source	e(s) Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal HUC/Stream Management Segment Measure Addressed									II BUI B 2 #13 #1	
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	3) Conduct stream sampling and dye testing			complete								x	х			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	 Prioritize areas for enforcement based on testing results 			complete						\square		x	х			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	5) Pursue enforcement requiring upgrades or replacement of failed or inadeouate systems			complete								x	x			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	1) Conduct additional stream sampling and dye testing	TMACOG, WRDA 401, Ohio Toledo/Lucas County EPA 319 Health Dept, Lucas County Auditor's Office, Wood County Health Dept)	concept	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage	all of Duck Creek Watershed						x	×			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	2) Modify priority areas (if necessary)			concept						H		×	x			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	 Pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) 			concept								×	x			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 3)	1) Continue to sample and dye test to identify problem areas	TMACOG, WRDA 401, Ohio Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept	2006 - ?	concept	Sample stream sites and dye test septic systems as needed per county to reduced discharges of unmeasurable amounts of inadequately treated sewage							x	x			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 3)	 Continue to pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) until priority areas are addressed 			concept								x	x			
Pathogens	Urban runoff	Review existing CSO data		Ohio EDA Millogo of Matama		concept	contia systems aliminated							Х				
Pathogens	Wastewater treatment plants	CSO elimination project for Village of Metamora		Ohio EPA, Village of Village of Metamora	ora 2005-?	in progress	septic systems eliminated, bacteria level in river		X	X					X	X	X)	<u>د</u>
Pathogens	Wastewater treatment plants	Develop Long Term Control Plan for Combined Sewer Overflows	1) Develop public & regulatory agency participation plan	City of Toledo City of Toledo	2002-2004	complete								X				
Pathogens	Wastewater treatment	Develop Long Term Control Plan for Combined Sewer Overflows	2) Develop flow characterization plan		2004	complete						\square		X				
Pathogens	Wastewater treatment plants	Develop Long Term Control Plan for Combined Sewer Overflows	3) Develop water quality study		2004	complete								Х				
Pathogens	Wastewater treatment plants	Develop Long Term Control Plan for Combined Sewer Overflows	4) Develop hydraulic model		2003	complete								X				
	Wastewater treatment plants	Develop Long Term Control Plan for Combined Sewer Overflows	5) Develop water quality model		2003	complete								Х				
Pathogens	Wastewater treatment plants	Implement Long Term Control Plan	1) Implement public & regulatory agency participation plan	City of Toledo City of Toledo	2005-2016	in progress								x				
Pathogens	Wastewater treatment plants	Implement Long Term Control Plan	2) Implement flow characterization plan			in progress								x				
Pathogens	Wastewater treatment	Implement Long Term Control Plan	3) Implement water quality study			in progress								x				
Pathogens	Wastewater treatment	Implement Long Term Control Plan	4) Implement hydraulic model			in progress								x				
Pathogens	Wastewater treatment	Implement Long Term Control Plan	5) Implement water quality model			in progress								x				
Pathogens	Wastewater treatment plants	Upgrade Package Plant at Peaceful Acres Mobile Home Park	Implement consent order issued by Ohio Attorney General's Office	PRP, Ohio EPA PRP	2005-2006	in progress	reduction in pathogens and solids discharged to Blue Creek	Blue Creek RM 8.75				x			x	x		
Pesticides	Urban/Suburban	Organic Lawn Care Clinic	Less fertilizer in urban/suburban runoff	SWCD/Black Swamp SWCD Conservancy	Annual	ongoing				x		х						
Sediment/Siltation	Construction	Develop and Implement Stormwater Management Plans (Phase I and II)	Develop Pre-and post-construction standards	MS4s; Maumee RAP Lake Erie Protect Urban Runoff Action Fund; Local Group jurisdictions	2003-2007	in progress		RM ?? To RM 0	x	x	x	x	x	(x	x	(
Sediment/Siltation	Construction	Educate developers/contractors on nee and use of BMPs	ed	Maumee RAP Urban Ohio Environmen Runoff Action Group, Education Fund, SWC GLC	ntal	concept		Chapter 10.5; 5.7.1 all of watershed	x	x	x	x	x	<		×	x :	(
Sediment/Siltation	Construction	Evaluate upstream contributions				concept		RM 16 to headwaters					>	<				
Sediment/Siltation	Construction	GIS Storm Sewer Inventory	1) Review existing road plans	Lucas County Engineers Office	2005	in progress				х		x)	¢		х		
Sediment/Siltation Sediment/Siltation	Construction Construction	GIS Storm Sewer Inventory GIS Storm Sewer Inventory	2) Input data into GIS format 3) Integrate with AREIS data		2005-2009 2009	in progress in progress				X		X				X X		
	Construction	Regional Storm Water Standards Manu (Phase 1)		RAP Urban Runoff Lake Erie Protect Action Group, Fund MRRSWC		complete	Implement a regional/watershed management program: a) control increases in runoff rates, b) prevent losses in infiltration, c) prevent runoff pollution	all of AOC	x	x	x		x x	×		x	x	<
Sediment/Siltation	Construction	Regional Storm Water Standards Manu (Phase 1)	ual 2) Write manual			complete			x	x	x	x	x >	×	\vdash	x	x >	<

										BUI	Color C	ode:	Imp	aired		lot Impaired	Jnknown		Not Applicable
Causes of Impairmen (Pollutant or Stressor	t Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Coasta Indicator/Environmental Managem Results (Loadings) Measur	ent Segment	BUI #1	BUI B #2 #	UI BUI 3 #4	BUI BU	JI <mark>ΒUI</mark> δ #7	BUI #8	BUI BUI BUI #9 #10 #11	BUI <mark>BU</mark> #12 #13	BUI #14	Comments & Misc. Info.
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 1)	 Identify alternative development designs/layouts that protect water quality 				complete			x	:	< x	×	x	х	x	x	x	
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 1)	 Encourage local jurisdications to adopt manual as their standards 				complete			х	:	< x	X	x	х	х	x	х	
Sediment/Siltation	Construction		1) Review existing manual	Maumee RAP Urban Runoff Action Group, SWC	GLC	2005-2007	in progress	Completion and distribution of Chapter 10.5 revised manual	5.7.1 all of watershed	×	:	< x	×	x	x	x	×	x	
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 2)	 Update chapters with new content and regulations 			2005-2006	in progress			x	:	(X	X	x	Х	X	x	х	
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 2)	3) Conduct workshops and site visits for consultants, developers, contractors on stormwater plan preparation and post- construction BMPs			2006-2007	in progress	50 percent of consultants, developers, contractors that work in the area participate		x	:	(X	×	. x	x	x	x	x	
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 3)	Maintain and update manual as needed				ongoing			х		< X	Х	x	х	х	x	х	
Sediment/Siltation	Construction	Require BMPs on smaller developments					concept		all of watershed	x	;	< X	×	x x	x	X		x	
Sediment/Siltation	Construction	Swan Creek Watershed Pilot Project	1) Enlist the participation of a majority of the jurisdictions in the watershed	TMACOG, more thar 75% of the jurisdictions in the Swan Creek watershed	LEPF	2006-2008	in progress	State of Ohio and a majority of the participating jurisdiction endorses PCA/PDA	all of the watershe	d X	:	(×	:	x	×		x	
Sediment/Siltation	Construction	Swan Creek Watershed Pilot Project	2) Determine priority conservation areas (PCA) and priority development areas (PDA)				in progress			×	1	¢	×		x	x		х	
Sediment/Siltation	Construction	Swan Creek Watershed Pilot Project	3) Encourage local jurisdictions to adopt PCAs and PDAs				in progress			x	:	<	×		x	X		х	
Sediment/Siltation	Cropland	Develop potential project list based on Cropland Inventory Project Results					concept		all of watershed	x	1	<	×	x	х	x		x	
Sediment/Siltation	Cropland	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed					concept		all of watershed	×	:	<	×	x	x	x		x	
Sediment/Siltation	Cropland	Incentive programs for implementation of agricultural BMPs such as filter strips & conservation tillage, fertilizer/pesticide management	Continue to promote and support the implementation of these programs	Ohio Lake Erie Commission USDA - NRCS SWCDs (Fulton & Lucas in Ohio)	Ohio Lake Erie Commission USDA - NRCS SWCDs (Fulton & Lucas in Ohio)		ongoing	3.3.1	all of watershed	x	:	<		x	x	x		x	
Sediment/Siltation	Cropland	Inventory watershed for amount of acreage in cropland	 Develop inventory methodology utilizing existing AERIS system and other available resources 	Maumee RAP Ag Runoff Action Group, SWCDs (Fulton & Lucas in Ohio), ODNR - SWC	U.S. ACE, Section 319, NatureWorks (ODNR)		concept	3.3.1; 3.3.4	all of watershed	x	:	<	×	x	×	x		x	
Sediment/Siltation	Cropland	Inventory watershed for amount of acreage in cropland	2) Convert electronic data into GIS map				concept			x	:	<	×	x x	х	X		x	
Sediment/Siltation	Cropland	Inventory watershed for amount of acreage in cropland	3) Intergrate with AERIS data				concept			x	;	<	×	x x	х	x		x	
Sediment/Siltation	Cropland		4) Determine impact on watershed and possible projects to reduce or eliminate				concept			x	:	<	×	x	x	x		x	
Sediment/Siltation	Cropland	Reduce the impact of erosion of water quality	Educate watershed landowners of their impact on water quality and of the benefits of riparian habitat protection or restoration	Maumee RAP Ag Runoff Action Group, SWCDs (Fulton & Lucas in Ohio), ODNR - SWC, Ohio EPA 319	Ohio EPA 319		concept	3.3.1	all of watershed	x	:	<	×	x	x	x		x	
Sediment/Siltation	Land clearing and infilling for development	Swan Creek Watershed Pilot Project	 Enlist the participation of a majority of the jurisdictions in the watershed 	TMACOG, more thar 75% of the jurisdictions in the Swan Creek watershed	LEPF	2006-2008	in progress	State of Ohio and a majority of the participating jurisdiction endorses PCA/PDA	all of the watershe	d X	:	<	×	:	x	x		x	
Sediment/Siltation	Land clearing and infilling for development	Swan Creek Watershed Pilot Project	2) Determine priority conservation areas (PCA) and priority development areas (PDA)				in progress			x	:	< l	×	:	x	x		х	
Sediment/Siltation	Land clearing and infilling for development	Swan Creek Watershed Pilot Project	3) Encourage local jurisdictions to adopt PCAs and PDAs				in progress			x	:	<	×		x	X		х	
Sediment/Siltation	Land clearing and infilling for development	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)		University of Toledo, Maumee RAP, TMACOG, Lucas Co.	OEPA 319	1999-2003	complete		portion on watershed in Luca Co	s	:	<	×	:	x	x		x	
Sediment/Siltation	Land clearing and infilling for development	Wetlands Inventory and Mapping (Phase	2) create GIS map of wetlands and potential wetlands				complete				:	<	×		х	X		х	
Sediment/Siltation	Land clearing and infilling for development	Wetlands Inventory and Mapping (Phase					complete				:	<	×		х	X		х	
Sediment/Siltation	Pasture	Cost share to install all-weather paddocks for horse owners	Install demonstration paddock in Lucas County	ODNR-DSWC, SWCD, NRCS	NRCS, ODNR- SWCD		concept			×	:	<	×		x	x x			
Sediment/Siltation	Pasture	Develop potential project list based on	- county	C1102, 11100		1	concept	1											

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed							BUI BU #10 #1			
Sediment/Siltation	Pasture	Identify extent & benefit of BMPs used by farmers in watershed	×	Ohio Lake Erie Commission USDA - NRCS SWCDs (Fulton & Lucas in Ohio)	Ohio Lake Erie Commission USDA - NRCS SWCDs (Fulton & Lucas in Ohio)		concept		Chapter 11		x	x		x	x	x	>		x	
Sediment/Siltation	Pasture	Incentive programs for implementation o agricultural BMPs such as filter strips, manure management, pesticide management	Continue to promote and support the implementation of these programs				concept		3.3.1		×	x		x	x	x	,		x	
Sediment/Siltation	Pasture	Inventory watershed for amount of acreage in pasture	 Develop inventory methodology utilizing existing AERIS system and othe available resources 	Ohio Lake Erie Commission USDA - NRCS SWCDs (Fulton & Lucas in Ohio, Monroe & Lenawee in MI)	U.S. ACE, Section 319, NatureWorks (ODNR)		concept		3.3.6	all of watershed	x	×		x	x	×	>	:	x	
Sediment/Siltation	Pasture	Inventory watershed for amount of acreage in pasture	2) Convert electronic data into GIS map files				concept				x	x		x	x	x		(x	
Sediment/Siltation	Pasture	Inventory watershed for amount of acreage in pasture	3) Intergrate with AERIS data				concept				х	х		×	x	x)	:	x	
Sediment/Siltation	Pasture	Inventory watershed for amount of acreage in pasture	4) Determine impact on watershed and possible projects to reduce or eliminate				concept				x	x		x	x	x)	:	×	
Sediment/Siltation	Pasture	Reduce the impact of erosion of water quality	Educate watershed landowners of their impact on water quality and of the benefits of riparian habitat protection or restoration				concept		3.3.1		×			x	x	x	,		x	
Sediment/Siltation	Pasture	Western Lucas County Wet Prairie Complex (Phase 1)	Conduct ORAM Evaluation of site	Ohio EPA, City of Toledo, TMACOG, Metroparks		2004	complete		8.3.1; 8.3.2	Wolf Creek RM 5- 7.5				х						
Sediment/Siltation	Pasture	Western Lucas County Wet Prairie Complex (Phase 2)	1) Land acquistion of 88 acres	Metroparks , The Nature Conservancy Ohio EPA and City o Toledo		2005-2009	planning	Awaiting 2005 award grant to acquire 88 acres in Kitty Todd Preserve, The Nature Conservancy Site adjacent to Wiregrass Ditch						x						
Sediment/Siltation	Pasture	Western Lucas County Wet Prairie Complex (Phase 2)	2) Restoration of headwater wet prairie				planning							x						
Sediment/Siltation	Riparian corridor destruction	Swan Creek Watershed Pilot Project	 Enlist the participation of a majority of the jurisdictions in the watershed 	TMACOG, more than 75% of the jurisdictions in the Swan Creek watershed	n LEPF	2006-2008	in progress	State of Ohio and a majority of the participating jurisdiction endorses PCA/PDA		all of the watershee	x	x		x		×	,	(x	
Sediment/Siltation	Riparian corridor destruction	Swan Creek Watershed Pilot Project	2) Determine priority conservation areas (PCA) and priority development areas (PDA)	watershed			in progress				x	x		×		x	>	:	×	
Sediment/Siltation	Riparian corridor destruction	Swan Creek Watershed Pilot Project	3) Encourage local jurisdictions to adopt PCAs and PDAs				in progress				х	х		x		x)	(х	
Sediment/Siltation	Streambanks	Develop potential project list based on Streambank Inventory Project Results					concept			all of watershed	x	х		x	x	x)	(х	
Sediment/Siltation	Streambanks	Erie Street Market Riverwalk	1) Design Boardwalk	City of Toledo	City of Toledo	2000	complete				Х	Х	Х		X	x	>	(Х	
Sediment/Siltation	Streambanks		2) Construct Boardwalk				complete	-			X	Х		4 '	X		>		X	
Sediment/Siltation Sediment/Siltation	Streambanks Streambanks	Erie Street Market Riverwalk Erie Street Market Riverwalk	 Develop educational signage Install signs 				complete				X	X X		4	X X				X	
Sediment/Siltation	Streambanks	Inventory watershed for streambank conditions		Ohio EPA, ODNR, US F&WS, US ACE	US ACE [WRDA ?? 905(b)], Ohio EPA 319		complete concept		7.6.1; Chapter 11	all of watershed	x	x	^	×	x	×	,		x	NOTE: ACE recognizes & recommends use of
Sediment/Siltation	Streambanks	Swan Creek Watershed Pilot Project	 Enlist the participation of a majority of the jurisdictions in the watershed 	TMACOG, more than 75% of the jurisdictions in the Swan Creek watershed	n LEPF	2006-2008	in progress	State of Ohio and a majority of the participating jurisdiction endorses PCA/PDA		all of the watershee	x	×		×		x	,		x	OEPA's QHEI
Sediment/Siltation	Streambanks	Swan Creek Watershed Pilot Project	 Determine priority conservation areas (PCA) and priority development areas (PDA) 				in progress				x	x		x		x)		x	
Sediment/Siltation	Streambanks	Swan Creek Watershed Pilot Project	3) Encourage local jurisdictions to adopt PCAs and PDAs				in progress				X	х		X		x)		х	
Sediment/Siltation	Streambanks	Western Lucas County Wet Prairie Complex (Phase 1)	Conduct ORAM Evaluation of site	Ohio EPA, City of Toledo, TMACOG, Metroparks		2004	complete		8.3.1; 8.3.2		x	х			x	x	>		х	
Sediment/Siltation	Streambanks	Western Lucas County Wet Prairie Complex (Phase 2)	1) Land acquistion of 88 acres	Metroparks , The Nature Conservancy Ohio EPA and City o Toledo		2005-2009	planning	Awaiting 2005 award grant to acquire 88 acres in Kitty Todd Preserve, The Nature Conservancy Site adjacent to Wiregrass Ditch			x	×			×	×	>		x	
Sediment/Siltation	Streambanks	Western Lucas County Wet Prairie Complex (Phase 2)	2) Restoration of headwater wet prairie				planning				x	х			x	x)	(x	
Sediment/Siltation	Urban/Suburban	Pond Clinic	Educate landowners on proper application of herbicides and alternate approaches to pond management; proper construction techniques including storm water BMPs.	OSU Extension Sea Grant, Fulton OSU Extension, Progressive Fisherman's Club		Annual	ongoing					x	x x	x			×>			

										BU	Color C	ode:	In	paired	N	ot Impaired	I 🗌 Ur	nknown	N	Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Coastal Indicator/Environmental Management Results (Loadings) Measure	HUC/Stream Segment Addressed	BUI #1	BUI B #2 #	UI BUI 3 #4	BUI E #5	BUI BUI #6 #7	BUI 8 #8 #	UI BUI #9 #10	BUI 8 #11 #	BUI BUI #12 #13	BUI #14	Comments & Misc. Info.
Sediment/Siltation	Vegetation removal for development	Swan Creek Watershed Pilot Project	 Enlist the participation of a majority of the jurisdictions in the watershed 	TMACOG, more than 75% of the jurisdictions in the Swan Creek watershed	nLEPF	2006-2008	in progress	State of Ohio and a majority of the participating jurisdiction endorses PCA/PDA	all of the watershee	x		(x	x		x		x	
Sediment/Siltation	Vegetation removal for development	Swan Creek Watershed Pilot Project	2) Determine priority conservation areas (PCA) and priority development areas (PDA)				in progress			x		¢		x	x		х		x	
Sediment/Siltation	Vegetation removal for development	Swan Creek Watershed Pilot Project	3) Encourage local jurisdictions to adopt PCAs and PDAs				in progress			x		(x	х		x		х	
Thermal stress/sunlight	Riparian corridor destruction	Swan Creek Watershed Pilot Project	1) Enlist the participation of a majority of the jurisdictions in the watershed	TMACOG, more than 75% of the jurisdictions in the Swan Creek watershed	nLEPF	2006-2008	in progress	State of Ohio and a majority of the participating jurisdiction endorses PCA/PDA	all of the watershee	×		(x	x		x		x	
Thermal stress/sunlight	Riparian corridor destruction	Swan Creek Watershed Pilot Project	2) Determine priority conservation areas (PCA) and priority development areas (PDA)				in progress			x		¢		x	x		x		x	
Thermal stress/sunlight	Riparian corridor destruction	Swan Creek Watershed Pilot Project	3) Encourage local jurisdictions to adopt PCAs and PDAs				in progress			x		(x	x		x		х	
Toxic substances	Industrial discharges (current or old)	Continue to Implement remediation activities for other sites and sources (i.e capping, etc.)	Develop Project	PRPs, US EPA, Ohio EPA	o PRPs, US EPA, Legacy Act		concept			x		(x		x x		x	x		x	
Toxic substances	Industrial discharges	Identify point sources					concept			x		(X		x x	x	x x	x		x	
Toxic substances	(current or old) Industrial discharges	Maintain compliance with NPDES					ongoing			Х		< X		x x	х	x x	х		X	
Toxic substances	(current or old) Industrial discharges	Permits NPDES permit GIS inventory (Phase 1)	1) Collect GIS coordinates for all current	Ohio EPA DSW	Ohio EPA	2005-07	in progress	Coodinates for all permits	+	x		(X		x x		X	x	x x	×	
Toxic substances	(current or old) Industrial discharges	NPDES permit GIS inventory (Phase 1)	NPDES permits 2) Convert electronic data into GIS map			2000 07		collected		×				x x		×		x x	×	
Toxic substances	(current or old) Industrial discharges (current or old)	NPDES permit GIS inventory (Phase 2)	files Intergrate with AERIS data	TMACOG, Lucas County Auditor's	Maumee RAP		in progress planning			×		(X		x x		×	× ·	× × ×	x	
Toxic substances	Landfills (current or old)	Glendale Avenue Landfill, Swan Creek	Conduct Remedial Investigation	Office PRP's	PRP's		concept		RM 9.0	×		(X		x x	x	x x	×			
Toxic substances	Urban Runoff	Metropark at Heilman Creek Develop and Implement Stormwater	1) Identify illicit connections	MS4	MS4				RM ?? To RM 0	^ _					^	^	~		<u> </u>	
Toxic substances	Urban Runoff	Management Plans (Phase I and II) Develop and Implement Stormwater	2) Identify sources not addressed by				in progress			^		· ·				~	^		Ĥ	
Toxic substances	Urban Runoff	Management Plans (Phase I and II) Develop and Implement Stormwater	existing regulations (i.e. commercial) 3) Evaluate capacity/condition of existing				in progress	Chapter 11		X		(X		X X		X	X		×	
	orban region	Management Plans (Phase I and II)	systems; analysis of storm water flow, thermal impacts, runoff quality, erosion and sedimentation, and groundwater recharge.				in progress			x	:	x x		x x		x	x		x	
Toxic substances Toxic substances	Urban Runoff Urban Runoff	Educate public on sources/pathways Evaluate capacity/condition of existing					concept									X			\square	
		systems; analysis of storm water flow, thermal impacts, runoff quality, erosion and sedimentation, and groundwater recharge.					concept			x	x	×	x	××	x	××	x	x x	×	
Toxic substances	Urban Runoff	Evaluate impact of Phase II Stormwater regulations		Possibly Health Dept & Toledo's, MS4 Permit			concept									x				
Toxic substances	Urban Runoff	Evaluate upstream contributions					concept		RM 16 to headwaters	x		(X		x x		x x	x		x	
Toxic substances	urban runoff	Give Water a Hand Campaign (Phase 1)	1) Develop project	Maumee RAP, TMACOG, local Jurisdictions, US F&WS, ODNR	OEEF, local jurisdictions, US F&WS, ODNR, Maumee RAP, TMACOG	2003-2006	complete	Educate public on 5.6.2; 5.7.1; sources/pathways of nonpoint and point source pollution; pre- and post-campaign surveys show increased awareness of citizens	Treadwaters			<		x	x	x	x	x	x	
Toxic substances	urban runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	2) Release RFP/Hire contractors		1	9/3/2004	complete					(x	х	х	х	X	х	
Toxic substances	urban runoff	Give Water a Hand Campaign (Phase 1)	3) Create and distribute TV, cinema and			10/03-4/05	complete					(x	х	x	х	x	x	
Toxic substances	urban runoff	(Residential Campaign) Give Water a Hand Campaign (Phase 1) (Residential Campaign)	newspaper ads 4) Create and distribute 6 tip cards & bonus items			10/03-4/05	complete					(x	х	x	х	x	х	
Toxic substances	urban runoff	Give Water a Hand Campaign (Phase 1)	5) Create and Implement pre-/post-			12/03 & 5/05	complete					(х	x	х	х	х	X	x	
Toxic substances	urban runoff	(Residential Campaign) Give Water a Hand Campaign (Phase 2) (Business Campaign)	campaign phone survey 1) Develop project	Maumee RAP, TMACOG, local jurisdictions	Maumee RAP, TMACOG, local jurisdictions	2004-2006	in progress	Educate business owners, manager and employees on sources/pathways of nonpoint and point source pollution; show increased awareness of through the # of businesses voluntarily participating in campaign				(x	x	x	x	x	x	x	
Toxic substances	urban runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)	2) Create and distribute 4 Guidebooks for local businesses			8/05-12/06	in progress					(х	x	х	X	х	X	х	
Toxic substances	urban runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)				10/05-12/06	in progress					(x	x	x	x	x	x	x	

											BU	Color	Code:		Impai	ired	No	Impaire	d 🗌 l	Jnknowi	n	Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed							BUI BI				UI BU 13 #14	
Toxic substances	urban runoff	Give Water a Hand Campaign (Phase 3 (Watershed Awareness Campaign)	 1) Design watershed signs for 4 streams (Ottawa, Swan, Maumee & Lake Erie) 	Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete						x		x		x	х	x		x x	
Toxic substances	urban runoff	Give Water a Hand Campaign (Phase 3 (Watershed Awareness Campaign)	B) 2) Place bulk order for local jurisdictions and organizations			Jun-05	complete						х		х		х	х	х		x x	
Toxic substances	urban runoff	Give Water a Hand Campaign (Phase 3 (Watershed Awareness Campaign)				Jul-05	complete						х		x		x	x	х		x x	
Toxic substances	urban runoff	Give Water a Hand Campaign and educational materials	Distribute info at events, programs and presentations	Maumee RAP; Lucas, Ottawa and and Wood SWCDs	Maumee RAP; Lucas, Ottawa and and Wood SWCDs	year round	ongoing			all of watershed	x	x	x >	×			x x	(x		
Toxic substances	Urban Runoff	Identify illicit connections					concept										>	(
Toxic substances	Urban Runoff	Identify sources not addressed by existing regulations (i.e. commercial)					concept										×					
Toxic substances	Urban Runoff	Identify vulnerable areas			1		concept										×					
Toxic substances	Urban Runoff	Implement a regional/watershed management program: a) control increases in runoff rates, b) prevent losses in infiltration, c) prevent runoff pollution		Toledo & other local governments, RAP Urban Runoff Action Group	Lake Erie Protection Fund Local jurisdictions		concept				x	x	x	< x	x		x x	(x		x	
Toxic substances	Urban Runoff	Implement permit/inspection program to encourage industries to minimize pollutant exposure		City will probably develop an inspection program as part of MS4 permit			concept				x		x	(×	×	x x	x	x		x	
Toxic substances	Urban Runoff	Performance bond/tie compliance into building permits.					concept				x		x >	(х	x	x x	x	x		х	
Toxic substances	Urban Runoff	Provide venues for proper disposal of wastes		Lucas County Solid Waste Mgmt Distrct			concept		5.7.1		x		x >	(x	x	x		x		x	
Toxic substances	Urban Runoff	Provide/identify BMPs (may be based c a performance criteria) to prevent/remove pollutants	n				concept				x		;	<	x	x	x x	x	x		×	
Toxic substances	Urban Runoff	Stormwater Coalition (fka. Stormwater Policy Board, Maumee River Regional Stormwater Coalition) (Phase 1)	1) Establish a voluntary regional partnership to facilitate collaboration	Toledo & other local governments, Maumee RAP Urbar Runoff Action Group			complete			RM 17 to RM 0	x		x		x	x		x	x		x	
Toxic substances	Urban Runoff	Stormwater Coalition (fka. Stormwater Policy Board, Maumee River Regional Stormwater Coalition) (Phase 1)	2) Evaluate the feasibility of establishing a regional stormwater utility		Lake Erie Protection Fund, local jurisdictions		complete				x		x		x	x		x	x		x	
Toxic substances	Urban Runoff	Stormwater Coalition (fka. Stormwater Policy Board, Maumee River Regional Stormwater Coalition) (Phase 1)	 Develop framework and steps to establishing a regional utility 		Lake Erie Protection Fund, local jurisdictions		complete				x		x		x	x		x	x		x	
Toxic substances	Urban Runoff	Stormwater Coalition (fka. Stormwater Policy Board, Maumee River Regional Stormwater Coalition) (Phase 2)	Continue to collaborate on regional projects	Toledo & other local governments, Maumee RAP Urbar Runoff Action Group			ongoing				x		х		x	x		x	x		x	
Toxic substances	Urban Runoff	Swan Creek Aqua Block Demonstratior Project	1) Identify fill sites along Swan Creek between Detroit and Swan Creek Metropark for potential application	Metroparks, Hull & Associates	Metroparks Research Funding	2005	planning			RM 5.0-7.0	x		x	C	x	x		x	x		x	
Toxic substances	Urban Runoff	Swan Creek Aqua Block Demonstration Project	2) Collect samples (sediment & biological)			2006	planning				x		x >	C	х	x		х	х		Х	
Toxic substances	Urban Runoff	Swan Creek Aqua Block Demonstration Project	3) Apply AquaBlok			2006	planning				x		x >	(x	x		х	х		Х	
Toxic substances	Urban Runoff	Swan Creek Aqua Block Demonstration	4) Monitor & sample site			2006-2010	planning				x		x >	(х	x		х	х		x	

											BU	Color	Code:		Impai	red	Not	Impaired	1 🗌 U	Jnknown		Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI	BUI			л ви	BUI		I BUI	BUI	BUI BL #12 #1	JI BUI	Comments &
All	All	Conduct a TMDL	1) Design watershed survey, 2) Collect water quality data, 3) Assess waterbodies, 4) Identify target conditions 5) Develop restoration projects, 6) Select restoration scenerio, 7) Prepare implementation plan, 8) Submit TMDL report, 9) Implement TMDL (inside Ohio EPA), 10) Implement TMDL (outside OEPA), 11) Annual validation activities, and 12) Validate water quality status		OEPA	2011-2013	concept				x	x	x	x	x	×	x x	x	x	×	×	Source: OEPA
All	All	GIS Water Quality database (Phase 1)	1) Create relational database from OEPA water resources inventory data for Maumee AOC	Universitry of Toledo Maumee RAP	, US EPA GLNPO	2004-2005	complete				х	x	x	x x	x		x	х	х	x	x	
All	All	GIS Water Quality database (Phase 1)	2) Export LE Tribs data to a GIS format				complete				×	х	х	x x	x		x	х	х	x	x	
All	All	GIS Water Quality database (Phase 1)	3) Publish relational database and GIS online				complete				х	х	х	x x	x		х	х	х	X	х	
All	All	GIS Water Quality database (Phase 2)	Expand GIS to entire AOC				in progress				Х	Х	Х	X X	X		Х	Х	Х	X	Х	
Flow Alterations	Changing Land Uses	Lucas County Floodplain Map	1) Determine waterways to study and map versus redelinate	Lucas County Engineer and Auditor Offices, FEMA	Lucas County, FEMA r	2005-2010	in progress	Study 60+ miles of stream to determine the current floodplain			x	x	x		×				x		x	
Flow Alterations Flow Alterations	Changing Land Uses Changing Land Uses	Lucas County Floodplain Map Lucas County Floodplain Map	2) Conduct new studies 3) Redelinate existing studies			2005-2008 2005-2008	in progress				X X	X	X X		X	_		_	XX		X X	
Flow Alterations	Changing Land Uses	Lucas County Floodplain Map	4) Request public comment on draft		1	2005-2008	in progress in progress			ł	×	×	x		×				×		×	<u> </u>
Flow Alterations	Changing Land Uses	Lucas County Floodplain Map	maps 5) Finalize maps and release				in progress				^	^	^		<u> </u>				~			
	Changing Land Uses	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	electronically 1) Indentify and evaluate existing wetlands using remote sensing	University of Toledo, Maumee RAP, TMACOG, Lucas	OEPA 319	2010 1999-2003	in progress complete			portion of watershed in Lucas Co	X	x	x x		x				X		x	
habitat modifications	Changing Land Uses	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	2) create GIS map of wetlands and potential wetlands	Co.			complete						х		x			_			x	
habitat modifications	Changing Land Uses	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)					complete						х		х						х	
habitat modifications	Changing Land Uses	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	 Indentify and evaluate existing wetlands using remote sensing 	Maumee RAP, TMACOG, Wood Co, University of Toledo	Lake Erie Protection , Fund, USEPA GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	planning			portion of watershed in Wood Co			x		x						x	
habitat modifications	Changing Land Uses	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	2) create GIS map of wetlands and potential wetlands				planning						x		x						x	
habitat modifications	Changing Land Uses	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	 3) Identify restoration needs 				planning						х		x						x	
Nutrients	Cropland	Investigate current phosphorus data					concept										X					
nutrients	Cropland or pasture where manure is spread	Educate Horse owners on proper disposal of manure	Implement Equine Environmental Assurance and Liability Program for Fulton, Lucas and Wood Counties	LSWCD,WSWCD Ohio Livestock Coalition, Farm Bureau	Ohio Livestock Coalition, Farm Bureau, ODRN- DSWC	2006	concept				x		x		x		×	x	x			
Nutrients	Erosion and runoff from fertilized fields	Expand Student Watershed Watch Program into additional schools		Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	year round	ongoing						х				x	х	x		×	
Nutrients	Erosion and runoff from fertilized fields	Investigate current phosphorus data					concept										x					
Nutrients		Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	August - November	ongoing						х				x	х	х		x	
Nutrients	Erosion and runoff from fertilized fields	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)				ongoing						х				x	х	х		x	
Nutrients	Erosion and runoff from fertilized fields	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 			Sept	ongoing						х				x	х	х		x	
Nutrients	Erosion and runoff from fertilized fields	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools			Sept	ongoing						х				x	х	Х		x	
Nutrients		Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)			mid-Oct	ongoing						х				x	х	х		x	
Nutrients	Erosion and runoff from fertilized fields	Student Watershed Watch	(perferably) 6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector)	1		late Oct- early Nov	ongoing						х				x	х	х		x	
Nutrients	Erosion and runoff from fertilized fields	Student Watershed Watch	7) Student share data and finding at Student Summit			mid-Nov	ongoing						Х				X	X	Х		х	
Nutrients		SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept										x	x	x		x	
		SWW Teacher Training/Creditable Data	2) Award a certificate completion for	†	1	1		1	1	1												

											BUI (olor Co	de:	In	npaired		Not Impa	aired	Unkn	own	Not A	Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed			II BUI 3 #4			I BUI	BUI B		л вл	BUI		omments & Misc. Info.
Nutrients	Erosion and runoff from fertilized fields	SWW Teacher Training/Creditable Data Certification	3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC) certification				concept									x		x x			x	
Nutrients	Erosion and runoff from fertilized fields	Tillage Transect	Drive the transect points and mark in GPS and note land use.	USDA-NRCS, ODNR-SWCD, LSWCD	NRCS, ODNR- SWCD	2006-07	concept	Ability to calculate no-till acres and developed acres.				x			x						x	
Nutrients	Industrial discharges	Investigate current phosphorus data		Lonob			concept									X						
Nutrients Nutrients	Pasture Urban runoff	Investigate current phosphorus data Investigate current phosphorus data					concept concept									X						
Nutrients	Wastewater treatment	Investigate current phosphorus data					concept									×						
Organic Enrichment	plants Urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	1) Design new Drains are for Rain storm drain stencils and companion door hangers	TMACOG, local jurisdictions,	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete	# of supplies ordered; # of households given educational materials; # of purchasing	Chapter 10.5; 5.7.1			×			x	^		x	:		x	
Organic Enrichment	Urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	2) Place bulk order for local jurisdictions and organizations	organizationo	organizationo	Jun-05	complete					x			х			x			x	
Organic Enrichment	Urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	3) Distribute stencils and door hangers for local jurisdictions and organizations to	0		Jul-05	complete					x			x			x			x	
Organic Enrichment	Urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	use 1) Design new Drains are for Rain storm drain stenciling Field Manuals	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF; 319 grants; ODNR/CZM grants; foundations; local donations; cities		ongoing	# of stenciling manuals sold	Chapter 10.5; 5.7.1									Х	(x	
Organic Enrichment	Urban runoff		2) Fill orders for local jurisdictions and				ongoing											X	:		х	
Organic Enrichment	Urban runoff	are for Rain) (Phase 2) Storm Drain Stenciling Program (Drains	organizations as placed Conduct public Storm Drain Stenciling	Duck and Otter	OEEF, ODNR/CZM	April - Oct	ongoing	# of new storm drains stenciled;										X			Х	
Pathogens	Human & animal excreta	Educate Horse owners on proper disposal of manure	Implement Equine Environmental Assurance and Liability Program for Fulton, Lucas and Wood Counties	LSWCD,WSWCD Ohio Livestock	Ohio Livestock Coalition, Farm Bureau, ODRN- DSWC	2006	concept				x	×			x	x		x x				
Pathogens	Human and Animal	Determine possible sources within the		Durodu	20110		concept										X	x				
Pathogens	Excreta Septic systems	Maumee AOC Expand Student Watershed Watch		Maumee RAP,	private donations													4			_	
		Program into additional schools		TMACOG, Ohio EPA, public and private schools		year round	ongoing					×			x	×		х			x	
Pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	1) Scan paper copies to create electronic files of existing septic systems	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office	LEPF, TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office	2002-2005	complete		5.6.2;	all of wathershed								x				
Pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	2) Convert electronic data into GIS map				complete											x				
Pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	3) Intergrate with AERIS data				complete											x				
Pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	4) Train Health Dept personnel to input data and use GIS system				in progress											x				
Pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	1) Scan paper copies to create electronic files of existing septic systems	Lucas County	LEPF, TMACOG, Lucas County Auditor's Office, Wood County Health Dept	2005-2007	in progress		5.6.2;	all of wathershed								x				
Pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	2) Convert electronic data into GIS map				in progress											x				
Pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	3) Intergrate with AERIS data				in progress											x				
Pathogens	Septic systems		4) Train Health Dept personnel to input data and use GIS system				in progress											x				
Pathogens Pathogens	Septic systems	Review existing CSO data	1) Identify stream sampling locations	TMACOG			concept	Sample 50 stream sites and this	5.6.2: Chapter 11								X	_				
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	1) Identify stream sampling locations	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept		2004	complete	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage										x				
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	 Identify septic system dye testing locations 				complete											х				
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	3) Conduct stream sampling and dye testing				complete											х				
	Septic systems	Stream and Septic System Sampling Project (Phase 1)	4) Prioritize areas for enforcement based on testing results	ł			complete											х				
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	 Pursue enforcement requiring upgrades or replacement of failed or 				complete											V				

											BUI C	olor Co	de:	Impa	ired	Not Ir	mpaired	Unkr	own	Not /	Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI B #1 #				I BUI B #7	BUI #8 #9	BUI B #10 #1		BUI B	u c	Comments & Misc. Info.
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	1) Conduct additional stream sampling and dye testing	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept	WRDA 401, Ohio /EPA 319	2005	concept	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage									×				
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	2) Modify priority areas (if necessary)				concept										x				
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	3) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available)				concept										x				
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 3)	1) Continue to sample and dye test to identify problem areas	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept	WRDA 401, Ohio /EPA 319	2006 - ?	concept	Sample stream sites and dye test septic systems as needed per county to reduced discharges of unmeasurable amounts of inadequately treated sewage									x				
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 3)	2) Continue to pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) until priority areas are addressed				concept										x				
Pathogens	Septic systems	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	August - November	ongoing					х				x	x	x	;	×	
Pathogens	Septic systems	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)				ongoing					х				x	x	x	;	×	
Pathogens	Septic systems	Student Watershed Watch	3) Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector)	5		Sept	ongoing					х				x	x >	x	;	×	
Pathogens	Septic systems	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools			Sept	ongoing					Х				x	X X	×	3	x	
Pathogens	Septic systems	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)	E		mid-Oct	ongoing					х				x	x >	x	;	×	
Pathogens	Septic systems	Student Watershed Watch	6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector)	в		late Oct- early Nov	ongoing					х				x	x >	x	;	x	
Pathogens	Septic systems	Student Watershed Watch	7) Student share data and finding at Student Summit			mid-Nov	ongoing					Х				x	х	x		x	
Pathogens	Septic systems	SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept									x	×	x	;	×	
Pathogens	Septic systems	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training				concept									x	x	x		x	
Pathogens	Septic systems		3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC) certification				concept									x	x >	x	:	×	
Pathogens Bothogons	Urban runoff Westewater treatment	Review existing CSO data Develop Long Term Control Plan for		City of Tolodo	City of Tolodo		concept									Х	Х				
Pathogens	Wastewater treatment plants	Combined Sewer Overflows	 Develop public & regulatory agency participation plan Develop flow characterization plan 	City of Toledo	City of Toledo	2002-2004	complete									Х					
Pathogens	Wastewater treatment plants	Develop Long Term Control Plan for Combined Sewer Overflows				2004	complete									х					
Pathogens	Wastewater treatment plants	Develop Long Term Control Plan for Combined Sewer Overflows	3) Develop water quality study			2004	complete									х					
	plants	Develop Long Term Control Plan for Combined Sewer Overflows	4) Develop hydraulic model			2003	complete									х					
Pathogens	Wastewater treatment plants	Develop Long Term Control Plan for Combined Sewer Overflows	5) Develop water quality model			2003	complete									х					
Pathogens	Wastewater treatment plants		 Implement public & regulatory agency participation plan 	City of Toledo	City of Toledo	2005-2016	in progress									x					
Pathogens	Wastewater treatment plants	Implement Long Term Control Plan	2) Implement flow characterization plan				in progress									x					
Pathogens	Wastewater treatment plants	Implement Long Term Control Plan	3) Implement water quality study				in progress									x					
Pathogens	Wastewater treatment plants	Implement Long Term Control Plan	4) Implement hydraulic model				in progress									x					·
Pathogens	Wastewater treatment plants		5) Implement water quality model				in progress									x					
Pathogens	Wastewater treatment plants	Review existing CSO data					concept									x					

										BUI Co	olor Cod	e:	Impa	aired	Not	Impaired	l 📃 Unl	known	Not A	Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI BU	JI BUI 2 #3	BUI B #4 #	UI BU 5 #6	i BUI 1 #7	3UI BU #8 #9	I BUI #10	BUI BI #11 #1	JI BUI 2 #13	BUI Ca #14 I	omments & Misc. Info.
Pathogens	Wastewater treatment plants	Stream and Septic System Sampling Project (Phase 1)	1) Identify stream sampling locations	TMACOG, US ACE [WRDA Toledo/Lucas County sec. 401] Health Dept, Lucas County Auditor's Office, Wood County Health Dept	2004	complete	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage	5.6.2; Chapter 11								x				
Pathogens	Wastewater treatment plants	Stream and Septic System Sampling Project (Phase 1)	2) Identify septic system dye testing locations			complete										х				
Pathogens	Wastewater treatment	Stream and Septic System Sampling	3) Conduct stream sampling and dye			complete										х				
Pathogens		Project (Phase 1) Stream and Septic System Sampling	4) Prioritize areas for enforcement based	1		complete										x				
Pathogens		Project (Phase 1) Stream and Septic System Sampling	on testing results 5) Pursue enforcement requiring													x				
	plants	Project (Phase 1)	upgrades or replacement of failed or inadequate systems			complete										X				
Pathogens	Wastewater treatment plants	Stream and Septic System Sampling Project (Phase 2)	 Conduct additional stream sampling and dye testing 	TMACOG, WRDA 401, Ohio Toledo/Lucas County EPA 319 Health Dept, Lucas County Auditor's Office, Wood County Health Dept	2005	concept	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage									x				
Pathogens	Wastewater treatment	Stream and Septic System Sampling	2) Modify priority areas (if necessary)			concept										x				
Pathogens	plants Wastewater treatment plants	Project (Phase 2) Stream and Septic System Sampling Project (Phase 2)	 Pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) 			concept										×				
Pathogens	Wastewater treatment plants	Stream and Septic System Sampling Project (Phase 3)	1) Continue to sample and dye test to identify problem areas	TMACOG, WRDA 401, Ohio Toledo/Lucas County EPA 319 Health Dept, Lucas County Auditor's Office, Wood County Health Dept	2006 - ?	concept	Sample stream sites and dye test septic systems as needed per county to reduced discharges of unmeasurable amounts of inadequately treated sewage									x				
Pathogens	Wastewater treatment plants	Stream and Septic System Sampling Project (Phase 3)	 Continue to pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) until priority areas are addressed 			concept										x				
Pathogens	Wastewater treatment plants	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, private donations TMACOG, Ohio EPA, public and private schools	August - November	ongoing					х				x	х	x		×	
Pathogens	Wastewater treatment plants	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)			ongoing					х				x	х	x		x	
Pathogens	Wastewater treatment plants	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 		Sept	ongoing					х				x	x	x		x	
Pathogens	Wastewater treatment	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools		Sept	ongoing					Х				x	х	х		х	
Pathogens		Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (berferably)	<u>j</u>	mid-Oct	ongoing					х				x	x	x		x	
Pathogens	Wastewater treatment plants	Student Watershed Watch	6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector)	g	late Oct- early Nov	ongoing					х				x	x	х		x	
Pathogens	Wastewater treatment	Student Watershed Watch	7) Student share data and finding at		mid-Nov	ongoing					Х				x	х	х		х	
Pathogens	plants Wastewater treatment plants	SWW Teacher Training/Creditable Data Certification	Student Summit 1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD	2006	concept									x	x	x		×	
Pathogens	Wastewater treatment plants	SWW Teacher Training/Creditable Data Certification				concept									x	x	x		x	
Pathogens	Wastewater treatment plants	SWW Teacher Training/Creditable Data Certification	training 3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC) certification			concept									x	x	×		x	
Pesticides	All land where	Determine chemical makeup of products				concept				x										
Pesticides	All land where	currently in use. Develop or support educational				concept		5.7.1; Chapter 10.5		x										
Pesticides	pesticides are used All land where	programs for proper use of pesticides. Develop or support new or existing				concept		5.7.1; Chapter 10.5		x		x								
Pesticides		pesticide disposal programs. Determine chemical makeup of products used and those currently in use.	5			concept				x										
Pesticides		Develop or support educational programs for proper use of pesticides.	<u> </u>			concept		5.7.1; Chapter 10.5		x										

											BUI C	olor Co	de:	Imj	paired	Nc	it Impaire	d 📃 l	Unknown		Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI B #1 #					BUI #8			BUI BL #12 #1		
Pesticides	Sites of historical usage (chlorinated pesticides)	Develop or support new or existing pesticide disposal programs.					concept				x		x								
Pesticides	Urban runoff	Determine chemical makeup of products used and those currently in use.					concept				x										
Pesticides	Urban runoff	Develop or support educational programs for proper use of pesticides.					concept		5.7.1; Chapter 10.5		х										
Pesticides	Urban runoff	Develop or support new or existing pesticide disposal programs.					concept				x		x								
Pesticides	Urban/Suburban	Organic Lawn Care Clinic	Less fertilizer in urban/suburban runoff	SWCD/Black Swam Conservancy	SWCD	Annual	ongoing					X		>	ĸ						
Pesticides	Urban/suburban areas	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	1) Develop project	Maumee RAP, TMACOG, local Jurisdictions, US F&WS, ODNR	OEEF, local jurisdictions, US F&WS, ODNR, Maumee RAP, TMACOG	2003-2006	complete	Educate public on sources/pathways of nonpoint and point source pollution; pre- and post-campaign surveys show increased awareness of citizens	5.6.2; 5.7.1; Chapter 10.5	Waterville		x		>	<	x	x	x	x	x x	
Pesticides	Urban/suburban areas	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	2) Release RFP/Hire contractors			9/3/04	complete					Х		>	<	x	х	х	х	< X	
Pesticides	Urban/suburban areas	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	3) Create and distribute TV, cinema and newspaper ads			10/03-4/05	complete					х		>	<	x	x	x	x	< X	
Pesticides	Urban/suburban areas	Give Water a Hand Campaign (Phase 1) (Residential Campaign)				10/03-4/05	complete					X		>	<	x	х	x	x	x x	
Pesticides	Urban/suburban areas	Give Water a Hand Campaign (Phase 1) (Residential Campaign)				12/03 & 5/05	complete					Х		>	ĸ	x	х	х	х	< X	
Pesticides	Urban/suburban areas	Give Water a Hand Campaign (Phase 2) (Business Campaign)		Maumee RAP, TMACOG, local jurisdictions	Maumee RAP, TMACOG, local jurisdictions	2004-2006	in progress	Educate business owners, manager and employees on sources/pathways of nonpoint and point source pollution; show increased awareness of through the # of businesses voluntarily participating in campaign		Waterville		x		,	(x	x	x	x	x x	
Pesticides	Urban/suburban areas	Give Water a Hand Campaign (Phase 2) (Business Campaign)	2) Create and distribute 4 Guidebooks for local businesses			8/05-12/06	in progress					х)	(x	x	х	×	(X	
Pesticides	Urban/suburban areas	Give Water a Hand Campaign (Phase 2) (Business Campaign)	3) Create and distribute print ads (newspaper, magazines, newsletters, bulletins)			10/05-12/06	in progress					x		>	<	x	x	x	×	(x	
Pesticides	Urban/suburban areas	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	 Design watershed signs for 4 streams (Ottawa, Swan, Maumee & Lake Erie) 	Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete			Waterville		x		>	<	x	x	x	×	(X	
Pesticides	Urban/suburban areas	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	2) Place bulk order for local jurisdictions and organizations			Jun-05	complete					х		>	<	x	х	х	х	x x	
Pesticides	Urban/suburban areas	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)				Jul-05	complete					х		>	<	x	х	х	х	x x	
Pesticides	Urban/suburban areas	Give Water a Hand Campaign and educational materials	Distribute info at events, programs and presentations	Lucas, Ottawa and	Maumee RAP; Lucas, Ottawa and and Wood SWCDs	year round	ongoing					x		>	ĸ	x	x	x	×	< X	
Pesticides		are for Rain) (Phase 1)	 Design new Drains are for Rain storm drain stencils and companion door hangers 		Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete	# of supplies ordered; # of households given educational materials; # of purchasing	Chapter 10.5; 5.7.1	Waterville		x		>	x			x		x	
Pesticides	Urban/suburban areas	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	2) Place bulk order for local jurisdictions and organizations			Jun-05	complete					х		>	x			х		х	
Pesticides	Urban/suburban areas	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	 Distribute stencils and door hangers for local jurisdictions and organizations to use 	D		Jul-05	complete					х		>	<			x		x	
Pesticides	Urban/suburban areas	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	 Design new Drains are for Rain storm drain stenciling Field Manuals 	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF; 319 grants; ODNR/CZM grants; foundations; local donations; cities		ongoing	# of stenciling manuals sold	Chapter 10.5; 5.7.1									x		x	
Pesticides	Urban/suburban areas	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	2) Fill orders for local jurisdictions and organizations as placed				ongoing											х		X	
Pesticides	Urban/suburban areas	Storm Drain Stenciling Program (Drains are for Rain) (Phase 3)		Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF, ODNR/CZM grants; foundations, Maumee RAP, TMACOG, local jurisdictions, organizations	April - Oct	ongoing	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating										x		x	

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI #1	BUI B #2 #	UI BUI 3 #4	BUI #5	BUI #6	BUI E #7	3 <mark>UI</mark> BL #8 #1	II BUI #10	BUI #11	BUI B #12 #1	UI BUI 13 #14	Comments & Misc. Info.
Refuse, litter, etc	litter	CYS Day	1) Establish planning team	Maumee RAP; Duck and Otter Creeks Partnership; ORKA; Cities of Oregon, Northwood, Toledo; TMACOG; Lake Erie Commission; various other community partners	Solicit private and public contributions, grants when available	April - Sept (annually)	ongoing	Relative to previous years: 1) tons of garbage and debris removed from area streams; 2) number of volunteers that participate; 3) # of sites/RM cleaned 4) amount of support received for planning and funding the event	Chapter 10.5				<						x			
Refuse, litter, etc	litter	CYS Day	2) Solicit contributions and site captain support			April - Sept						1	(Х			
Refuse, litter, etc Refuse, litter, etc	litter litter	CYS Day CYS Day	3) Distribute promotional materials4) Select waterways and sites to be			June - Sept	ongoing					1	(4	-	Х			
			cleaned			Aug	ongoing						(Х			ļ
Refuse, litter, etc Refuse, litter, etc	litter litter	CYS Day CYS Day	5) Conduct site captain training6) Hold event and appreciation picnic			Sept Sept	ongoing ongoing						((XX			<u> </u>
Sediment/Siltation	Construction	Evaluate existing sediment data regarding PCB and Hg to determine if there is a link with fish tissue concentrations	Develop a project plan to identify additional partners and funding sources	Ohio EPA, Bowling Green State University (BGSU)			concept				×		x									
Sediment/Siltation Sediment/Siltation	Construction Construction	Evaluate land use Regional Storm Water Standards Manua (Phase 1)	al 1) Determine contents for manual	RAP Urban Runoff Action Group, MRRSWC	Lake Erie Protection Fund	2002	concept	Implement a regional/watershed management program: a) control increases in runoff rates, b) prevent losses in infiltration, c) prevent runoff pollution		all of AOC			(
Sediment/Siltation	Construction	Regional Storm Water Standards Manua	al 2) Write manual				complete						(
Sediment/Siltation	Construction	(Phase 1) Regional Storm Water Standards Manua (Phase 1)	al 3) Identify alternative development designs/layouts that protect water quality	,			complete					:	<									
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 1)	4) Encourage local jurisdications to adop	t			complete					3	(
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 2)	manual as their standards al 1) Review existing manual	Maumee RAP Urban Runoff Action Group SWC	GLC	2005-2007	in progress	Completion and distribution of revised manual	Chapter 10.5; 5.7.1	all of watershed		:	(
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 2)	 2) Update chapters with new content and regulations 	1		2005-2006	in progress					:	(
Sediment/Siltation	Construction	(Phase 2) (Phase 2)	a) Conduct workshops and site visits for consultants, developers, contractors on stormwater plan preparation and post- construction BMPs			2006-2007	in progress	50 percent of consultants, developers, contractors that work in the area participate				:	<									
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 3)	Maintain and update manual as needed				ongoing					1	<									
Sediment/Siltation	Construction	Require BMPs on smaller developments					concept					1	(х							
Sediment/Siltation	Cropland	Develop watershed management plan					concept						(
Sediment/Siltation	Cropland	Educate watershed landowners on water quality impacts of erosion and benefits o riparian habitat protection or restoration.					concept		Chapter 10.5; 5.7.1			1	¢									
Sediment/Siltation	Cropland	Evaluate agricultural land use in watershed (including upstream sources)		RAP Ag Runoff Group	USACE, Section 319		concept		Chapter 11			1	<									
Sediment/Siltation	Cropland	Evaluate existing sediment data regarding PCB and Hg to determine if there is a link with fish tissue concentrations	Develop a project plan to identify additional partners and funding sources	Ohio EPA, Bowling Green State University (BGSU)			concept				×		x									
Sediment/Siltation	Cropland	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed					concept		Chapter 11			:	¢		x							
Sediment/Siltation	Cropland	Incentive programs for implementation o agricultural BMPs such as filter strips & conservation tillage, fertilizer/pesticide mgmt.	f Continue to promote and support the implementation of these programs	Ohio Lake Erie Commission, USDA NRCS, Lucas SWCE	Ohio Lake Erie - Commission, USDA - D NRCS, Lucas SWCD	-	concept		3.3.1	all of watershed		:	¢		x							
Sediment/Siltation	Cropland	Inventory watershed for amount of acreage in cropland	1) Develop inventory methodology utilizing existing AERIS system and othe available resources	Maumee RAP Ag r Runoff Action Group Lucas SWCD, ODNR - SWC	U.S. ACE, Section ,319, NatureWorks (ODNR)		concept		3.3.1						×							
Sediment/Siltation	Cropland	Inventory watershed for amount of acreage in cropland	2) Convert electronic data into GIS map files				concept								x							
Sediment/Siltation	Cropland	Inventory watershed for amount of acreage in cropland	3) Integrate with AERIS data				concept								x							í
Sediment/Siltation	Cropland	Inventory watershed for amount of acreage in cropland	4) Determine impact on watershed and possible projects to reduce or eliminate				concept								x							
Sediment/Siltation	Cropland	Promote buffer zones and no till farming	1	SWCDs,	1			t	3.3.1													

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed					II BUI			BUI BUI #11 #12			Comments & Misc. Info.
Sediment/Siltation	Cropland	Reduce the impact of erosion of water quality	Educate watershed landowners of their impact on water quality and of the benefits of riparian habitat protection or restoration	Maumee RAP Ag Runoff Action Group, SWCDs, ODNR - SWC, Ohio EPA 319	Ohio EPA 319		concept		Chapter 10.5					×							
Sediment/Siltation	land clearing and infilling for development	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	 Indentify and evaluate existing wetlands using remote sensing 	University of Toledo, Maumee RAP, TMACOG, Lucas Co.	OEPA 319	1999-2003	complete			portion of watershed in Lucas Co	5	x		x						x	
Sediment/Siltation	land clearing and infilling	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	2) create GIS map of wetlands and potential wetlands				complete					x		x						х	
Sediment/Siltation	land clearing and infilling	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	3) Identify restoration needs				complete					х		x						x	
Sediment/Siltation	land clearing and infilling for development		 Indentify and evaluate existing wetlands using remote sensing 	Maumee RAP, TMACOG, Wood Co, University of Toledo	LEPF, USEPA GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	planning			portion of watershed in Wood Co		x		x						x	
Sediment/Siltation	land clearing and infilling	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	2) create GIS map of wetlands and potential wetlands				planning					х		x						x	
Sediment/Siltation	land clearing and infilling	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	 3) Identify restoration needs 				planning					х		×						x	
Sediment/Siltation	Other land disturbing activities	Evaluate existing sediment data regarding PCB and Hg to determine if there is a link with fish tissue concentrations	Develop a project plan to identify additional partners and funding sources	Ohio EPA, Bowling Green State University (BGSU)			concept				x		x								
Sediment/Siltation	Pasture	Cost share to install all-weather paddocks for horse owners	Install demonstration paddock in Lucas County	ODNR-DSWC, SWCD, NRCS	NRCS, ODNR- SWCD		concept				х	х		x		x	x	x			
Sediment/Siltation	Pasture	Develop potential project list based on Inventory Project Results					concept							x							
Sediment/Siltation	Pasture	Develop watershed management plan					concept					Х									·
Sediment/Siltation	Pasture	Educate watershed landowners on water quality impacts of erosion and benefits of riparian habitat protection or restoration.	r f				concept		Chapter 10.5; 5.7.1			x									
Sediment/Siltation	Pasture	Evaluate agricultural land use in watershed (including upstream sources)					concept		Chapter 11			x									
Sediment/Siltation	Pasture	Evaluate existing sediment data regarding PCB and Hg to determine if there is a link with fish tissue concentrations	Develop a project plan to identify additional partners and funding sources	Ohio EPA, Bowling Green State University (BGSU)			concept				x		x								
Sediment/Siltation	Pasture	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed					concept		Chapter 11			x		×							
Sediment/Siltation	Pasture		Continue to promote and support the implementation of these programs	Ohio Lake Erie Commission, USDA - NRCS, Lucas SWCD	Ohio Lake Erie Commission, USDA - NRCS, Lucas SWCD		concept		3.3.1	all of watershed		x		x							
Sediment/Siltation	Pasture	Inventory watershed for amount of acreage in pasture	1) Develop inventory methodology utilizing existing AERIS system and othe available resources		U.S. ACE, Section 319, NatureWorks (ODNR)		concept		3.3.1; 3.3.6; Chapter 11					x							
Sediment/Siltation	Pasture	Inventory watershed for amount of acreage in pasture	2) Convert electronic data into GIS map files				concept							x							
Sediment/Siltation	Pasture	Inventory watershed for amount of acreage in pasture	3) Integrate with AERIS data				concept							x							
Sediment/Siltation	Pasture	Inventory watershed for amount of acreage in pasture	4) Determine impact on watershed and possible projects to reduce or eliminate				concept							x							
Sediment/Siltation	Pasture	Promote buffer zones and no till farming		SWCDs,			concept											x			
Sediment/Siltation	Pasture	Reduce the impact of erosion of water quality	Educate watershed landowners of their impact on water quality and of the benefits of riparian habitat protection or restoration				concept		Chapter 10.5					x							
Sediment/Siltation	Roads	Evaluate existing sediment data regarding PCB and Hg to determine if there is a link with fish tissue concentrations	Develop a project plan to identify additional partners and funding sources	Ohio EPA, Bowling Green State University (BGSU)			concept				×		x								
Sediment/Siltation Sediment/Siltation	Stream banks Stream banks	Collect additional data as needed Develop potential project list					concept concept					X		X							
Sediment/Siltation	Stream banks	Identify additional data needed					concept		1			Х		X							
Sediment/Siltation Sediment/Siltation	Stream banks Streambanks	Streambank tree planting Evaluate existing sediment data	Develop a project plan to identify	Ohio EPA, Bowling			concept		7.6.1; 8.3.3			X		X							
		regarding PCB and Hg to determine if there is a link with fish tissue concentrations	additional partners and funding sources	Green State University (BGSU)			concept				x		x								
Sediment/Siltation	Streambanks	Promote buffer zones and no till farming		SWCDs			concept											x			

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Indicator/Environmental	Coastal Management Measure	HUC/Stream Segment Addressed	BUI #1	BUI B #2 #	UI BU 3 #4	BUI	BUI	BUI	BUI BU #8 #9	BUI			BUI #14	Comments & Misc. Info.
Sediment/Siltation	Urban/Suburban	Pond Clinic	Educate landowners on proper application of herbicides and alternate approaches to pond management; proper construction techniques including storm water BMPs.	OSU Extension Sea Grant, Fulton OSU Extension, Progressive Fisherman's Club		Annual	ongoing						< x	x	x			х	x			
Toxic Substances	atmospheric deposition	Educate public on sources/pathways					concept				x											
Toxic Substances	atmospheric deposition	Evaluate existing data for the location of "hot spots".					concept				x											
Toxic Substances	atmospheric deposition						concept				x											
Toxic Substances	atmospheric deposition	Identify vulnerable areas.		Bowling Green State University	Grant?		concept				x											
Toxic Substances	atmospheric deposition	Implement a regional/watershed management program	1) control increases in runoff rates, 2) prevent losses in infiltration, 3) prevent runoff pollution		Lake Erie Protection fund Local Jurisdiction.		concept				x											
Toxic Substances	atmospheric deposition	Implement permit/inspection program to encourage industries to minimize pollutant exposure.					concept				x											
Toxic Substances	atmospheric deposition	Provide/identify BMPs (may be based or a performance criteria) to prevent/remove pollutants.	1				concept				×											
Toxic Substances Toxic Substances	Industrial discharges Industrial discharges	Identify point sources Implement permit/inspection program to		Ohio EPA Ohio EPA Permitees	Ohio EPA Ohio EPA		concept						<			— – –	_			—		
Toxic Substances	Industrial Discharges	encourage industries to minimize pollutant exposure. Industrial Waste Minimization Plan	Implement program to reduce industrial	City of Toledo	City of Toledo	ongoing	concept				X											
			waste flow during CSO events			2002-2007	in progress					X	< X	x	x	×					×	
Toxic Substances	Industrial discharges	Maintain compliance with NPDES permits		Ohio EPA Permitees	Ohio EPA	ongoing	concept						(
Toxic Substances	Industrial discharges	Provide/identify BMPs (may be based or a performance criteria) to prevent/remove pollutants.		Ohio EPA	Ohio EPA		concept				×											
Toxic substances	Industrial discharges (current or old)	NPDES permit GIS inventory (Phase 1)	1) Collect GIS coordinates for all current NPDES permits	Ohio EPA DSW	Ohio EPA	2005-07	in progress	Coodinates for all permits collected			х		< X		х	x		х	x >	x x	x	
Toxic substances	Industrial discharges (current or old)	NPDES permit GIS inventory (Phase 1)	2) Convert electronic data into GIS map				in progress				х		x x		х	x		х	х	x x	x	
Toxic substances	Industrial discharges (current or old)	NPDES permit GIS inventory (Phase 2)	Intergrate with AERIS data	TMACOG, Lucas County Auditor's	Maumee RAP		planning				x		< x		x	x		x	x ;	x x	×	
Toxic Substances	Urban runoff	Educate public on sources/pathways					concept				X		<									
Toxic Substances	Urban Runoff	Evaluate capacity/condition of existing systems; analysis of storm water flow, thermal impacts, runoff quality, erosion and sedimentation, and groundwater recharge.					concept					:	K									
Toxic Substances	Urban runoff	Evaluate existing data for the location of "hot spots".					concept						Х									
Toxic Substances	Urban runoff	Evaluate existing data for the location of "hot spots".					concept				x		x									
Toxic Substances	Urban Runoff	Evaluate impact of Phase II Stormwater regulations					concept						<									
Toxic Substances	Urban Runoff	Evaluate upstream contributions					concept						<									
Toxic Substances Toxic Substances	Urban Runoff Urban runoff	Identify illicit connections Identify sources not addressed by					concept concept				x		< <									
Toxic Substances	Urban runoff	existing regulations (i.e. commercial) Implement a regional/watershed management program	1) control increases in runoff rates, 2) prevent losses in infiltration, 3) prevent runoff pollution	Toledo & other local governments, RAP Urban Runoff Action Group	Lake Erie Protection fund Local Jurisdiction.		concept				x											
Toxic Substances	Urban runoff	Implement permit/inspection program to encourage industries to minimize pollutant exposure.		Gloup			concept				×	:	<									
Toxic Substances	Urban Runoff	Performance bond/tie compliance into					concept						<									
Toxic Substances	Urban Runoff	building permits. Provide venues for proper disposal of					concept		5.7.1				<									
Toxic Substances	Urban runoff	wastes Provide/identify BMPs (may be based or a performance criteria) to prevent/remove pollutants.		<u> </u>			concept				x		<									
Toxic substances	Urban Runoff	Stormwater Coalition (fka. Stormwater Policy Board, Maumee River Regional Stormwater Coalition)		Toledo & other local governments, Maumee RAP Urban Runoff Action Group			complete				x		<		x		x	x	x	x	x	
Toxic substances	Urban Runoff	Stormwater Coalition (fka. Stormwater Policy Board, Maumee River Regional Stormwater Coalition)	2) Evaluate the feasibility of establishing a regional stormwater utility		Lake Erie Protection Fund, local jurisdictions		complete				х		<		x		x	х	х	х	x	
Toxic substances	Urban Runoff	Stormwater Coalition (fka. Stormwater Policy Board, Maumee River Regional Stormwater Coalition)	3) Develop framework and steps to establishing a regional utility		Lake Erie Protection Fund, local jurisdictions		complete				х		<		x		x	х	х	x	x	

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s) Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI BI #1 #	UI BUI 2 #3	BUI #4	BUI BL #5 #6	JI BUI 5 #7	BUI B #8 #	UI BUI 9 #10	BUI #11	BUI BU #12 #13	BUI #14	Comments & Misc. Info.
Toxic substances	Urban Runoff	Stormwater Coalition (fka. Stormwater Policy Board, Maumee River Regional Stormwater Coalition)	4) Continue to collaborate on regional projects		ongoing				х	х		х		х	х	х	x	х	
Toxic Substances	Wastewater treatment plants	Educate public on sources/pathways			concept				х										
Toxic Substances	Wastewater treatment plants	Evaluate existing data for the location of "hot spots".			concept				х		х								
Toxic Substances		Identify sources not addressed by existing regulations (i.e. commercial)			concept				х										
Toxic Substances	Wastewater treatment plants	Implement a regional/watershed management program	1) control increases in runoff rates, 2) prevent losses in infiltration, 3) prevent runoff pollution	Toledo & other local Lake Erie Protection governments, RAP fund Local Urban Runoff Action Jurisdiction. Group	concept				x										
Toxic Substances	Wastewater treatment plants	Implement permit/inspection program to encourage industries to minimize pollutant exposure.			concept				x										
Toxic Substances		Provide/identify BMPs (may be based or a performance criteria) to prevent/remove pollutants.	n		concept				x										

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI #1	BUI B #2 #	UI BU 3 #4	I BUI	BUI	BUI B		BUI		BUI BUI 12 #13	BUI #14	Comments & Misc. Info.
All	All	Conduct a TMDL	 Design watershed survey, 2) Collect water quality data, 3) Assess waterbodies, 4) Identify target conditions, 5) Develop restoration projects,6) Select restoration scenerio, 7) Prepare implementation plan, 8) Submit TMDL report, 9) Implement TMDL (inside Ohio EPA), 10) Implement TMDL (outside OEPA), 11) Annual validation activities, and 12) Validate water quality status 	OEPA	OEPA	2006-2008	planning				x	x	< x	x	x)	(x	X	×	X	Source: OEPA
All	All	GIS Water Quality database (Phase 1)	1) Create relational database from OEPA water resources inventory data for Maumee AOC	Universitry of Toledo, Maumee RAP	US EPA GLNPO	2004-2005	complete				x	x	x x	x	x	;	<	x	x	x	x	
All	All	GIS Water Quality database (Phase 1)	2) Export LE Tribs data to a GIS format				complete				х	X	x x	х	х)	<	х	x	x	х	
All	All	GIS Water Quality database (Phase 1)	3) Publish relational database and GIS				complete				x	X	x x	х	x)	<	x	x	x	x	
All	All	GIS Water Quality database (Phase 2)	online Expand GIS to entire AOC				in progress				X	X	x x	х	X)	(X	X	x	X	
flow alterations	Channelization	Stream restoration demonstration projec		Maumee RAP Rural Runoff Action Group, Wood SWCD		2005-2010	concept						ĸ		x						x	
flow alterations	Channelization	Stream restoration demonstration projec	t 2) assess possible stream restoration projects				concept						ĸ		x						x	
flow alterations	Channelization	Stream restoration demonstration project					concept						<		x						x	
flow alterations	Channelization	Stream restoration demonstration projec	t 4) conduct landowner contact				concept						<		x						x	
flow alterations	Channelization	Stream restoration demonstration projec	t 5) conduct public education				concept						<u> </u>		x						×	
flow alterations	Channelization	Stream restoration demonstration projec	t 5) complete project										`	-	×	_	_			_	×	
flow alterations	Channelization	Stream restoration demonstration projec					concept						`		×						×	
							concept						K		X						X	
habitat modifications	Changing Land Uses	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	 Indentify and evaluate existing wetlands using remote sensing 	Maumee RAP, TMACOG, Wood Co, University of Toledo		2005-2006	planning			portion of watershed in Wood Co			K		x						x	
habitat modifications	Changing Land Uses	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	e 2) create GIS map of wetlands and potential wetlands				planning						ĸ		x						x	
habitat modifications	Changing Land Uses	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	3) Identify restoration needs				planning						ĸ		х						x	
habitat modifications	streambank modifications	Stream restoration demonstration projec		Maumee RAP Rural Runoff Action Group, Wood SWCD		2005-2010	concept						ĸ		x						x	
habitat modifications	streambank modifications	Stream restoration demonstration projec	t 2) assess possible stream restoration projects				concept						ĸ		х						x	
habitat modifications	streambank modifications	Stream restoration demonstration projec					concept						<		x						x	
habitat modifications	streambank	Stream restoration demonstration project	t 4) conduct landowner contact				concept						<		x						х	
habitat modifications	modifications streambank	Stream restoration demonstration projec	t 5) conduct public education				concept						<u> </u>		×	_	_				×	
habitat modifications		Stream restoration demonstration projec	t 5) complete project												Y						×	
habitat modifications	modifications streambank	Stream restoration demonstration projec	t 6) assess and monitor results				concept						`									
Nutrients	modifications Cropland	Investigate current phosphorus data					concept						`		×)					X	
nutrients	Cropland or pasture where manure is spread	Educate Horse owners on proper		LSWCD,WSWCD Ohio Livestock Coalition, Farm Bureau	Ohio Livestock Coalition, Farm Bureau, ODRN- DSWC	2006	concept				x		<		x	,	<	x	x			
Nutrients	Erosion and runoff from fertilized fields	Expand Student Watershed Watch Program into additional schools		Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	year round	ongoing															
Nutrients	Erosion and runoff from fertilized fields	Investigate current phosphorus data					concept)	(
Nutrients		Student Watershed Watch		Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	August - November	ongoing						ĸ)	<	x	x		×	
Nutrients	fertilized fields	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)				ongoing						ĸ)	<	×	х		x	
Nutrients	Erosion and runoff from fertilized fields	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 			Sept	ongoing						K)	¢	×	х		х	

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI BU #1 #2	I BUI #3	BUI BU #4 #5	BUI #6	BUI E #7		BUI #10	BUI E #11 #	BUI BUI 12 #13	BUI #14	Comments & Misc. Info.
Nutrients	Erosion and runoff from fertilized fields	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools			Sept	ongoing					х				x	х	х		х	
Nutrients	Erosion and runoff from fertilized fields	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)	ł		mid-Oct	ongoing					х				x	х	х		х	
Nutrients	Erosion and runoff from fertilized fields	Student Watershed Watch	6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector)	Ł		late Oct- early Nov	ongoing					х				x	х	х		x	
Nutrients	Erosion and runoff from fertilized fields	Student Watershed Watch	7) Student share data and finding at Student Summit			mid-Nov	ongoing					х				x	х	х		Х	
Nutrients	Erosion and runoff from fertilized fields	SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept									x	x	x		x	
Nutrients	Erosion and runoff from fertilized fields	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training				concept									x	х	x		x	
Nutrients	Erosion and runoff from fertilized fields	SWW Teacher Training/Creditable Data Certification	3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC) certification				concept									x	x	x		x	
Nutrients	Erosion and runoff from fertilized fields	Tillage Transect	Drive the transect points and mark in GPS and note land use.	USDA-NRCS, ODNR-SWCD, LSWCD	NRCS, ODNR- SWCD	2006-07	concept	Ability to calculate no-till acres and developed acres.			x			x						x	
Nutrients Nutrients	Industrial discharges Pasture	Investigate current phosphorus data Investigate current phosphorus data					concept concept									X X					
Nutrients Nutrients	Urban runoff Wastewater treatment	Investigate current phosphorus data Investigate current phosphorus data					concept									X					
	plants		1) Design new Drains are far Dein storm	Moumoo DAD	Mourae DAD		concept	# of ourpeling ordereds # of	Chapter 10.5: 5.7.1							×	_				
Organic Enrichment	Urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	1) Design new Drains are for Rain storm drain stencils and companion door hangers	Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete	# of supplies ordered; # of households given educational materials; # of purchasing	Chapter 10.5; 5.7.1			x		x				х		x	
Organic Enrichment	Urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	2) Place bulk order for local jurisdictions and organizations		- U	Jun-05	complete					х		х				х		х	
Organic Enrichment	Urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)		D		Jul-05	complete					x		x				х		x	
Organic Enrichment	Urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	1) Design new Drains are for Rain storm drain stenciling Field Manuals	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions,	OEEF; 319 grants; ODNR/CZM grants; foundations; local donations; cities		ongoing	# of stenciling manuals sold	Chapter 10.5; 5.7.1									x		x	
Organic Enrichment	Urban runoff	Storm Drain Stenciling Program (Drains	2) Fill orders for local jurisdictions and	organizations			ongoing											х		×	
Organic Enrichment	Urban runoff	are for Rain) (Phase 2) Storm Drain Stenciling Program (Drains are for Rain) (Phase 3)	organizations as placed Conduct public Storm Drain Stenciling events	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF, ODNR/CZM grants; foundations, Maumee RAP, TMACOG, local jurisdictions, organizations	April - Oct	ongoing	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating										x		x	
Pathogens	Human & animal excreta	Educate Horse owners on proper disposal of manure	Implement Equine Environmental Assurance and Liability Program for Fulton, Lucas and Wood Counties	LSWCD,WSWCD Ohio Livestock Coalition, Farm Bureau	Ohio Livestock Coalition, Farm Bureau, ODRN- DSWC	2006	concept				x	x		x		x	x	x			
Pathogens	Septic systems	Expand Student Watershed Watch Program into additional schools		Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	year round	ongoing					х		х		x		х		x	
Pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	 Scan paper copies to create electronic files of existing septic systems 	TMACOG, Wood County Health Dept, Lucas County Auditor's Office, Northwest Regional Sewer District	Auditor's Office, Wood County Health	2005-2007	in progress		5.6.2;	all of wathershed		x		x		x		x		x	
Pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	2) Convert electronic data into GIS map files				in progress					x		Х		х		х		х	
Pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	3) Intergrate with AERIS data				in progress					x		х		x		х		x	
Pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	4) Train Health Dept personnel to input data and use GIS system				in progress					X		х		x		х		x	
Pathogens	Septic systems	Review existing CSO data		TMACOC			concept	Sample E0 stream sites and the	E 6 2: Chanter 44							X					
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	1) Identify stream sampling locations	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept		2004	complete	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage				x		x		x		x		x	
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	2) Identify septic system dye testing locations				complete					x		х		x		х		х	
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	3) Conduct stream sampling and dye testing				complete					х		х		х		х		х	
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	 Prioritize areas for enforcement based on testing results 				complete					х		х		х		х		х	

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Causes of Impairment (Pollutant or Stressor)		Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed							UI BUI #9 #10				Comments & Misc. Info.
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	5) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems			complete					x		x		x		x		×	
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	1) Conduct additional stream sampling and dye testing	TMACOG, WRDA 401, Ohio Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept	2005	concept	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage				x		x		x		x		×	
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	2) Modify priority areas (if necessary)			concept					х		x		x		×		×	
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	3) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available)			concept					x		x		x		×		×	
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 3)	1) Continue to sample and dye test to identify problem areas	TMACOG, WRDA 401, Ohio Toledo/Lucas County EPA 319 Health Dept, Lucas County Auditor's Office, Wood County Health Dept	2006 - ?	concept	Sample stream sites and dye test septic systems as needed per county to reduced discharges of unmeasurable amounts of inadequately treated sewage				x		x		×		×		×	
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 3)	2) Continue to pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) until priority areas are addressed			concept					x		x		x		x		x	
Pathogens	Septic systems	Student Watershed Watch	 Enlist teacher/schools to participate 	Maumee RAP, private donations TMACOG, Ohio EPA, public and private schools	August - November	ongoing					x				x	x	x		×	
Pathogens	Septic systems	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data			ongoing					х				x	×	х		х	
Pathogens	Septic systems	Student Watershed Watch	Certification) 3) Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data		Sept	ongoing					x				x	х	x		x	
Pathogens	Septic systems	Student Watershed Watch	Collector) 4) Supplies are distributed to participating teacher/schools		Sept	ongoing					Х				x	X	X		x	
Pathogens	Septic systems	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)	3	mid-Oct	ongoing					х				x	х	x		×	
Pathogens	Septic systems	Student Watershed Watch	6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualifier Data Collector)	e e e e e e e e e e e e e e e e e e e	late Oct- early Nov	ongoing					х				x	x	x		×	
Pathogens	Septic systems	Student Watershed Watch	7) Student share data and finding at Student Summit		mid-Nov	ongoing					х				x	X	х		х	
Pathogens	Septic systems	SWW Teacher Training/Creditable Data Certification		Maumee RAP, Ohio EPA, Lucas SWCD	2006	concept									x	x	x		x	
Pathogens	Septic systems	SWW Teacher Training/Creditable Data				concept							+-		X	X	x		×	
Pathogens	Septic systems	Certification SWW Teacher Training/Creditable Data Certification	training 3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC) certification			concept									x	x	x		×	
Pathogens	Urban runoff	Review existing CSO data				concept										x				
Pathogens	Wastewater treatment plants	Review existing CSO data				concept									2	<				
Pathogens	Wastewater treatment plants	Stream and Septic System Sampling Project (Phase 1)	1) Identify stream sampling locations	TMACOG, US ACE [WRDA Toledo/Lucas County sec. 401] Health Dept, Lucas County Auditor's Office, Wood County Health Dept	2004	complete	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage				x		x		×		x		×	
Pathogens	Wastewater treatment	Stream and Septic System Sampling Project (Phase 1)	2) Identify septic system dye testing		1	complete					х		x		х		х		х	
Pathogens	Wastewater treatment plants	Stream and Septic System Sampling Project (Phase 1)	3) Conduct stream sampling and dye testing			complete					х		х		х		х		х	
Pathogens	Wastewater treatment plants	Stream and Septic System Sampling Project (Phase 1)	 Prioritize areas for enforcement based on testing results 	ł		complete					х		х		х		х		х	
Pathogens		Stream and Septic System Sampling Project (Phase 1)	5) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems			complete					х		х		х		x		x	
Pathogens	Wastewater treatment plants	Stream and Septic System Sampling Project (Phase 2)	1) Conduct additional stream sampling and dye testing	TMACOG, WRDA 401, Ohio Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept	2005	concept	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage				x		x		x		x		x	

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI #1	BUI B #2 #	UI BUI 3 #4	BUI #5	BUI E #6	BUI BU #7 #8	BUI #9	BUI #10	BUI #	BUI BU #12 #1:	I BUI 3 #14	Comments & Misc. Info.
Pathogens	Wastewater treatment plants	Stream and Septic System Sampling Project (Phase 2)	2) Modify priority areas (if necessary)				concept						ĸ		x	x			х		X	
Pathogens	Wastewater treatment plants	Stream and Septic System Sampling Project (Phase 2)	 Pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) 				concept					:	ĸ		x	x			x		x	
Pathogens	Wastewater treatment plants	Stream and Septic System Sampling Project (Phase 3)	1) Continue to sample and dye test to identify problem areas	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept	WRDA 401, Ohio /EPA 319	2006 - ?	concept	Sample stream sites and dye test septic systems as needed per county to reduced discharges of unmeasurable amounts of inadequately treated sewage				:	ĸ		x	×			x		×	
Pathogens	Wastewater treatment plants	Stream and Septic System Sampling Project (Phase 3)	2) Continue to pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) until priority areas are addressed				concept					:	ĸ		x	x			x		×	
Pathogens	Wastewater treatment plants	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	August - November	ongoing					1	ĸ			x		x	х		x	
Pathogens	Wastewater treatment plants	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)				ongoing					:	ĸ			×		x	х		x	
Pathogens	Wastewater treatment plants	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 			Sept	ongoing					:	ĸ			×		x	х		×	
Pathogens	Wastewater treatment	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools			Sept	ongoing					:	<			x		х	х		x	
Pathogens	Wastewater treatment plants	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)			mid-Oct	ongoing					:	ĸ			x		х	х		x	
Pathogens	Wastewater treatment plants	Student Watershed Watch	6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector)			late Oct- early Nov	ongoing					:	ĸ			x		х	х		x	
Pathogens	Wastewater treatment	Student Watershed Watch	7) Student share data and finding at Student Summit			mid-Nov	ongoing						K			x		Х	Х		x	
Pathogens	Wastewater treatment plants	SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept									x		x	x		×	
Pathogens	Wastewater treatment plants	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training				concept									x		×	х		x	
Pathogens	Wastewater treatment plants		3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC) certification				concept									×		x	x		×	
Pesticides	All land where pesticides are used	Determine chemical makeup of products currently in use.					concept				x											
Pesticides	All land where pesticides are used	Develop or support educational programs for proper use of pesticides.					concept		5.7.1; Chapter 10.5		x											
Pesticides	All land where pesticides are used	Develop or support new or existing pesticide disposal programs.					concept		5.7.1; Chapter 10.5		x		x									
Pesticides		 Determine chemical makeup of past products and those in use. 					concept				x											
Pesticides	Sites of historical usage	 Develop or support new or existing pesticide disposal programs. 					concept				x		x									
Pesticides	Urban runoff	Determine chemical makeup of products currently in use.					concept				x											
Pesticides	Urban runoff	Develop or support educational programs for proper use of pesticides.				1	concept		5.7.1; Chapter 10.5		x											
Pesticides	Urban runoff	Develop or support new or existing pesticide disposal programs.				† †	concept				х		x									
Pesticides	Urban/Suburban	Organic Lawn Care Clinic	Less fertilizer in urban/suburban runoff	SWCD/Black Swamp Conservancy	SWCD	Annual	ongoing					:	ĸ		x							
Pesticides	Urban/suburban areas	Give Water a Hand Campaign and educational materials	Distribute info at events, programs and presentations	Maumee RAP; Lucas, Ottawa and and Wood SWCDs	Maumee RAP; Lucas, Ottawa and and Wood SWCDs	year round	ongoing									T						
Pesticides	Urban/suburban areas	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	1) Design new Drains are for Rain storm drain stencils and companion door hangers	Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete	# of supplies ordered; # of households given educational materials; # of purchasing	Chapter 10.5; 5.7.1			;	ĸ		x				x		x	
Pesticides	Urban/suburban areas	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	2) Place bulk order for local jurisdictions and organizations	· ·		Jun-05	complete					:	ĸ		х				х		х	
Pesticides	Urban/suburban areas	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				Jul-05	complete					:	ĸ		х				х		x	

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI		JI BUI		UI BUI	BUI I	BUI BUI #9 #10	I BUI	BUI BI	UI BUI	Comments &
Pesticides	Urban/suburban areas	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	 Design new Drains are for Rain storm drain stenciling Field Manuals 	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF; 319 grants; ODNR/CZM grants; foundations; local donations; cities		ongoing	# of stenciling manuals sold	Chapter 10.5; 5.7.1									x		x	
Pesticides	Urban/suburban areas	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	2) Fill orders for local jurisdictions and organizations as placed	organizatorio			ongoing											х		x	
Pesticides	Urban/suburban areas		Conduct public Storm Drain Stenciling events	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF, ODNR/CZM grants; foundations, Maumee RAP, TMACOG, local jurisdictions, organizations	April - Oct	ongoing	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating										x		x	
Refuse, litter, etc	litter	CYS Day	1) Establish planning team	Maumee RAP; Duck and Otter Creeks Partnership; ORKA; Cities of Oregon, Northwood, Toledo; TMACOG; Lake Erie Commission; various other community partners	Solicit private and public contributions, grants when available	April - Sept (annually)	ongoing	Relative to previous years: 1) tons of garbage and debris removed from area streams; 2) number of volunteers that participate; 3) # of sites/RM cleaned 4) amount of support received for planning and funding the event	Chapter 10.5			>						x			
Refuse, litter, etc	litter	CYS Day	2) Solicit contributions and site captain support			April - Sept						×	:					x		╉	
Refuse, litter, etc	litter	CYS Day	3) Distribute promotional materials			June - Sept	ongoing					×						Х			
Refuse, litter, etc	litter	CYS Day	 Select waterways and sites to be cleaned 			Aug	ongoing					×						х			1
Refuse, litter, etc	litter	CYS Day	5) Conduct site captain training			Sept	ongoing					×						X			l
Refuse, litter, etc Sediment/Siltation	Construction	CYS Day Evaluate existing sediment data regarding PCB and Hg to determine if there is a link with fish tissue concentrations	 6) Hold event and appreciation picnic Develop a project plan to identify additional partners and funding sources 	Ohio EPA, Bowling Green State University (BGSU)		Sept	ongoing concept				x		x								
Sediment/Siltation	Construction	Evaluate land use					concept					>						4			ļ
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 1)		Runoff Action Group	Lake Erie Protection	2002	complete	Implement a regional/watershed management program: a) control increases in runoff rates, b) prevent losses in infiltration, c) prevent runoff pollution		l of AOC		>									
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 1)	2) Write manual				complete					×	:								
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 1)	 Identify alternative development designs/layouts that protect water quality 	,			complete					×									
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 1)	 Encourage local jurisdications to adop manual as their standards 	t			complete					×									
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 2)		Maumee RAP Urban Runoff Action Group SWC		2005-2007	in progress	Completion and distribution of revised manual	Chapter 10.5; 5.7.1 al	l of watershed		>	:					\square			
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 2)	 Update chapters with new content and regulations 			2005-2006	in progress					>	:								
Sediment/Siltation	Construction		 Conduct workshops and site visits for consultants, developers, contractors on stormwater plan preparation and post- construction BMPs 			2006-2007	in progress	50 percent of consultants, developers, contractors that work in the area participate				×									
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 3)	Maintain and update manual as needed				ongoing					×									
Sediment/Siltation	Construction	Require BMPs on smaller developments					concept					×		×	(
Sediment/Siltation	Cropland	Develop potential project list based on Inventory Project Results					concept														
Sediment/Siltation	Cropland	Develop watershed management plan					concept		Chapter 10 5: 5 7 1			X						\blacksquare			Í
Sediment/Siltation	Cropland	Educate watershed landowners on water quality impacts of erosion and benefits of riparian habitat protection or restoration.					concept		Chapter 10.5; 5.7.1			×									
Sediment/Siltation	Cropland	Evaluate agricultural land use in watershed (including upstream sources)		Maumee RAP Ag Runoff Group	USACE, Section 319		concept		Chapter 11			×									
	Cropland	Evaluate existing sediment data regarding PCB and Hg to determine if there is a link with fish tissue concentrations	Develop a project plan to identify additional partners and funding sources	Ohio EPA, Bowling Green State University (BGSU)			concept				x		x								
Sediment/Siltation	Cropland	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed					concept		Chapter 11			>		×	(

Grassy Creek Watershed Projects Table

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Causes of Impairment (Pollutant or Stressor)	t) Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed								I BUI 0 #11			Comments & Misc. Info.
Sediment/Siltation	Cropland	Incentive programs for implementation of agricultural BMPs such as filter strips & conservation tillage, fertilizer/pesticide mgmt.	Continue to promote and support the implementation of these programs	Ohio Lake Erie Commission, USDA NRCS, Wood SWCDs	Ohio Lake Erie - Commission, USDA - NRCS, Wood SWCDs		concept		3.3.1	all of watershed		x		x							
Sediment/Siltation	Cropland	Inventory watershed for amount of acreage in cropland	1) Develop inventory methodology utilizing existing AERIS system and othe available resources	Maumee RAP Ag er Runoff Action Group, Wood SWCD, ODNR - SWC	U.S. ACE, Section 319, NatureWorks (ODNR)		concept		3.3.1					×							
Sediment/Siltation	Cropland	Inventory watershed for amount of acreage in cropland	2) Convert electronic data into GIS map files				concept							x							
Sediment/Siltation	Cropland	Inventory watershed for amount of acreage in cropland	3) Integrate with AERIS data				concept							x							
Sediment/Siltation	Cropland	Inventory watershed for amount of acreage in cropland	4) Determine impact on watershed and possible projects to reduce or eliminate				concept							x							
Sediment/Siltation	Cropland	Promote buffer zones and no till farming		SWCDs,			concept		3.3.1									x			
Sediment/Siltation	Cropland	Reduce the impact of erosion of water quality	Educate watershed landowners of their impact on water quality and of the benefits of riparian habitat protection or restoration	Runoff Action Group, SWCDs, ODNR - SWC, Ohio EPA 319	Ohio EPA 319		concept		Chapter 10.5					×							
Sediment/Siltation	land clearing and infilling for development	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	 Indentify and evaluate existing wetlands using remote sensing 	University of Toledo, Maumee RAP, TMACOG, Lucas Co.	OEPA 319	1999-2003	complete			portion of watershed in Lucas Co	6	x		x						x	
Sediment/Siltation	land clearing and infilling for development	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	2) create GIS map of wetlands and potential wetlands				complete					х		х						х	
Sediment/Siltation	land clearing and infilling	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	3) Identify restoration needs				complete					х		х						х	
Sediment/Siltation	land clearing and infilling for development	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	 Indentify and evaluate existing wetlands using remote sensing 	Maumee RAP, TMACOG, Wood Co University of Toledo	LEPF, USEPA , GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	planning			portion of watershed in Wood Co		x		x						x	
Sediment/Siltation	land clearing and infilling	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	2) create GIS map of wetlands and potential wetlands				planning					X		X						x	
Sediment/Siltation	land clearing and infilling	2) (Wood Co.) Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	3) Identify restoration needs				planning					х		x						x	
Sediment/Siltation	Other land disturbing activities	Evaluate existing sediment data regarding PCB and Hg to determine if there is a link with fish tissue concentrations	Develop a project plan to identify additional partners and funding sources	Ohio EPA, Bowling Green State University (BGSU)			concept				x		x								
Sediment/Siltation	Pasture	Cost share to install all-weather paddocks for horse owners	Install demonstration paddock in Lucas County	ODNR-DSWC, SWCD, NRCS	NRCS, ODNR- SWCD		concept				x	×		x		x	x	x			
Sediment/Siltation	Pasture	Develop potential project list based on Inventory Project Results					concept							х							
Sediment/Siltation	Pasture	Develop watershed management plan					concept					X						\pm			
Sediment/Siltation	Pasture	Educate watershed landowners on water quality impacts of erosion and benefits of riparian habitat protection or restoration.	- F				concept		Chapter 10.5; 5.7.1			x									
Sediment/Siltation	Pasture	Evaluate agricultural land use in watershed (including upstream sources)					concept		Chapter 11			x									
Sediment/Siltation	Pasture	Evaluate existing sediment data regarding PCB and Hg to determine if there is a link with fish tissue concentrations	Develop a project plan to identify additional partners and funding sources	Ohio EPA, Bowling Green State University (BGSU)			concept				x		x								
Sediment/Siltation	Pasture	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed					concept		Chapter 11			x		x							
Sediment/Siltation	Pasture		Continue to promote and support the implementation of these programs	Ohio Lake Erie Commission, USDA NRCS, Wood SWCDs	Ohio Lake Erie -Commission, USDA - NRCS, Wood SWCDs		concept		3.3.1	all of watershed		x		x							
Sediment/Siltation	Pasture	Inventory watershed for amount of acreage in pasture	1) Develop inventory methodology utilizing existing AERIS system and othe available resources	Maumee RAP Ag	U.S. ACE, Section ,319, NatureWorks (ODNR)		concept		3.3.1; 3.3.6; Chapter 11					×							
Sediment/Siltation	Pasture	Inventory watershed for amount of acreage in pasture	2) Convert electronic data into GIS map files				concept							x							
Sediment/Siltation	Pasture	Inventory watershed for amount of acreage in pasture	3) Integrate with AERIS data				concept							x							
Sediment/Siltation	Pasture	Inventory watershed for amount of acreage in pasture	4) Determine impact on watershed and possible projects to reduce or eliminate				concept							x							
Sediment/Siltation	Pasture	Promote buffer zones and no till farming		SWCDs,			concept											x			

Grassy Creek Watershed Projects Table

										BUI C	olor Co	de:	Im	paired		Not Impa	aired	Unknov	wn	Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed						л ви	BUI B	UI BU	BUI	BUI BU #13 #14	JI Comments &
Sediment/Siltation	Pasture	Reduce the impact of erosion of water quality	Educate watershed landowners of their impact on water quality and of the benefits of riparian habitat protection or restoration			concept		Chapter 10.5)	×						
Sediment/Siltation	Roads	Evaluate existing sediment data regarding PCB and Hg to determine if there is a link with fish tissue concentrations	Develop a project plan to identify additional partners and funding sources	Ohio EPA, Bowling Green State University (BGSU)		concept				×		x								
Sediment/Siltation	Stream banks	Collect additional data as needed				concept					X			x						
Sediment/Siltation Sediment/Siltation	Stream banks Stream banks	Develop potential project list Identify additional data needed				concept concept					X			x x	_				_	
Sediment/Siltation	Stream banks	Streambank tree planting				concept		7.6.1; 8.3.3			X			-						
Sediment/Siltation	Streambanks	Evaluate existing sediment data regarding PCB and Hg to determine if there is a link with fish tissue concentrations	Develop a project plan to identify additional partners and funding sources	Ohio EPA, Bowling Green State University (BGSU)		concept				x		x								
Sediment/Siltation	Streambanks	Promote buffer zones and no till farming		SWCDs,		concept											х			
Sediment/Siltation	Urban/Suburban	Pond Clinic	Educate landowners on proper application of herbicides and alternate approaches to pond management; proper construction techniques including storm water BMPs.	OSU Extension Sea Grant, Fulton OSU Extension, Progressive Fisherman's Club	Annual	ongoing					×	x	x >	x			x x			
Toxic Substances	atmospheric deposition	Educate public on sources/pathways				concept				x										
Toxic Substances	atmospheric deposition					concept				x										
Toxic Substances	atmospheric deposition					concept				Y										
Toxic Substances	atmospharia deposition	existing regulations (i.e. commercial)		Rowling Croop State Cropt?		сопсерт				^										
Toxic Substances	atmospheric deposition	Identify vulnerable areas.		Bowling Green State Grant? University		concept				x										
Toxic Substances	atmospheric deposition	management program	1) control increases in runoff rates, 2) prevent losses in infiltration, 3) prevent runoff pollution	Toledo & other local LEPF, Local governments, RAP Jurisdictions Urban Runoff Action Group		concept				x										
Toxic Substances	atmospheric deposition	encourage industries to minimize pollutant exposure.				concept				x										
Toxic Substances		Provide/identify BMPs (may be based or a performance criteria) to prevent/remove pollutants.				concept				x										
Toxic Substances Toxic Substances	Industrial discharges Industrial discharges	Identify point sources Implement permit/inspection program to		Ohio EPA Ohio EPA Ohio EPA Permitees Ohio EPA		concept					×									
	g	encourage industries to minimize pollutant exposure.			ongoing	concept				x										
Toxic Substances	Industrial discharges	Maintain compliance with NPDES permits		Ohio EPA Ohio EPA Permitees	ongoing	concept					x									
Toxic Substances	Industrial discharges	Provide/identify BMPs (may be based or a performance criteria) to prevent/remove pollutants.	n	Ohio EPA Ohio EPA		concept				x										
Toxic substances	Industrial discharges (current or old)	NPDES permit GIS inventory (Phase 1)	 Collect GIS coordinates for all current NPDES permits 	Ohio EPA DSW Ohio EPA	2005-07	in progress	Coodinates for all permits collected			x	х	х)	x x			x x	x	x x	
Toxic substances	Industrial discharges (current or old)	NPDES permit GIS inventory (Phase 1)	2) Convert electronic data into GIS map			in progress	Conected			x	x	x)	x x	:		x x	х	x x	<u> </u>
Toxic substances	Industrial discharges (current or old)	NPDES permit GIS inventory (Phase 2)	Intergrate with AERIS data	TMACOG, Lucas Maumee RAP County Auditor's Office		planning				x	x	x	;	x x	:		x x	x	x x	
Toxic Substances	Urban runoff	Educate public on sources/pathways				concept				X	Х									
Toxic Substances	Urban Runoff	Evaluate capacity/condition of existing systems; analysis of storm water flow, thermal impacts, runoff quality, erosion and sedimentation, and groundwater recharce.				concept					x									
Toxic Substances	Urban runoff	Evaluate existing data for the location of "hot spots".				concept		1				x								
Toxic Substances	Urban runoff	Evaluate existing data for the location of "hot spots".				concept				x		x								
Toxic Substances	Urban Runoff	Evaluate impact of Phase II Stormwater regulations				concept		1			x									
Toxic Substances	Urban Runoff	Evaluate upstream contributions				concept					Х									
Toxic Substances Toxic Substances	Urban Runoff Urban runoff	Identify illicit connections				concept		<u>-</u>			X									4
TOXIC SUDSIGNCES		Identify sources not addressed by existing regulations (i.e. commercial)				concept				×	X									
Toxic Substances Toxic Substances	Urban runoff Urban runoff	Identify vulnerable areas. Implement a regional/watershed management program	1) control increases in runoff rates, 2) prevent losses in infiltration, 3) prevent runoff pollution	Toledo & other local governments, RAP Urban Runoff Action Group		concept concept				x x	X									
Toxic Substances	Urban runoff	Implement permit/inspection program to encourage industries to minimize pollutant exposure.				concept				x	×									
Toxic Substances	Urban Runoff	Performance bond/tie compliance into				concept	1				x									
	l	building permits.		I		r .	1		l											

Grassy Creek Watershed Projects Table

										BUI	Color C	ode:	Imp	aired	Not	Impaired	Unk	nown	Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI #1	BUI BU	JI BUI 3 #4	BUI BU	JI BUI 6 #7	BUI BU	JI BUI 9 #10	BUI BU #11 #1:	JI BUI B 2 #13 #	UI Comments & 14 Misc. Info.
Toxic Substances	Urban Runoff	Provide venues for proper disposal of wastes				concept		5.7.1			×	(
Toxic Substances	Urban runoff	Provide/identify BMPs (may be based on a performance criteria) to prevent/remove pollutants.				concept				x	×	(
Toxic Substances	Wastewater treatment plants	Educate public on sources/pathways				concept				x									
Toxic Substances	Wastewater treatment plants	Evaluate existing data for the location of "hot spots".				concept				x		x							
Toxic Substances	Wastewater treatment	Identify sources not addressed by existing regulations (i.e. commercial)				concept				x									
Toxic Substances	Wastewater treatment	Identify vulnerable areas.		Bowling Green State Grant? University		concept				x									
Toxic Substances	Wastewater treatment plants		1) control increases in runoff rates, 2) prevent losses in infiltration, 3) prevent runoff pollution	Toledo & other local LEPF, Local governments, RAP Jurisdictions Urban Runoff Action Group		concept				x									
Toxic Substances	Wastewater treatment plants	Implement permit/inspection program to encourage industries to minimize pollutant exposure.				concept				x									
Toxic Substances	Wastewater treatment plants	Provide/identify BMPs (may be based on a performance criteria) to prevent/remove pollutants.				concept				x									

											BUILO	Color Co	de:	Impai	ired	Not Ir	nnaired	Unkn	own		ot Applicable
[Decrease in sediment load;			Bort		ue.	Impa				Olikii			
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	decrease in turbidity; decrease in storm drain dumping	Coastal Management Measure	HUC/Stream Segment Addressed						BUI BUI #8 #9					Comments & Misc. Info.
All	All	Conduct a TMDL	 Design watershed survey, 2) Collect water quality data, 3) Assess waterbodies, 4) Identify target conditions. Develop restoration projects, 6) Select restoration scenario, 7) Prepare implementation plan, 8) Submit TMDL report, 9) Implement TMDL (inside Ohio EPA), 10) Implement TMDL (outside OEPA), 11) Annual validation activities, and 12) Validate water quality status 	OEPA	OEPA	2006-2008	planning	Distribution of the TSD and implementation of the applicable TMDL for each sub-watershed		all of watershed	×	x x	×	x		x	x	x x		X So	urce: OEPA
All	All	GIS Water Quality database (Phase 1)	1) Create relational database from OEPA water resources inventory data for	University of Toledo, Maumee RAP	US EPA GLNPO	2004-2005	complete			all of AOC	x	x x	x	x x		x	x >	ĸ	x	x	
All	All	GIS Water Quality database (Phase 1)	Maumee AOC 2) Export LE Tribs data to a GIS format				complete				x	x x	x	x x		x	x >	<	x	x	
All	All	GIS Water Quality database (Phase 1)	3) Publish relational database and GIS				in progress				х	x x	x	x x		х	x >	<	х	х	
All	All	GIS Water Quality database (Phase 2)	online Expand GIS to entire AOC				in progress			all of watershed	X	x x	X	x x		X	X)	<	X	x	
Flow Alterations	Changing Land Use	Lucas County Floodplain Map	1) Determine waterways to study and map versus redelinate	Lucas County Engineer and Auditor Offices, FEMA	Lucas County, FEMA	2005-2010	in progress	Study 60+ miles of stream to determine the current floodplain		all of watershed	x	x x		x			>	ĸ		x	
Flow Alterations Flow Alterations	Changing Land Use Changing Land Use	Lucas County Floodplain Map Lucas County Floodplain Map	2) Conduct new studies 3) Redelinate existing studies			2005-2008 2005-2008	in progress				X	X X X X		X)			X X	
Flow Alterations	Changing Land Use	Lucas County Floodplain Map	4) Request public comment on draft			2005-2008	in progress in progress				x	x x		×						x	
Flow Alterations	Changing Land Use	Lucas County Floodplain Map	maps 5) Finalize maps and release electronically			2009	in progress				x	x x		x)	<pre></pre>		x	
flow alterations	changing land use	Re-planting program	Secure grant and identify available space along creeks for replanting				concept		7.6.1; 8.3.3	all of Duck Creek				x							
flow alterations	construction	Re-planting program	Secure grant and identify available space along creeks for replanting				concept		7.6.1; 8.3.3	all of Duck Creek				x							
flow alterations	streambank modifications	Discuss periodic "controlled releases" w/City of Toledo from Hecklinger Pond into Duck Creek to increase flow in creek					concept					x								x	
flow alterations	streambank modifications	Identify areas of creek where stream "curves" can be re-created					concept					х								х	
flow alterations	streambank modifications	Identify areas of creek where stream bank stabilization is needed	Continue "walking" creek and general observations annually	City of Toledo; Duck and Otter Creeks Partnership staff and/or volunteers		2004	ongoing		5.5.1; 7.6.1	all of Duck Creek		x									
flow alterations	streambank modifications	Work w/local cities and county to review code and incorporate environmental					concept		Chapter 5					x							
flow alterations	streambank modifications	planning/setbacks Work with new development/industries moving into the watershed to develop strategies to minimize their impact on the	Identify BMPs to recommend and literature to support it; become familiar with local storm water rules, wetland and	Duck and Otter Creeks Partnership, Inc.; US Coking;	none needed	2004-2006	ongoing		5.3.1; 5.3.2	all of watershed				x							
habitat modifications	changing land use	Educate developers/contractors on need and use of BMPs		Maumee RAP Urban Runoff Action Group,	Ohio Environmental Education Fund,	2005	planning		5.3.1; 5.3.2; 5.5.1; Chapter 10.5	all of watershed		x									
habitat modifications	changing land use	Implement the Phase 2 storm water management program	Decrease in sediment load; decrease in turbidity; decrease in storm drain dumping	and/or Wood and Lucas county	GLC local jurisdictions; additional grants if necessary	2004	ongoing	Decrease in sediment load; decrease in turbidity; decrease in storm drain dumping		all of watershed		x									
habitat modifications	changing land use	Propose alternative development designs/layouts and BMPs that protect habitat and water quality		Duck and Otter Creeks Partnership, Inc.; US Coking; other new businesses		2004	ongoing			all of watershed		x									
habitat modifications	changing land use	Regional Storm Water Standards Manua (Phase 1)	1) Determine contents for manual		Lake Erie Protection Fund	2002	complete	Implement a regional/watershed management program: a) control increases in runoff rates, b) prevent losses in infiltration, c) prevent runoff pollution		all of AOC		x									
habitat modifications	changing land use	Regional Storm Water Standards Manua (Phase 1)					complete					х									
habitat modifications	changing land use	Regional Storm Water Standards Manua (Phase 1)	 Identify alternative development designs/layouts that protect water quality 				complete					х									
habitat modifications	changing land use	Regional Storm Water Standards Manua (Phase 1)	 4) Encourage local jurisdictions to adopt manual as their standards 				complete					х									
habitat modifications	changing land use	Regional Storm Water Standards Manua (Phase 2)		Maumee RAP Urban Runoff Action Group, SWC	GLC	2005-2007	in progress	Completion and distribution of revised manual	Chapter 10.5; 5.7.1	all of watershed		x									
habitat modifications	changing land use	Regional Storm Water Standards Manua (Phase 2)	 Update chapters with new content and regulations 			2005-2006	in progress					х									·

											BUILO	olor C	ode:	Impair	ed	Not	Impaired	Unk	nown	Not Applicable
							Status (in progress	Decrease in sediment load;	Coastal	HUC/Stream										
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	decrease in turbidity; decrease in storm drain dumping	Coastal Management Measure	HUC/Stream Segment Addressed									I BUI BI 2 #13 #1	
habitat modifications	changing land use	Regional Storm Water Standards Manua (Phase 2)	I3) Conduct workshops and site visits for consultants, developers, contractors on stormwater plan preparation and post- construction BMPs			2006-2007	in progress	50 percent of consultants, developers, contractors that work in the area participate				,	(
habitat modifications	changing land use	Regional Storm Water Standards Manua (Phase 3)	Maintain and update manual as needed				ongoing)	(
habitat modifications	changing land use	Work with new development/industries moving into the watershed to develop	Identify BMPs to recommend and literature to support it; become familiar with local storm water rules, wetland and stream mitigation rules, etc	Duck and Otter Creeks Partnership, Inc.; US Coking; other new businesses	none needed	2004-2006	ongoing		5.3.1; 5.3.2	all of watershed		;	(>	
habitat modifications	construction	Work with new development/industries moving into the watershed to develop	Identify BMPs to recommend and literature to support it; become familiar with local storm water rules, wetland and stream mitigation rules, etc	Duck and Otter Creeks Partnership,	none needed	2004-2006	ongoing		5.3.1; 5.3.2	all of watershed)	(>	
habitat modifications	construction	Educate developers/contractors on need and use of BMPs		Maumee RAP Urban Runoff Action Group	Ohio Environmental Education Fund, GLC	2005	planning		5.3.1; 5.3.2; 5.5.1; Chapter 10.5	all of watershed		;	(
habitat modifications	construction	Implement the Phase 2 storm water management program		Cities of Toledo, Oregon, Northwood and/or Wood and Lucas county	local jurisdictions; additional grants if necessary	2004	ongoing	Decrease in sediment load; decrease in turbidity; decrease in storm drain dumping		all of watershed		;	<							
habitat modifications	construction	Propose alternative development designs/layouts and BMPs that protect habitat and water quality		Duck and Otter Creeks Partnership, Inc.; US Coking; other new businesses		2004	ongoing			all of watershed)	(
habitat modifications	construction	Regional Storm Water Standards Manua (Phase 1)	1) Determine contents for manual	RAP Urban Runoff Action Group, MRRSWC	Lake Erie Protection Fund	2002	complete	Implement a regional/watershed management program: a) control increases in runoff rates, b) prevent losses in infiltration, c) prevent runoff pollution		all of AOC		;	(
habitat modifications	construction	Regional Storm Water Standards Manua (Phase 1)	I 2) Write manual				complete					;	(
habitat modifications	construction	Regional Storm Water Standards Manua (Phase 1)	 Identify alternative development designs/layouts that protect water quality 				complete					;	(
habitat modifications	construction	Regional Storm Water Standards Manua (Phase 1)	 4) Encourage local jurisdictions to adopt manual as their standards 				complete					;	(
habitat modifications	construction	Regional Storm Water Standards Manua (Phase 2)		Maumee RAP Urban Runoff Action Group SWC	GLC	2005-2007	in progress	Completion and distribution of revised manual	Chapter 10.5; 5.7.1	all of watershed		;	(
habitat modifications	construction	Regional Storm Water Standards Manua (Phase 2)	I2) Update chapters with new content and regulations	0110		2005-2006	in progress)	(
habitat modifications	construction		(a) Conduct workshops and site visits for consultants, developers, contractors on stormwater plan preparation and post- construction BMPs			2006-2007	in progress	50 percent of consultants, developers, contractors that work in the area participate				;	(
habitat modifications	construction	Regional Storm Water Standards Manua (Phase 3)	Maintain and update manual as needed				ongoing)	(
habitat modifications	removal of riparian vegetation	Conduct ash tree replacement program for private property owners whose ash trees removed due to emerald ash tree borer invasion	1) Identify and map trees removed or slated for removal in watershed	Duck and Otter Creeks Partnership, Inc; MetroParks or local parks dept.; Cities; Maumee RAP	federal funding; grant funding, 319, ODNR CZM; local partners or members	2006-2007	concept	# of trees replaced; # of landowners enrolled		Duck Creek, priorit to adjacent landowners	iy i	;	(×					,	
habitat modifications	removal of riparian vegetation	Conduct ash tree replacement program for private property owners whose ash trees removed due to emerald ash tree borer invasion	2) Secure funding				concept					;	(x					,	
habitat modifications	removal of riparian vegetation	Conduct ash tree replacement program for private property owners whose ash trees removed due to emerald ash tree borer invasion	3) Enroll landowners				concept)	(x					>	
habitat modifications	removal of riparian vegetation	Conduct ash tree replacement program for private property owners whose ash trees removed due to emerald ash tree borer invasion	4) Distribute replacement trees				concept					;	(x					>	
habitat modifications	removal of riparian vegetation	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream		Duck and Otter Creeks Partnership; Sunoco; BP Amoco; Port Authority	US EPA CZM grant	2002-2003	complete	7 preliminary sites identified; detailed site plans for 4 sites	8.3.1; 8.3.2; 8.3.3	Duck Creek and riparian corridor w/in 500 feet		;	(x					>	
habitat modifications	removal of riparian vegetation	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream				2002	complete					;	(x					>	

										BUI C	Color Coc	de:	Impaire	ed [Not Impair	red 🗌 U	nknown	Not	t Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Decrease in sediment load; decrease in turbidity; decrease in storm drain dumping	Coastal Management Measure	HUC/Stream Segment Addressed						JI BUI BU 8 #9 #10				Comments & Misc. Info.
habitat modifications	removal of riparian vegetation	Inventory watershed for existing wetland 3) Desktop review of watershed to id sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream			2002-2003	complete					x		x					x	
habitat modifications	removal of riparian vegetation	Inventory watershed for existing wetland 4) Secure property owner permission for sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream			2003	complete					x		x					x	
habitat modifications	removal of riparian vegetation	Inventory watershed for existing wetland 5) Conduct detailed survey of each sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream			2003	complete					x		x					x	
habitat modifications	removal of riparian vegetation	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream feet of stream sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	d		2003	complete					x		x					x	
habitat modifications	removal of riparian vegetation	Inventory watershed for existing wetland 7) Distribute WIRP to interested sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream			2004	complete					х		x					x	
habitat modifications	removal of riparian vegetation	Propose alternative development designs/layouts and BMPs that protect habitat and water quality	Duck and Otter Creeks Partnership, Inc.; US Coking; other new businesses		2004-2005	ongoing			all of watershed									x	
habitat modifications	removal of riparian	Re-planting program Secure grant and identify available spac	8			concept		5.5.1; 7.6.1			х								
habitat modifications	vegetation removal of riparian vegetation	along creeks for replanting Wetlands Inventory and Mapping (Phase 1) Identify and evaluate existing wetland 1) (Lucas Co.) using remote sensing	SUniversity of Toledo, Maumee RAP, TMACOG, Lucas	OEPA 319	1999-2003	complete			all of watershed		x		x					x	
habitat modifications	removal of riparian	Wetlands Inventory and Mapping (Phase 2) create GIS map of wetlands and 1) (Lucas Co.) potential wetlands	00.			complete					х		х					х	
habitat modifications	vegetation removal of riparian	Wetlands Inventory and Mapping (Phase 3) Identify restoration needs				complete					х		x					х	
habitat modifications	vegetation streambank modification	1) (Lucas Co.) Conduct ash tree replacement program Conduct ash tree replacement program 1) Identify and map trees removed or slated for removal in watershed trees removed due to emerald ash tree borer invasion Slated for removal in watershed	Duck and Otter Creeks Partnership, Inc; MetroParks or local parks dept.; Cities; Maumee RAP	federal funding; grant funding, 319, ODNR CZM; local partners or members	2006-2007	concept	# of trees replaced; # of landowners enrolled		Duck Creek, priorit to adjacent landowners	y	x		×					x	
habitat modifications	streambank modification	Conduct ash tree replacement program 2) Secure funding for private property owners whose ash trees removed due to emerald ash tree borer invasion				concept					x		x					x	
habitat modifications	streambank modification	Conduct ash tree replacement program 3) Enroll landowners for private property owners whose ash trees removed due to emerald ash tree borer invasion				concept					x		x					x	
habitat modifications	streambank modification	Conduct ash tree replacement program for private property owners whose ash trees removed due to emerald ash tree borer invasion				concept					×		x					x	
habitat modifications	streambank modification	Continue working with City of Toledo on "The Duck Creek Wetland Restoration, Conservation and Public Access Project" (SEP)	US EPA, Ohio EPA, City of Toledo w/input from Duck and Otter Creeks Partnership, Inc.	\$500,000 City of Toledo SEP	2003-2004	complete	Establish 1 wetland enhancement or restoration project on Duck Creek within 3 years	8.3.2; 8.3.3	Duck Creek watershed		x		×					x	
habitat modifications	streambank modificatior	Continue working with City of Toledo on 2) Develop detailed workplan "The Duck Creek Wetland Restoration, Conservation and Public Access Project" (SEP)	US EPA, Ohio EPA, City of Toledo w/input from Duck and Otter Creeks Partnership, Inc.		2005	in progress					x		x					x	
habitat modifications	streambank modification	Continue working with City of Toledo on "The Duck Creek Wetland Restoration, Conservation and Public Access Project" (SEP)	Bowling Green State University; Duck and Otter Creeks Partnership, Inc.		2005	in progress					x		×					X fost thro the invo	ntinues bughout project d after project to tor adoption of wetland and blyement in the cess
habitat modifications	streambank modification	Continue working with City of Toledo on 4) Implement wetland restoration "The Duck Creek Wetland Restoration, Conservation and Public Access Project" (SEP)	City of Toledo		2006-2007	in progress					x		x					x	
habitat modifications	streambank modificatior	Continue working with City of Toledo on 5) Assist with public outreach, education "The Duck Creek Wetland Restoration, Conservation and Public Access Project" (SEP)	Duck and Otter Creeks Partnership, Inc.; Bowling Green State University	US EPA GLNPO, National Fish and Wildlife Foundation, other grants, private donors	2005-2007	in progress					x		x					x	

										BUI Co	lor Code:	Imp	aired	Not In	npaired	Unkno	wn [Not Applicable
Causes of Impairment (Pollutant or Stressor)	t Sources of Pollutant	Projects Major Tasl	xs/ Milestones Potential Project Partners	Et Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Decrease in sediment load; decrease in turbidity; decrease in storm drain dumping	Coastal Management Measure	HUC/Stream Segment Addressed		I BUI BU #3 #4							
habitat modifications	streambank modification	Implement Wetland Id and Restoration 1) Solicit cooperati Plan for Duck and Otter Creeks to Iandowners for 1 p identify and encourage priority areas for sites on Duck Cree enhancement/restoration of wetlands Implement Wetland	riority restorations owners, City of	through National Fish	March 2004- 2007	complete	Establish 1 wetland enhancement or restoration project within 5 years	8.3.1; 8.3.2; 8.3.3	Hecklinger Pond and Ravine Park, RM 4.0+		x	x					>	In conjunction w/City of Toledo SEP project
habitat modifications	streambank modification	Implement Wetland Id and Restoration Plan for Duck and Otter Creeks to identify and encourage priority areas for enhancement/restoration of wetlands	nding to implement activities		2005	complete					x	×					>	
habitat modifications	streambank modification		nunity involvement gram, focusing on etland restoration etland restoration Bowling Green Sta University; Duck a Otter Creeks Partnership, Inc.		2005	in progress					x	x					, ,	Continues throughout project and after project to fostor adoption of the wetland and involvement in the
habitat modifications	streambank modification	Implement Wetland Id and Restoration 4) Implement wetla Plan for Duck and Otter Creeks to identify and encourage priority areas for enhancement/restoration of wetlands 4)	ind restoration		2006-2007	in progress					x	×	:				>	process
habitat modifications	streambank modification		nunity involvement gram, focusing on etland restoration etland restoration Bowling Green Sta University; Duck a Otter Creeks Partnership, Inc.		2005	in progress					x	x					,	Continues throughout project and after project to fostor adoption of the wetland and involvement in the
habitat modifications	streambank modification	Inventory watershed for existing wetland 1) Develop scope a sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	and tasks for project Duck and Otter Creeks Partnershi Sunoco; BP Amoc Port Authority		2002-2003	complete	7 preliminary sites identified; detailed site plans for 4 sites	8.3.1; 8.3.2; 8.3.3	Duck Creek and riparian corridor w/in 500 feet		x	×					>	process
habitat modifications	streambank modification	Inventory watershed for existing wetland 2) Distribute RFP a sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	and hire consultants		2002	complete					x	×					>	
habitat modifications	streambank modification	Inventory watershed for existing wetland 3) Desktop review sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream			2002-2003	complete					x	x					>	
habitat modifications	streambank modification	Inventory watershed for existing wetland 4) Secure property sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream			2003	complete					x	×					>	
habitat modifications		Inventory watershed for existing wetland 5) Conduct detailed sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream			2003	complete					x	×					>	
habitat modifications	streambank modification	Inventory watershed for existing wetland 6) Develop detailed sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream wetlands			2003	complete					x	×					>	
habitat modifications	streambank modificatior	Inventory watershed for existing wetland 7) Distribute WIRP sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream			2004-	complete					x	×					>	
habitat modifications	streambank modification	Re-planting program Secure grant and i along creeks for re	dentify available space planting			concept		5.5.1; 7.6.1			x							
habitat modifications	streambank modification	Wetlands Inventory and Mapping (Phase 1) Identify and eva 1) (Lucas Co.) using remote sens			1999-2003	complete			all of watershed		x	×					>	
habitat modifications	streambank modification	Wetlands Inventory and Mapping (Phase 2) create GIS map 1) (Lucas Co.) potential wetlands	of wetlands and			complete					х	×					×	
habitat modifications	streambank modification	Wetlands Inventory and Mapping (Phase 3) Identify restorati 1) (Lucas Co.)	on needs			complete					х	×					>	
nutrients	urban runoff	1) Conduct educational campaign for watershed awareness to encourage action by community members	Duck and Otter Creeks Partnershi Inc	Great Lakes Aquatic p, Habitat Network and Fund, Lucas County Commissioners		complete	# of educational brochures distributed; # of attendees at meeting; # of new members or Friends of		all of watershed		x							Over 11,000 ed brochures distributed; 23 attendees at Open House; at least 6 Friends ofto date
nutrients	urban runoff	Conduct educational campaign for watershed awareness to encourage action by community members			Mar-05	complete					x							

										BUI C	olor C	ode:		Impaire	ed	No ¹	Impaire	d 🗌 l	Unknown		Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s) Timeline	Status (in progress, planning, concept, ongoing, complete)	Decrease in sediment load; decrease in turbidity; decrease in storm drain dumping	Coastal Management Measure	HUC/Stream Segment Addressed	BUI B #1	UI BI	JI BUI 3 #4	BUI #5	BUI #6	BUI E #7	UI BL #8 #1	JI BUI 9 #10	BUI #11	BUI BU #12 #13	JI BUI 3 #14	Comments & Misc. Info.
nutrients	urban runoff	Conduct educational campaign for watershed awareness to encourage action by community members	3) Develop educational materials		Summer 2005	complete					×			Π							
nutrients	urban runoff	Conduct educational campaign for watershed awareness to encourage	4) Distribute materials		Fall 2005	complete					×			Π							
nutrients	urban runoff	action by community members Conduct educational campaign for watershed awareness to encourage action by community members	5) Hold Open House to highlight opportunities for involvement w/Partnership		Oct-05	complete					×			Π							
nutrients	urban runoff	Develop or adopt existing program for Fertilizer/pesticide education/reduction for general public and commercial users				concept		5.7.1; Chapter 10.5	all of watershed		×			Π							Collins Park Golf Course
nutrients	urban runoff	periodic observations by watershed coordinator and/or other volunteers to determine if nuisance algae is present	Volunteer reports if nuisance algae is observed and its location, daytime temp, conditions, etc.	Partnership none needed members/volunteers; community members?	2005	concept										x					
nutrients	urban runoff	Review existing dissolved oxygen data	Determine if creek meets Ohio WQS or if data is lacking	none needed	2005	concept										x					
organic enrichment	decaying plant/animal matter	Develop or obtain educational material t deter landowners from dumping grass clippings and such into creeks	o 1) Research available materials, 2) Distribute to landowners, especially adjacent to creek			concept	# of households reached; survey of individual implementation?	Chapter 10.5	Duck Creek		×	:		x							
organic enrichment	decaying plant/animal matter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)		Maumee RAP, Maumee RAP, TMACOG, local TMACOG, local jurisdictions, jurisdictions, organizations organizations	Spring 2005	complete	# of supplies ordered; # of households given educational materials; # of purchasing	Chapter 10.5; 5.7.1	East Toledo near Duck Creek									x		x	
organic enrichment	decaying plant/animal matter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	2) Place bulk order for local jurisdictions and organizations		Jun-05	complete												x		х	
organic enrichment	decaying plant/animal matter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)		3	Jul-05	complete												x		х	
organic enrichment	decaying plant/animal matter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	1) Design new Drains are for Rain storm drain stenciling Field Manuals	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, example the partnership, donations; cities	2003-2005	ongoing	# of stenciling manuals sold	Chapter 10.5; 5.7.1										x		x	
organic enrichment	decaying plant/animal	Storm Drain Stenciling Program (Drains		organizations		ongoing												x		X	
organic enrichment	matter decaying plant/animal matter	are for Rain) (Phase 2) Storm Drain Stenciling Program (Drains are for Rain) (Phase 3)	organizations as placed Conduct public Storm Drain Stenciling events	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	April - Oct	ongoing	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating		East Toledo near Duck Creek									x		x	Aug 2005 event: 44 drains stenciled, approx. 300 door hangers/flyers distributed
organic enrichment	discarded litter/food waste	CYS Day	1) Establish planning team	Maumee RAP; Duck Solicit private and and Otter Creeks Partnership; ORKA; Cities of Oregon, Northwood, Toledo; TMACOG; Lake Erie Commission; various other community partners	April - Sept (annually)	ongoing	Relative to previous years: 1) tons of garbage and debris removed from area streams; 2) number of volunteers that participate; 3) # of sites/RM cleaned 4) amount of support received for planning and funding the event	Chapter 10.5	sites vary each yea typically 3-6 sites between RM 2.0 and 4.0 on Duck Creek, including Hecklinger Pond		×			x						x	
organic enrichment	discarded litter/food waste	CYS Day	2) Solicit contributions and site captain support		April - Sept	ongoing					Х			х						X	
organic enrichment	discarded litter/food waste	CYS Day	3) Distribute promotional materials		June - Sept	ongoing					×			х						X	
organic enrichment	discarded litter/food	CYS Day	4) Select waterways and sites to be		Aug	ongoing					×	:		х						×	
organic enrichment	discarded litter/food	CYS Day	5) Conduct site captain training		Sept	ongoing					×			х		T				x	
organic enrichment	discarded litter/food	CYS Day	6) Hold event and appreciation picnic		Sept	ongoing					×	:		х						x	
organic enrichment	waste discarded litter/food waste	Work with local communities to encourage "adopt a stream segment" or neighborhood stewardship program		City of Toledo, City of Oregon, City of Northwood		concept					×									x	
organic enrichment	human and animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	1) Design new Drains are for Rain storm drain stencils and companion door hangers	Maumee RAP, TMACOG, local jurisdictions, organizations Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete	# of supplies ordered; # of households given educational materials; # of purchasing	Chapter 10.5; 5.7.1			×	:		x			x	x		x	
organic enrichment	human and animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	2) Place bulk order for local jurisdictions and organizations		Jun-05	complete					×	:		х			х	х		х	
organic enrichment	human and animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)			Jul-05	complete					×			х			x	x		x	
organic enrichment	human and animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	1) Design new Drains are for Rain storm drain stenciling Field Manuals	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	2003-2004	ongoing	# of stenciling manuals sold	Chapter 10.5; 5.7.1			×	· · · · · · · · · · · · · · · · · · ·		x			×	x		x	

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Decrease in sediment load; decrease in turbidity; decrease in storm drain dumping	n Management Measure	HUC/Stream Segment Addressed	BUI #1		BUI B #3 #	UI BU #4 #5	I BUI #6	BUI #7		BUI	BUI BUI #11 #12		JI Comments & 4 Misc. Info.
organic enrichment	human and animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	2) Fill orders for local jurisdictions and organizations as placed				ongoing						Х		Х			Х	Х	X	
organic enrichment	human and animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 3)		Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF, ODNR/CZM grants; foundations, Maumee RAP, TMACOG, local jurisdictions, organizations	April - Oct	ongoing	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating		East Toledo near Duck Creek			x		x			×	x	×	Aug 2005 event: 44 drains stenciled, approx. 300 door hangers/flyers distributed
organic enrichment/ nutrients	urban runoff	Conduct educational campaign for watershed awareness to encourage action by community members	1) Secure funding	Duck and Otter Creeks Partnership, Inc	Great Lakes Aquatic Habitat Network and Fund, Lucas County Commissioners	2005	complete	# of educational brochures distributed; # of attendees at meeting; # of new members or Friends of		Duck Creek					x						Over 11,000 ed brochures distributed; 23 attendees at Open House; at least 6 Friends ofto date
organic enrichment/ nutrients	urban runoff	Conduct educational campaign for watershed awareness to encourage action by community members	2) Hire consultant			Mar-05	complete								х						
organic enrichment/ nutrients	urban runoff	Conduct educational campaign for watershed awareness to encourage action by community members	3) Develop educational materials			Summer 2005	complete								х						
organic enrichment/ nutrients	urban runoff	Conduct educational campaign for watershed awareness to encourage action by community members	4) Distribute materials			Fall 2005	complete								х						
organic enrichment/ nutrients	urban runoff	Conduct educational campaign for watershed awareness to encourage action by community members	5) Hold Open House to highlight opportunities for involvement w/Partnership			Oct-05	complete								х						
organic enrichment/ nutrients	urban runoff	Give Water a Hand Campaign (Phase 1 (Residential Campaign)) 1) Develop project	Maumee RAP, TMACOG, local Jurisdictions, US F&WS, ODNR	OEEF, local jurisdictions, US F&WS, ODNR, Maumee RAP, TMACOG	2003-2006	complete	Educate public on sources/pathways of nonpoint and point source pollution; pre- and post-campaign surveys show increased awareness of citizens	5.6.2; 5.7.1; Chapter 10.5						x						
nutrients	urban runoff	Give Water a Hand Campaign (Phase 1 (Residential Campaign)				9/3/2004	complete								х						
organic enrichment/ nutrients	urban runoff	(Residential Campaign)) 3) Create and distribute TV, cinema and newspaper ads			10/03-4/05	complete								х						
organic enrichment/ nutrients	urban runoff	Give Water a Hand Campaign (Phase 1 (Residential Campaign)) 4) Create and distribute 6 tip cards & bonus items			10/03-4/05	complete								Х						
organic enrichment/ nutrients	urban runoff	Give Water a Hand Campaign (Phase 1 (Residential Campaign)) 5) Create and Implement pre-/post- campaign phone survey			12/03 & 5/05	complete								х						
organic enrichment/ nutrients	urban runoff	Give Water a Hand Campaign (Phase 3 (Watershed Awareness Campaign)		Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete								x						
organic enrichment/ nutrients	urban runoff	Give Water a Hand Campaign (Phase 3 (Watershed Awareness Campaign)	2) Place bulk order for local jurisdictions and organizations			Jun-05	complete								х						
	urban runoff	Give Water a Hand Campaign (Phase 3				Jul-05	complete								x						
nutrients organic enrichment/ nutrients	urban runoff	(Watershed Awareness Campaign) Give Water a Hand Campaign and educational materials	and organizations to use Distribute info at events, programs and presentations	Creeks Partnership, Inc; Maumee RAP; Lucas, Ottawa and	Duck and Otter Creeks Partnership, Inc; Maumee RAP; Lucas, Ottawa and	year round	ongoing	1) Distributed at Oregon Days annually 2) Distributed at CYS Days annually 3) Distributed at Partnership Open House		all of watershed	×		X	x	x						2005: Distributed at Oregon Days, Oper House
organic enrichment/ nutrients	urban runoff	Give Water a Hand Campaign and educational materials (Phase 4)	Seek grant to distribute series of 6 GWAH tip cards to E. Toledo residents	Wood SWCDs Maumee RAP; City of Toledo	Wood SWCDs OEEF; local jurisdictions; Dana Foundation; other foundations	2004-2005	planning	biennially Survey at end of program; # of households distributed to in our watershed; # of additional event: brochures were distributed at	s	all of Duck Creek watershed	×		x	×	x						
pathogens	human and animal excreta	Implement baseline water quality sampling program	 Implement seasonal sampling for variety of parameter at fixed, repeated locations, 2) Share data with other entities, such as UT LERC and Partnership, 3) Identify problems areas and/or trends 	City of Toledo	Cities	2004-?	ongoing	# of samples taken, # of locations sampled	Chapter 11	Duck Creek								x			
pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	 and/or trends 1) Scan paper copies to create electronic files of existing septic systems 	c TMACOG, Toledo/Lucas Count Health Dept, Lucas County Auditor's Office	Lake Erie Protection y Fund, TMACOG, Toledo/Lucas Count; Health Dept, Lucas County Auditor's Office	y 2002-2005	complete		5.6.2									x			
pathogens	Septic systems		2) Convert electronic data into GIS map files				complete											х			
pathogens	Septic systems	GIS Septic System Inventory (Phase 1)					complete											х			
pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	 4) Train Health Dept personnel to input data and use GIS system 				in progress											х			

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Causes of Impairment (Pollutant or Stressor)		Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Decrease in sediment load; decrease in turbidity; decrease in storm drain dumping	Coastal Management Measure	HUC/Stream Segment Addressed		BUI BUI #3 #4		I BUI E	BUI BUI		JI BUI		Comments &
pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	1) Identify stream sampling locations	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept		2004	complete	Sample 50 stream sites and dye 5.6. test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage	2; Chapter 11							x			no sites in Duck Creek watershed, but Phase 2 or 3 could be expanded to Duck Creek; ver few, if any, septic remain in watershed
pathogens		Stream and Septic System Sampling Project (Phase 1)	2) Identify septic system dye testing locations				complete									x			Wateroned
pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	3) Conduct stream sampling and dye testing				complete									x			
pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	 4) Prioritize areas for enforcement based on testing results 	d			complete									x			
pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	5) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems				complete									x			
pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	1) Conduct additional stream sampling and dye testing	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept	WRDA 401, Ohio yEPA 319		concept	Sample 50 stream sites and dye 5.6. test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage	2; Chapter 11							x			
pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	2) Modify priority areas (if necessary)				concept									x			
pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	3) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available)				concept									x			
pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 3)	1) Continue to sample and dye test to identify problem areas	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept	WRDA 401, Ohio yEPA 319		concept	Sample stream sites and dye test septic systems as needed per county to reduced discharges of unmeasurable amounts of inadequately treated sewage	2; Chapter 11							x			
pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 3)	2) Continue to pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) until priority areas are addressed				concept									x			
pathogens	urban runoff	Obtain and review current water quality data to id areas of high bacteria or nutrient loading	Contact City of Toledo to obtain current data	City of Toledo, City of Oregon, University of Toledo, TMACOG Health Depts	y	2004-2005	in progress		C	Ouck Creek						x			
pathogens	urban runoff	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Duck and Otter Creeks Partnership, BP, Cities of Toledo and Oregon, Clay High School and other schools	private donations	August - November	ongoing		a	ll of watershed						x			2005: one site added on Duck Creek- Hecklinger Pond, RM 4.2
pathogens	urban runoff	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)				ongoing									x			
pathogens	urban runoff	Student Watershed Watch	3) Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector)	s		Sept	ongoing									×			
pathogens	urban runoff	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools			Sept	ongoing									x			
pathogens	urban runoff	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (oreferably)	d		mid-Oct	ongoing									x			
pathogens	urban runoff	Student Watershed Watch	6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualifier Data Collector)	d		late Oct- early Nov	ongoing									x			
pathogens	urban runoff	Student Watershed Watch	7) Student share data and finding at Student Summit	1		mid-Nov	ongoing									х			
pathogens	urban runoff	Student Watershed Watch	Expand Student Watershed Watch Program into additional schools	Maumee RAP, TMACOG, Duck and Otter Creeks Partnership, BP, Cities of Toledo and Oregon, Clay High School and other schools		year round	ongoing	# of new sites added; # of Cha students involved; # of samples Cha taken		ll of watershed						x			2005: site added- Hecklinger Pond
pathogens	urban runoff	SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept									x			

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Decrease in sediment load; decrease in turbidity; decrease in storm drain dumping	Coastal Management Measure	HUC/Stream Segment Addressed	BUI 8 #1	BUI B #2 #	JI BU 3 #4	BUI #5	BUI #6	BUI	BUIE		л ви	BUI BUI #12 #13	BUI #14	Comments & Misc. Info.
pathogens	urban runoff	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training				concept											x				
pathogens	urban runoff	SWW Teacher Training/Creditable Data Certification					concept											x	Π			
pathogens	urban runoff	Work with Health Dept to review available sediment and water data for creeks to identify if contact advisories should be posted	1) Review data with Health Dept to id problem areas	Lucas and Wood Co. Health Depts; Ohio EPA	. Health Dept?	2004-2005	complete			Duck Creek, including Hecklinge Pond	er							x	Π			
pathogens	urban runoff	Work with Health Dept to review available sediment and water data for creeks to identify if contact advisories should be posted	2) Send available data to LC Health Dept for review				complete											x	Π			
pathogens	urban runoff	Work with Health Dept to review available sediment and water data for creeks to identify if contact advisories should be posted	3) Meet with L.C. Health Dept. to determine next steps (I.e additional sampling?)				ongoing											x	Π			
pathogens	urban runoff	Work with University of Toledo to include bacteria sampling in future sediment sampling events	3	University of Toledo			concept		Chapter 11									x	Π			
pesticides	all land where pesticide: are used	Develop or adopt existing program for Fertilizer/pesticide education/reduction for general public and commercial users					concept		5.7.1; Chapter 10.5	all of watershed		;	(Collins Park Golf Course
pesticides	all land where pesticides are used	Distribute info about existing Household Haz waste Disposal programs	encourage local jurisdictions to host collection days				concept		5.7.1; Chapter 10.5			;	x x		x				Ħ		x	
pesticides	all land where pesticide are used	Educational workshop for residents and other appliers (golf course staff, etc) to stress proper application and alternative					concept		5.7.1; Chapter 10.5	all of watershed												
pesticides		management measures Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 1)	1) Secure contractor	Duck and Otter Creeks Partnership, Inc.	US EPA GLNPO	Phase 1: Oct 2004- Sept 2005	complete	project completion	Chapter 11	Duck Creek, including Hecklinge Pond	er	;	(P	e.g. heavy metals, PCBs, etc)
pesticides	sites of historical usage	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 1)	 Compilation of existing data and integration w/GIS 	Duck and Otter Creeks Partnership, Inc.	US EPA GLNPO	Jan-Mar 2005	complete					3	(e.g. heavy metals, PCBs, etc)
pesticides	sites of historical usage	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 1)	3) complete screening HHRA	Duck and Otter Creeks Partnership, Inc.	US EPA GLNPO	Sep-05	complete					3	(e.g. heavy metals, PCBs, etc)
pesticides	sites of historical usage	`````	4) complete workplans for Phase 2 sampling	Duck and Otter Creeks Partnership, Inc	US EPA GLNPO	Sep-05	complete					;	(e.g. heavy metals, PCBs, etc)
pesticides	sites of historical usage	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 2)	1) Secure funding	Duck and Otter Creeks Partnership,	US EPA; foundations, private	2006	planning			Duck Creek, including Hecklinge	er	;	(Π		(e P	e.g. heavy metals, PCBs, etc)
pesticides	sites of historical usage	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 2)	2) implement workplan from Phase 1				planning					;	(Π		(e P	e.g. heavy metals, PCBs, etc)
pesticides	sites of historical usage	Establish sampling (sediment and/or water) program for creek with the UT	1) Collaborate with UT professor	UT Lake Erie Research Center or other dept.; Duck and Otter Creeks Partnership, Inc.	UT or grant	2004-2006	concept	# of samples taken in creek		Duck Creek	x											reside in ediment?)
pesticides	sites of historical usage	Establish sampling (sediment and/or water) program for creek with the UT	2) Develop project workplan	r annoromp, mo.			concept				x											
pesticides	sites of historical usage		3) Secure additional funding or resources				concept				x											
pesticides	sites of historical usage		if necessary 1) Secure funding; 2) Develop workplan	Duck and Otter Creeks Partnership,	US EPA GLNPO	2007-?	concept					;	(П			e.g. heavy metals, PCBs, etc)
pesticides	sites of historical usage	Remedial Alternatives (if needed) for sediment contamination	1) Secure funding; 2) Develop workplan	Duck and Otter Creeks Partnership, Inc.	US EPA GLNPO Great Lakes Legacy Act	2008	concept			Duck Creek		;	(Π			e.g. heavy metals, PCBs, etc)
pesticides	urban runoff	Conduct educational campaign for watershed awareness to encourage action by community members	1) Secure funding	Duck and Otter Creeks Partnership, Inc	Great Lakes Aquatic Habitat Network and Fund, Lucas County Commissioners	2005	complete	# of educational brochures distributed; # of attendees at meeting; # of new members or Friends of		Duck Creek		;	<								br di X at	Over 11,000 ed prochures listributed; 23 littendees at Open louse; at least 6 friends ofto date
pesticides	urban runoff	Conduct educational campaign for watershed awareness to encourage	2) Hire consultant			Mar-05	complete					:	(x	
pesticides	urban runoff	action by community members Conduct educational campaign for watershed awareness to encourage	3) Develop educational materials			Summer 2005	complete					;	(×	
pesticides	urban runoff	action by community members Conduct educational campaign for watershed awareness to encourage action by community members	4) Distribute materials			Fall 2005	complete					;	(x	
pesticides	urban runoff	Conduct educational campaign for watershed awareness to encourage action by community members	5) Hold Open House to highlight opportunities for involvement w/Partnership			Oct-05	complete					;	(×	

											BU	l Color (Code:		Impai	aired	No	t Impaired	l 📃 Unk	nown	Not Applicable
							Status (in progress,	Decrease in sediment load;	Coastal	HUC/Stream											
Causes of Impairment (Pollutant or Stressor	t) Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	planning, concept, ongoing, complete)	decrease in turbidity; decrease in storm drain dumping	Management Measure	Segment Addressed										I BUI BU 2 #13 #1	
pesticides	urban runoff	Distribute contact information for household haz. waste disposal options and existing programs for collection	encourage local jurisdictions to host collection days				concept		5.7.1; Chapter 10.5		x		:	x							
pesticides	urban runoff	Distribute educational material to homeowners and commercial users on proper application techniques and alternative BMPs					concept		5.7.1; Chapter 10.5	all of watershed		x									
pesticides	urban runoff	Educational workshop for residents and other appliers (golf course staff, etc) to stress proper application and alternative management measures					concept		5.7.1; Chapter 10.5	all of watershed	x										Collins Park Golf Course
pesticides	urban runoff	Establish sampling (sediment and/or water) program for creek with the UT	1) Collaborate with UT professor	UT Lake Erie Research Center or other dept.; Duck and Otter Creeks Partnership, Inc.	UT or grant	2004-2006	concept	# of samples taken in creek		Duck Creek			x								
pesticides	urban runoff	Establish sampling (sediment and/or water) program for creek with the UT	2) Develop project workplan				concept						х								
pesticides	urban runoff	Establish sampling (sediment and/or	3) Secure additional funding or resources	s			concept						x								
pesticides	urban runoff	water) program for creek with the UT Give Water a Hand Campaign (Phase 1) (Residential Campaign)	if necessary 1) Develop project	Maumee RAP, TMACOG, local Jurisdictions, US F&WS, ODNR	OEEF, local jurisdictions, US F&WS, ODNR, Maumee RAP, TMACOG	2003-2006	complete	Educate public on sources/pathways of nonpoint and point source pollution; pre- and post-campaign surveys show increased awareness of citizens	5.6.2; 5.7.1; Chapter 10.5		x		x :	x	x						
pesticides	urban runoff	Give Water a Hand Campaign (Phase 1)) 2) Release RFP/Hire contractors			9/3/2004	complete				х		x :	x	х						
pesticides	urban runoff) 3) Create and distribute TV, cinema and			10/03-4/05	complete				х		x :	x	x						
pesticides	urban runoff	(Residential Campaign) Give Water a Hand Campaign (Phase 1)	newspaper ads 4) Create and distribute 6 tip cards &			10/03-4/05	complete				x		_	x	x						
pesticides	urban runoff	(Residential Campaign) Give Water a Hand Campaign (Phase 1)	bonus items) 5) Create and Implement pre-/post-								~				×						
, pesticides	urban runoff	(Residential Campaign)	campaign phone survey 1) 1) Design watershed signs for 4 streams	Maumee RAP,	Maumee RAP,	12/03 & 5/05	complete				X		X :	x	×						
		(Watershed Awareness Campaign)	(Ottawa, Swan, Maumee & Lake Erie)	TMACOG, local jurisdictions, organizations	TMACOG, local jurisdictions, organizations	Spring 2005	complete				x		x	x	x						
pesticides	urban runoff	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	 Place bulk order for local jurisdictions and organizations 			Jun-05	complete				х		x	x	х						
pesticides	urban runoff	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)) 3) Distribute signs for local jurisdictions and organizations to use			Jul-05	complete				х		x :	х	х						
pesticides	urban runoff	Give Water a Hand Campaign and educational materials	Distribute info at events, programs and presentations	Duck and Otter Creeks Partnership, Inc; Maumee RAP; Lucas, Ottawa and Wood SWCDs	Maumee RAP; Lucas, Ottawa and Wood SWCDs	year round	ongoing	1) Distributed at Oregon Days annually 2) Distributed at CYS Days annually 3) Distributed at Partnership Open House biennially		all of watershed	х		x	x	×						2005: Distributed at Oregon Days, Open House
pesticides	urban runoff	Give Water a Hand Campaign and educational materials (Phase 4)	Seek grant to distribute series of 6 GWAH tip cards to E. Toledo residents	Maumee RAP; City of Northwood; City of Oregon	OEEF; local f jurisdictions; Dana Foundation; other foundations	2004-2005	planning	Survey at end of program; # of households distributed to in our watershed; # of additional events brochures were distributed at	ŝ	all of Duck Creek watershed	x		x	x	×						
pesticides	urban runoff	Implement baseline water quality sampling program	 Implement seasonal sampling for variety of parameter at fixed, repeated locations, 2) Share data with other entities, such as UT LERC and Partnership, 3) Identify problems areas and/or trends 	City of Toledo	Cities	2004-?	ongoing	# of samples taken, # of locations sampled	Chapter 11	Duck Creek			×		×						Oregon: 4 sample locations; Otter Creek parameters: depth, temp, DO, pH, conductivity, ORP, TSS, turbidity, ammonia, phosphates, nitrates, e coli, FOGs
pesticides	urban runoff	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	August - November	ongoing			all of watershed			x					x	×	xx	(
pesticides	urban runoff	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data				ongoing						х					х	х	xx	
pesticides	urban runoff	Student Watershed Watch	Certification) 3) Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data	5		Sept	ongoing						x					x	x	xx	
pesticides	urban runoff	Student Watershed Watch	Collector) 4) Supplies are distributed to			Sept	ongoing						X		╞			X	X	XV	
pesticides	urban runoff	Student Watershed Watch	participating teacher/schools 5) Teachers conduct student training and sampling on designated sampling day (preferably)	ł		mid-Oct	ongoing						x					x	x	x x	
pesticides	urban runoff	Student Watershed Watch	(preferably) 6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector)	Ł		late Oct- early Nov	ongoing						x					x	x	x x	

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Causes of Impairment (Pollutant or Stressor)		Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Decrease in sediment load; decrease in turbidity; decrease in storm drain dumping	Coastal Management Measure	HUC/Stream Segment Addressed	BUI E	BUI E	UI BI	UI BU	I BU	BUI	BUI	BUI BU	JI BUI	BUI BUI #12 #13	BUI	Comments & Misc. Info.
pesticides	urban runoff	Student Watershed Watch	7) Student share data and finding at			mid-Nov	ongoing						х					×	x	x	X	
pesticides	urban runoff	Student Watershed Watch	Student Summit Expand Student Watershed Watch Program into additional schools	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	year round	ongoing			all of watershed			x					x	x	x	x	
pesticides	urban runoff	SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept						x					x	x	x	x	
pesticides	urban runoff	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for				concept						x					x	x	x	x	
pesticides	urban runoff	SWW Teacher Training/Creditable Data Certification	 3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC) certification 				concept						x					x	x	x	x	
pesticides	urban runoff	Wildlife officials surveyed to determine if reports of tainting; if unknown by wildlife officials, survey local residents to determine if eat fish and if so, if tainted?	F Contraction of the second seco	University; volunteer student; ODNR, Maumee RAP	unknown		concept			all of watershed		x									c s C h t	Ask wildlife officials? Mark S says probably not- DDNR would have heard reports, but ainting is subjective
Pesticides	Urban/Suburban	Organic Lawn Care Clinic	Less fertilizer in urban/suburban runoff	SWCD/Black Swamp Conservancy	SWCD	Annual	ongoing						х		х							
Refuse, litter	litter	Conduct educational campaign for watershed awareness to encourage action by community members	1) Secure funding	Duck and Otter Creeks Partnership, Inc	Great Lakes Aquatic Habitat Network and Fund, Lucas County	2005	complete	# of educational brochures distributed; # of attendees at meeting; # of new members or		Duck Creek									x		b	Over 11,000 ed prochures distributed; 23
Refuse, litter	litter	Conduct educational campaign for watershed awareness to encourage action by community members	2) Hire consultant			Mar-05	complete												x			
Refuse, litter	litter	Conduct educational campaign for watershed awareness to encourage action by community members	3) Develop educational materials			Summer 2005	in progress												х			
Refuse, litter	litter	Conduct educational campaign for watershed awareness to encourage action by community members	4) Distribute materials			Fall 2005	in progress												x			
Refuse, litter	litter	Conduct educational campaign for watershed awareness to encourage action by community members	5) Hold Open House to highlight opportunities for involvement w/Partnership			Oct-05	in progress												x			
Refuse, litter	litter	Continue/expand Sign our Streams program to increase community awareness of stream locations and increase stewardship of stream by the community (in turn, reduce dumping/aesthetic degradation)	1) Purchase signs/images from Clearwater	Duck and Otter Creeks Partnership, City of Oregon, City of Toledo	ODNR Operating Support grant, in- kind from Cities	2003	complete	# of locations "signed"	Chapter 10.5										x			Γwo existing signs; δ locations planned
Refuse, litter	litter	Continue/expand Sign our Streams program to increase community awareness of stream locations and increase stewardship of stream by the community (in turn, reduce dumping/aesthetic degradation)	 Identify sign locations at visible road crossings in community 			2004	complete												x			
Refuse, litter	litter	Continue/expand Sign our Streams program to increase community awareness of stream locations and increase stewardship of stream by the community (in turn, reduce dumping/aesthetic degradation)	3) Install signs			2005	in progress												x			
Refuse, litter	litter	periodic observations by watershed coordinator or other volunteers to report noticeable "free froms"	1)Throughout year, compile list of potential CYS sites and areas that regularly have litter, etc	Partnership members, Friends of volunteers, community members; watershed coordinator		2004-	ongoing			all of Duck Creek									x			
Refuse, litter	litter	periodic observations by watershed coordinator or other volunteers to report noticeable "free froms"	2) enlist volunteers and discuss what to look for and report	watershed coordinator or volunteer	none needed	2005-2006	ongoing												x			
Refuse, litter, etc	litter	CYS Day	1) Establish planning team	Volunteer Maumee RAP; Duck and Otter Creeks Partnership; ORKA; Cities of Oregon, Northwood, Toledo; TMACOG; Lake Erie Commission; various other community partners	Solicit private and public contributions, grants when available	April - Sept (annually)	ongoing	Relative to previous years: 1) tons of garbage and debris removed from area streams; 2) number of volunteers that participate; 3) # of sites/RM cleaned 4) amount of support received for planning and funding the event	Chapter 10.5	sites vary each yea typically 3-6 sites between RM 2.0 and 4.0 on Duck Creek, including Hecklinger Pond	ar		x						x			2004-2005: Hecklinger Pond
Refuse, litter, etc	litter	CYS Day	2) Solicit contributions and site captain support			April - Sept	ongoing						х						X			
Refuse, litter, etc	litter litter	CYS Day	3) Distribute promotional materials			June - Sept	ongoing						Х						Х			
Refuse, litter, etc		CYS Day	4) Select waterways and sites to be cleaned			Aug	ongoing						Х						Х			
Refuse, litter, etc	litter litter	CYS Day CYS Day	5) Conduct site captain training6) Hold event and appreciation picnic			Sept Sept	ongoing ongoing	1					X X						X			

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	decrease in turbidity; decrease in Man	nagement	UC/Stream Segment Addressed						BUI BUI #8 #9				
Refuse, litter, etc	litter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	 Design new Drains are for Rain storm drain stencils and companion door hangers 	Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete	# of supplies ordered; # of Chapter households given educational materials; # of purchasing	er 10.5; 5.7.1								x			
Refuse, litter, etc	litter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	2) Place bulk order for local jurisdictions and organizations			Jun-05	complete										х			
Refuse, litter, etc	litter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	 Distribute stencils and door hangers for local jurisdictions and organizations to use 			Jul-05	complete										х			
Refuse, litter, etc	litter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	 Design new Drains are for Rain storm drain stenciling Field Manuals 	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF; 319 grants; ODNR/CZM grants; foundations; local donations; cities		ongoing	# of stenciling manuals sold Chapter	er 10.5; 5.7.1								x			
Refuse, litter, etc	litter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	2) Fill orders for local jurisdictions and organizations as placed				ongoing								1		X			
Refuse, litter, etc	litter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 3)	Conduct public Storm Drain Stenciling events	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF, ODNR/CZM grants; foundations, Maumee RAP, TMACOG, local jurisdictions, organizations	April - Oct	ongoing	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating		Toledo near : Creek							×			Aug 2005 event: 4 drains stenciled, approx. 500 door hangers/flyers distributed; 37 volunteers, also picked up trash
salinity	road deicing	Implement alternative deicing products (such as corn-based products) and other control measures	Begin using alternative deicing products	City of Toledo	City of Toledo	2005-	concept	% of salt use reduced; # of miles 5.8.4 of road where alternative applied	all of	watershed		x		x)	<
salinity	road deicing	Install computerized spreaders on all sal trucks to control application rate	t	City of Toledo	City of Toledo	2005-	concept	# of trucks converted; % of salt 5.8.4 use reduced	all of	watershed		x		X)	C
salinity	road deicing	Sampling program for conductivity, pH, and other salinity factors during winter months	Determine if salinity is a limiting factor or concentrated pollutant leading to fish/habitat impairments	UT LERC; Cities		2005-	concept	Chapter	ər 11			x		×)	(
sediment/siltation	construction	Regional Storm Water Standards Manua (Phase 1)	1) Determine contents for manual	RAP Urban Runoff Action Group, MRRSWC	Lake Erie Protection Fund	2002	complete	Implement a regional/watershed management program: a) control increases in runoff rates, b) prevent losses in infiltration, c) prevent runoff pollution	all of	AOC							x		,	(
sediment/siltation	construction	Regional Storm Water Standards Manua (Phase 1)	l 2) Write manual				complete										x)	(
sediment/siltation	construction	Regional Storm Water Standards Manua (Phase 1)	 Identify alternative development designs/layouts that protect water quality 				complete										x)	(
sediment/siltation	construction	Regional Storm Water Standards Manua (Phase 1)	 I4) Encourage local jurisdictions to adopt manual as their standards 				complete										x)	(
sediment/siltation	construction	Regional Storm Water Standards Manua (Phase 2)	I 1) Review existing manual	Maumee RAP Urban Runoff Action Group SWC		2005-2007	in progress	Completion and distribution of Chapter revised manual	er 10.5; 5.7.1 all of	watershed							x)	(
sediment/siltation	construction	Regional Storm Water Standards Manua (Phase 2)	 I2) Update chapters with new content and regulations 	500		2005-2006	in progress										x)	<
sediment/siltation	construction	(Phase 2) Regional Storm Water Standards Manua (Phase 2)	 a) Conduct workshops and site visits for consultants, developers, contractors on stormwater plan preparation and post- construction BMPs 			2006-2007	in progress	50 percent of consultants, developers, contractors that work in the area participate									×		,	c
sediment/siltation	construction	Revise storm water regulations and ordinances; incorporate Maumee RAP manual, ODNR Rainwater manual, regional Storm Water Coalition recommendations and other references		City of Toledo	City of Toledo	2004-2006	in progress	stricter BMPs, ordinances that Chapter are more protective of stream health		: Creek, arily East do)	(
sediment/siltation	construction	creeks (for instance, storm water BMPs, setbacks, habitat buffers, etc)	Identify BMPs to recommend and literature to support it; become familiar with local storm water rules, wetland and stream mitigation rules, etc	other new businesses	none needed	2004-2006	ongoing	5.3.1; 5	5.3.2 all of	watershed		x		x			x			
sediment/siltation	roads	Implement alternative deicing products (such as corn-based products) and other control measures		City of Toledo, City of Oregon	City of Toledo, City of Oregon	2005-	ongoing	% of salt use reduced; # of miles 5.8.4 of road where alternative applied		Creek, arily East				x						
sediment/siltation	roads	Install computerized spreaders on all sal trucks to control application rate	t	City of Toledo	City of Toledo	2005-	ongoing	# of trucks converted; % of salt 5.8.4 use reduced	TOIEC					X						
sediment/siltation	roads	Revise storm water regulations rate Revise storm water regulations and ordinances; may incorporate Maumee RAP manual, ODNR Rainwater manual, regional Storm Water Coalition recommendations and other references		City of Toledo	City of Toledo	2004-2006	concept	stricter BMPs, ordinances that are more protective of stream health	er 5					×						

									BUI Co	lor Code):	Impai	ired	Not Im	paired	Unknr	own	Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Decrease in sediment load; decrease in turbidity; decrease in storm drain dumping	Coastal Management Measure	HUC/Stream Segment Addressed						BUI BUI #8 #9				
sediment/siltation	streambanks	Identify and/or establish program to provide incentive to landowners for filter strips and replanting/preserving habitat along creek	Maumee RAP or 319 program, Duck and Otter ODNR/CZM grants; at Creeks Partnership, private foundations, Inc; landowners; National Fish and Cities of Oregon, Wildlife Foundation, Toledo, and US EPA Northwood National Fish and	2006	concept		5.5.1; 7.6.1			x								
sediment/siltation	streambanks	Identify areas of creek where stream Continue "walking" creek and general bank stabilization is needed observations	City of Toledo; Duck and Otter Creeks Partnership staff and/or volunteers	2004-?	ongoing		7.6.1; 8.3.3	all of watershed									>	(
sediment/siltation	streambanks	Implement Wetland Id and Restoration 1) Solicit cooperation/support of Plan for Duck and Otter Creeks to Iandowners for 1 priority restorations identify and encourage priority areas for sites on Duck Creek enhancement/restoration of wetlands sites on Duck Creek	Residential property owners, City of Toledo, Duck and Partnership, Inc, University, community USEPA GLNPO (through National Fish and Wildlife Otter Creeks Foundation), Duck and Otter Creeks Bowling Green State University, community Partnership, Inc; project partners, City of Toledo SEP wolunteers volunteers monies, mitigation monies, private donations	Mar-05	complete	Establish 1 wetland enhancement or restoration project within 5 years	8.3.1; 8.3.2; 8.3.3	Hecklinger Pond and Ravine Park, RM 4.0+		×		x					>	In conjunction w/City of Toledo SEP project
sediment/siltation	streambanks	Implement Wetland Id and Restoration 2) Secure grant funding to implement Plan for Duck and Otter Creeks to wetland restoration activities identify and encourage priority areas for enhancement/restoration of wetlands		2005	complete			Ravine Park Integrated Restoration Project at RM 4	t	x		x					,	(
sediment/siltation	streambanks	Implement Wetland Id and Restoration 4) Implement wetland restoration Plan for Duck and Otter Creeks to identify and encourage priority areas for enhancement/restoration of wetlands identify and encourage		2006-2007	in progress					x		x					>	¢
sediment/siltation	streambanks	Regional Storm Water Standards Manual 1) Review existing manual (Phase 2)	Maumee RAP Urban GLC Runoff Action Group, SWC	2005-2007	in progress	Completion and distribution of revised manual	Chapter 10.5; 5.7.	1 all of watershed		x		x			x			
sediment/siltation	streambanks	Regional Storm Water Standards Manual 2) Update chapters with new content as (Phase 2) regulations		2005-2006	in progress					х		х			x			
sediment/siltation	streambanks	(Phase 2) (Phase		2006-2007	in progress	50 percent of consultants, developers, contractors that work in the area participate				x		x			x			
sediment/siltation	streambanks	Inventory watershed for existing wetland 1) Develop scope and tasks for project sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	Duck and Otter US EPA CZM grant Creeks Partnership; Sunoco; BP Amoco; Port Authority	2002-2003	complete	7 preliminary sites identified; detailed site plans for 4 sites	8.3.1; 8.3.2; 8.3.3	Duck Creek and riparian corridor w/in 500 feet									>	(
sediment/siltation	streambanks	Inventory watershed for existing wetland 2) Distribute RFP and hire consultants sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream		2002	complete												,	
sediment/siltation	streambanks	Inventory watershed for existing wetland 3) Desktop review of watershed to id sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream		2002-2003	complete												>	
sediment/siltation	streambanks	Inventory watershed for existing wetland 4) Secure property owner permission for sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	۶۲ – ۲	2003	complete												>	
sediment/siltation	streambanks	Inventory watershed for existing wetland 5) Conduct detailed survey of each sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream		2003	complete												>	:
sediment/siltation	streambanks	Inventory watershed for existing wetland 6) Develop detailed conceptual plans a sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream 6) Develop detailed conceptual plans a cost estimates for restoration/enhancement of identified wetlands	nc	2003	complete												>	:
sediment/siltation	streambanks	Inventory watershed for existing wetland 7) Distribute WIRP to interested sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream		2004	complete												>	
sediment/siltation	streambanks	Regional Storm Water Standards Manual 1) Determine contents for manual (Phase 1)	RAP Urban Runoff Lake Erie Protection Action Group, Fund MRRSWC	2002	complete	Implement a regional/watershed management program: a) control increases in runoff rates, b) prevent losses in infiltration, c) prevent runoff pollution		all of AOC		x		х			x			
sediment/siltation	streambanks	Regional Storm Water Standards Manual 2) Write manual (Phase 1)			complete					×		Х			X			

											BUI	Color Co	de:	Imp	aired	Not Im	paired	Unkn	iown	No	ot Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Decrease in sediment load; decrease in turbidity; decrease ir storm drain dumping	Coastal Management Measure	HUC/Stream Segment Addressed						BUI BUI #8 #9					Comments & Misc. Info.
sediment/siltation	streambanks	Regional Storm Water Standards Manua (Phase 1)	I3) Identify alternative development designs/layouts that protect water quality				complete					x		x				x			
sediment/siltation	streambanks	Regional Storm Water Standards Manua (Phase 1)	4) Encourage local jurisdictions to adopt manual as their standards				complete					X		X				х			
Sediment/Siltation	Urban/Suburban	Pond Clinic	Educate landowners on proper application of herbicides and alternate approaches to pond management; proper construction techniques including storm water BMPs.	OSU Extension Sea Grant, Fulton OSU Extension, Progressive Fisherman's Club		Annual	ongoing					x	x	x x			x	x			
thermal stress/sunlight	riparian corridor destruction	Encourage landowners re-planting or maintaining of buffers along creeks		Duck and Otter Creeks Partnership,			concept		5.5.1; 7.6.1	all of watershed		x				x				x	
toxic substances	industrial discharges (current or old)	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 1)	1) Secure contractor	Duck and Otter Creeks Partnership, Inc.	US EPA GLNPO	Phase 1: Oct 2004- Sept 2005	complete	project completion	Chapter 11	Duck Creek	x		x	x			x				g. heavy metals, CBs, etc)
toxic substances	industrial discharges (current or old)	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 1)	 Compilation of existing data and integration w/GIS 	Duck and Otter Creeks Partnership, Inc.	US EPA GLNPO	Jan-Mar 2005	complete				х		x	x			x				.g. heavy metals, CBs, etc)
toxic substances	industrial discharges (current or old)	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 1)	3) complete screening HHRA	Duck and Otter Creeks Partnership,	US EPA GLNPO	Sep-05	complete				х		x	x			x				.g. heavy metals, CBs, etc)
toxic substances	industrial discharges (current or old)	Conduct Ecological and Human Health Risk Assessment for Duck and Otter	4) complete workplans for Phase 2 sampling	Duck and Otter Creeks Partnership,	US EPA GLNPO	Sep-05	complete				х		x	x			x				g. heavy metals, CBs, etc)
toxic substances	industrial discharges (current or old)	Creeks watersheds (Phase 1) Conduct Ecological and Human Health Risk Assessment for Duck and Otter	1) Secure funding	Inc. Duck and Otter Creeks Partnership,	US EPA; foundations, private	2006	planning			Duck Creek, including Hecklinge	er X		x	x			x				.g. heavy metals, CBs, etc)
toxic substances	industrial discharges (current or old)	Creeks watersheds (Phase 2) Conduct Ecological and Human Health Risk Assessment for Duck and Otter	2) implement workplan from Phase 1	Inc.	aonors		planning			Pond	x		x	×			x				g. heavy metals, CBs, etc)
toxic substances	industrial discharges (current or old)	Creeks watersheds (Phase 2) Continue to add new information to GIS inventory	Map of NPDES locations; basic information on type of discharge, frequency of use, permit parameters, etc	university volunteer or graduate student in GIS		2002-2006	ongoing	updated map available			x									in c wat	hunting allowed city limits; atershed w/in city
toxic substances	industrial discharges (current or old)	Determine where active NPDES discharges are located and what parameters are sampled for and compliance rates	Map of NPDES locations; basic information on type of discharge, frequency of use, permit parameters,	OEPA; Partnership members		2004-2005	in progress	updated map available		Duck Creek		x									Its
toxic substances	Industrial discharges (current or old)	Establish sampling (sediment and/or water) program for creek with the UT	1) Collaborate with UT professor	UT Lake Erie Research Center or other dept.; Duck and Otter Creeks Partnership, Inc.	UT or grant	2004-2006	concept	# of samples taken in creek		Otter Creek				×			×				
toxic substances	Industrial discharges (current or old)	Establish sampling (sediment and/or water) program for creek with the UT	2) Develop project workplan	,			concept							x			х				
toxic substances	Industrial discharges (current or old)	Establish sampling (sediment and/or water) program for creek with the UT	 Secure additional funding or resources if necessary 				concept							x			x				
toxic substances	industrial discharges (current or old)	Hot Spot Delineation	 Secure funding; 2) Develop workplan 	Duck and Otter Creeks Partnership,	US EPA GLNPO	2007-?	concept				x		x	x			x				.g. heavy metals, CBs, etc)
toxic substances	Industrial discharges (current or old)	Implement baseline water quality sampling program	1) Implement seasonal sampling for variety of parameter at fixed, repeated locations	City of Toledo	Cities	2004-?	ongoing	# of samples taken, # of locations sampled	Chapter 11	Duck Creek				x							
toxic substances	Industrial discharges (current or old)	Implement baseline water quality sampling program	2) Share data with other entities, such as UT LERC and Partnership		none needed		ongoing							X							
toxic substances	Industrial discharges (current or old)	Implement baseline water quality sampling program	3) Identify problems areas and/or trends				ongoing							X	.						
Toxic substances	Industrial discharges (current or old)	NPDES permit GIS inventory (Phase 1)	1) Collect GIS coordinates for all current NPDES permits	Ohio EPA DSW	Ohio EPA	2005-07	in progress	Coordinates for all permits collected													
Toxic substances	Industrial discharges	NPDES permit GIS inventory (Phase 1)	2) Convert electronic data into GIS map				in progress	collected													
Toxic substances	(current or old) Industrial discharges (current or old)	NPDES permit GIS inventory (Phase 2)	Integrate with AERIS data	TMACOG, Lucas County Auditor's	Maumee RAP		planning														
toxic substances	industrial discharges (current or old)	Remedial Alternatives (if needed) for sediment contamination	1) Secure funding; 2) Develop workplan	Office Duck and Otter Creeks Partnership,	US EPA GLNPO Great Lakes Legacy	2008	concept				x		x	x			x			(e.(PC	g. heavy metals, CBs, etc)
Toxic substances	Industrial discharges (current or old)	Work with City of Toledo to review need for "No Contact/No Eating Fish" posting		Inc. City of Toledo; county Health Depts	ACT		planning				x										.g. heavy metals, CBs, etc)
toxic substances	Industrial discharges (current or old)	at Hecklinger Pond Work with Health Dept to review available sediment and water data for creeks to identify if contact advisories should be posted	1) Review data with Health Dept to id problem areas	Lucas and Wood Co. Health Depts; Ohio EPA	Health Dept?	2004-2005	complete			Duck Creek, including Hecklinge Pond	er X						x				
toxic substances	Industrial discharges (current or old)	Work with Health Dept to review available sediment and water data for creeks to identify if contact advisories should be posted	2) Send available data to LC Health Dept for review				complete				×						×				
toxic substances	Industrial discharges (current or old)	Work with Health Dept to review available sediment and water data for creeks to identify if contact advisories should be posted	3) Meet with L.C. Health Dept. to determine next steps (I.e additional sampling?)				ongoing				x						x				

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Causes of Impairment (Pollutant or Stressor)	t) Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Decrease in sediment load; decrease in turbidity; decrease in storm drain dumping	Coastal Management Measure	HUC/Stream Segment Addressed	BUI E #1	UI BU	JI BUI 3 #4	BUI BI #5 #	JI <mark>BUI</mark> 6 #7		JI BUI 9 #10	BUI E #11 #	BUI BUI B #12 #13 #	UI Comments & 14 Misc. Info.
toxic substances	landfills (current or old)	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 1)	1) Secure contractor	Duck and Otter US EPA GLNPO Creeks Partnership, Inc.	Phase 1: Oct 2004- Sept 2005	complete	project completion	Chapter 11	Duck Creek							×			(e.g. heavy metals, PCBs, etc)
toxic substances	landfills (current or old)	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 1)	2) Compilation of existing data and integration w/GIS	Duck and Otter US EPA GLNPO Creeks Partnership, Inc.	Jan-Mar 2005	complete										х			(e.g. heavy metals, PCBs, etc)
toxic substances	landfills (current or old)	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 1)	3) complete screening HHRA	Duck and Otter US EPA GLNPO Creeks Partnership, Inc.	Sep-05	complete										х			(e.g. heavy metals, PCBs, etc)
toxic substances	landfills (current or old)	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 1)	4) complete workplans for Phase 2 sampling	Duck and Otter US EPA GLNPO Creeks Partnership, Inc.	Sep-05	complete										х			(e.g. heavy metals, PCBs, etc)
toxic substances	landfills (current or old)	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 2)	1) Secure funding	Duck and Otter US EPA; Creeks Partnership, Inc.; UT Lake Erie donors Research Center	2006	planning			Duck Creek, including Hecklinge Pond	er						x			(e.g. heavy metals, PCBs, etc)
toxic substances	landfills (current or old)	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 2)	2) implement workplan from Phase 1			planning										×			(e.g. heavy metals, PCBs, etc)
toxic substances	landfills (current or old)	Establish sampling (sediment and/or water) program for creek with the UT	1) Collaborate with UT professor	UT Lake Erie UT or grant Research Center or other dept.; Duck and Otter Creeks Partnership, Inc.	2004-2006	concept	# of samples taken in creek		Duck Creek							x			
toxic substances	landfills (current or old)	Establish sampling (sediment and/or water) program for creek with the UT	2) Develop project workplan			concept										x			
toxic substances	landfills (current or old)		3) Secure additional funding or resource if necessary	s		concept										X			
toxic substances	landfills (current or old)		 Secure funding; 2) Develop workplan 	Duck and Otter US EPA GLNPO Creeks Partnership,	2007-?	concept										x			(e.g. heavy metals, PCBs, etc)
toxic substances	landfills (current or old)	Implement baseline water quality sampling program	1) Implement seasonal sampling for variety of parameter at fixed, repeated locations	City of Toledo Cities	2004-	ongoing	# of samples taken, # of locations sampled	Chapter 11	Duck Creek							x			
toxic substances	landfills (current or old)	Implement baseline water quality sampling program	 2) Share data with other entities, such as UT LERC and Partnership 	s none needed		ongoing										X			
toxic substances	landfills (current or old)	Implement baseline water quality	3) Identify problems areas and/or trends			ongoing										X			
toxic substances	landfills (current or old)	sampling program Remedial Alternatives (if needed) for sediment contamination	1) Secure funding; 2) Develop workplan	Duck and Otter Creeks Partnership, Inc.	2008	concept										x			(e.g. heavy metals, PCBs, etc)
toxic substances	urban runoff	Conduct survey of local residents to determine if fish and/or turtles caught in creek are eaten	Obtain funding or student volunteer	University of Toledo; Bowling Green State	2006-2007	concept			all of Duck Creek	x									
toxic substances	urban runoff	Establish sampling (sediment and/or water) program for creek with the UT	1) Collaborate with UT professor	UT Lake Erie UT or grant Research Center or other dept.; Duck and Otter Creeks Partnership, Inc.	2004-2006	concept	# of samples taken in creek		Duck Creek			x							
toxic substances	urban runoff	Establish sampling (sediment and/or water) program for creek with the UT	2) Develop project workplan			concept						x							
toxic substances	urban runoff	Establish sampling (sediment and/or water) program for creek with the UT	 Secure additional funding or resource if necessary 	s		concept						x							
toxic substances	urban runoff	periodic observations by watershed coordinator or other volunteers to report noticeable "free froms" and unusual spills or occurrences	enlist volunteers and discuss what to look for and report	Partnership none needed members or staff, Friends of volunteers, community members	2006-2007	concept			all of Duck Creek								x		
toxic substances	urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	1) Design new Drains are for Rain storm drain stencils and companion door hangers	Maumee RAP, Maumee RAP, TMACOG, local TMACOG, local jurisdictions, jurisdictions, organizations organizations	Spring 2005	complete	# of supplies ordered; # of households given educational materials; # of purchasing	Chapter 10.5; 5.7.1	all of watershed								x		
toxic substances	urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	 Place bulk order for local jurisdictions and organizations 		Jun-05	complete											х		
toxic substances	urban runoff		 Distribute stencils and door hangers for local jurisdictions and organizations t use 	a	Jul-05	complete											x		
toxic substances	urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	1) Design new Drains are for Rain storm drain stenciling Field Manuals	Duck and Otter Creeks Partnership, Maumee RAP, Jurisdictions, organizations		ongoing	# of stenciling manuals sold	Chapter 10.5; 5.7.1									x		
toxic substances	urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	2) Fill orders for local jurisdictions and organizations as placed			ongoing											х		

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source	ce(s) Timeline	Status (in progress, planning, concept, ongoing, complete)	Decrease in sediment load; decrease in turbidity; decrease in storm drain dumping	Coastal HUC/St Management Segm Measure Addres	ent BUI		3UI BUI #3 #4								Comments & Misc. Info.
toxic substances	urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 3)	Conduct public Storm Drain Stenciling events	Duck and Otter OEEF, ODNR/C Creeks Partnership, Maumee RAP, Maumee RAP, TMACOG, local TMACOG, local jurisdictions, organizations organizations	ons,	ongoing	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating	Duck Creek primarily Ea Toledo								x		dı aş ha di vo	ug 2005 event: 41 Irains stenciled, pprox. 500 door angers/flyers listributed; 37 olunteers, also icked up trash
toxic substances	urban runoff	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, private donation TMACOG, Duck and Otter Creeks Partnership, BP, Cities of Toledo and Oregon, Clay High School and other schools	s August - November	ongoing		all of water	hed		x				х	x	x		1005: Hecklinger Pond added
toxic substances	urban runoff	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)			ongoing					х				х	х	x	х	
toxic substances	urban runoff	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 		Sept	ongoing					x				x	x	×	х	
toxic substances	urban runoff	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools		Sept	ongoing					х				Х	х	x	Х	
toxic substances	urban runoff	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (oreferably)	3	mid-Oct	ongoing					x				х	x	x	х	
toxic substances	urban runoff	Student Watershed Watch	6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector)	9	late Oct- early Nov	ongoing					x				x	x	x	Х	
toxic substances	urban runoff	Student Watershed Watch	7) Student share data and finding at Student Summit		mid-Nov	ongoing					х				Х	х	x	Х	
toxic substances	urban runoff	Student Watershed Watch	Expand Student Watershed Watch Program into additional schools	Maumee RAP, TMACOG, Ohio EPA, public and private schools	s year round	ongoing		all of waters	hed		×				x	x	x	x	
toxic substances	urban runoff	SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD	2006	concept					x				x	x	x	x	
toxic substances	urban runoff	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training			concept					x				x	x	x	x	
toxic substances	urban runoff		3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC) certification			concept					x				x	x	x	x	

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	ви		I BUI		BUI		BUIB		BUI	ви	Comments & Misc. Info.
All	All	Conduct a TMDL	 Design watershed survey, 2) Collect water quality data, 3) Assess waterbodies, 4) Identify target conditions Develop restoration projects,6) Select restoration scenerio, 7) Prepare implementation plan, 8) Submit TMDL report, 9) Implement TMDL (inside Ohio EPA), 10) Implement TMDL (outside OEPA), 11) Annual validation activities, and 12) Validate water quality status 	OEPA ,	OEPA	2008-2010	concept	Distribution of the TSD and implementation of the applicable TMDL for each sub-watershed			×	x x	x	x x		x	×	x	×	X So	ource: OEPA
All	All	GIS Water Quality database (Phase 1)	1) Create relational database from OEPA water resources inventory data for Maumee AOC	Universitry of Toledo Maumee RAP	, US EPA GLNPO	2004-2005	complete				x	x x	x	x x		х	х	x x		x	
All	All	GIS Water Quality database (Phase 1)	2) Export LE Tribs data to a GIS format				complete				х	x x	х	x x		х	Х	x x		х	
All	All	GIS Water Quality database (Phase 1)	3) Publish relational database and GIS online				complete				х	x x	x	x x		х	x	x x		х	
All Flow Alterations	All Changing Land Use	GIS Water Quality database (Phase 2) Lucas County Floodplain Map	Expand GIS to entire AOC 1) Determine waterways to study and map versus redelinate	Lucas County Engineer and Auditor Offices, FEMA	Lucas County, FEMA	2005-2010	in progress	Study 60+ miles of stream to determine the current floodplain			x x	x x x x	X	x x x		X	X	x x x		x x	
Flow Alterations Flow Alterations	Changing Land Use Changing Land Use	Lucas County Floodplain Map Lucas County Floodplain Map	2) Conduct new studies3) Redelinate existing studies			2005-2008 2005-2008	in progress in progress				X X	X X X X		X				X X		X X	
Flow Alterations	Changing Land Use	Lucas County Floodplain Map	4) Request public comment on draft maps			2009	in progress				X	x x		X				x		x	
Flow Alterations	Changing Land Use	Lucas County Floodplain Map	5) Finalize maps and release electronically			2010	in progress				х	x x		x				х		x	
flow alterations	changing land use	Re-planting program	Secure grant and identify available space along creeks for replanting				concept		7.6.1; 8.3.3					x							
flow alterations	streambank modifications	Identify areas of creek where stream "curves" can be re-created					concept					x								x	
flow alterations	streambank modifications	Identify areas of creek where stream bank stabilization is needed	Continue "walking" creek and general observations annually	City of Oregon; Duck and Otter Creeks Partnership staff and/or volunteers		2004-	ongoing		5.5.1; 7.6.1			х								х	
flow alterations	streambank modifications	Work w/local cities and county to review code and incorporate environmental planning/setbacks					concept		Chapter 5					x							
flow alterations	streambank modifications	Work with new development/industries moving into the watershed to develop	Identify BMPs to recommend and literature to support it; become familiar with local storm water rules, wetland and	Duck and Otter Creeks Partnership, Inc.; US Coking;	none needed	2004-2006	ongoing		5.3.1; 5.3.2					х							
habitat modifications	changing land use	Educate developers/contractors on need and use of BMPs	1	Maumee RAP Urban Runoff Action Group, SWC	Ohio Environmental Education Fund, GLC	2005	planning		5.3.1; 5.3.2; 5.5.1; Chapter 10.5	all of watershed		x									
habitat modifications	changing land use	Implement the Phase 2 storm water management program		Oregon, Northwood	local jurisdictions; additional grants if necessary	2004-	ongoing	Decrease in sediment load; decrease in turbidity; decrease ir storm drain dumping	n			x									
habitat modifications	changing land use	Implement the Phase 2 storm water management program	Review all site plan and require pre/post construction controls for water quality, even for sites < 1 acre	City of Oregon	City of Oregon	2004-	ongoing		5.3.1; 5.3.2; 5.3.3; 5.4.1; 5.4.2	Otter Creek within Oregon (RM 0.5- 6.5)		x								wa fea	regon requires a ater quality ature on site to duce urban runoff
habitat modifications	changing land use	Implement the Phase 2 storm water management program	Revise storm water regulations and ordinances; may incorporate Maumee RAP manual, ODNR Rainwater manual, regional Storm Water Coalition recommendations and other references	City of Oregon	City of Oregon	2004- 2005	complete	stricter BMPs, ordinances that are more protective of stream health	Chapter 5	Otter Creek within Oregon (RM 0.5- 6.5)		x									
habitat modifications	changing land use	Propose alternative development designs/layouts and BMPs that protect habitat and water quality		Duck and Otter Creeks Partnership, Inc.; US Coking; other new businesses		2004-	ongoing					×									
habitat modifications	changing land use	Regional Storm Water Standards Manua (Phase 1)	al 1) Determine contents for manual	RAP Urban Runoff Action Group, MRRSWC	Lake Erie Protection Fund	2002	complete	Implement a regional/watershed management program: a) control increases in runoff rates, b) prevent losses in infiltration, c) prevent runoff pollution		all of AOC		x									
habitat modifications	changing land use	Regional Storm Water Standards Manua (Phase 1)	al 2) Write manual				complete					x									
habitat modifications	changing land use	(Phase 1) (Phase 1)	a 3) Identify alternative development designs/layouts that protect water quality				complete					х									
habitat modifications	changing land use	Regional Storm Water Standards Manua (Phase 1)	 4) Encourage local jurisdications to adop manual as their standards 	t			complete					х									

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed									BUI BU #12 #1		Comments & Misc. Info.
habitat modifications	changing land use	Regional Storm Water Standards Manua (Phase 2)	1) Review existing manual	Maumee RAP Urban GLC Runoff Action Group, SWC	2005-2007	in progress	Completion and distribution of revised manual	Chapter 10.5; 5.7.1	all of watershed		;	(
habitat modifications	changing land use	Regional Storm Water Standards Manua (Phase 2)	 Update chapters with new content and regulations 			in progress					;	(
habitat modifications	changing land use	Regional Storm Water Standards Manua (Phase 2)	(3) Conduct workshops and site visits for consultants, developers, contractors on stormwater plan preparation and post- construction BMPs			in progress	50 percent of consultants, developers, contractors that work in the area participate				;	K								
habitat modifications	changing land use	Regional Storm Water Standards Manua (Phase 3)	Maintain and update manual as needed			ongoing)	<								
habitat modifications	changing land use	Work with new development/industries moving into the watershed to develop strategies to minimize their impact on the	Identify BMPs to recommend and literature to support it; become familiar with local storm water rules, wetland and stream mitigation rules, etc	Duck and Otter none needed Creeks Partnership, Inc.; US Coking; other new businesses	2004-2006	ongoing		5.3.1; 5.3.2			3	K							х	
habitat modifications	construction	Implement the Phase 2 storm water management program		Cities of Toledo, local jurisdictions; Oregon, Northwood additional grants if and/or Wood and necessary Lucas county	2004-	ongoing	Decrease in sediment load; decrease in turbidity; decrease in storm drain dumping				2	K								
habitat modifications	construction	Implement the Phase 2 storm water management program	Review all site plan and require pre/post construction controls for water quality, even for sites < 1 acre	City of Oregon City of Oregon	2004-	ongoing		5.3.1; 5.3.2; 5.3.3; 5.4.1; 5.4.2	Otter Creek within Oregon (RM 0.5- 6.5))	<								Oregon requires a water quality feature on site to reduce urban runoff
habitat modifications	construction	Implement the Phase 2 storm water management program	Revise storm water regulations and ordinances; may incorporate Maumee RAP manual, ODNR Rainwater manual, regional Storm Water Coalition recommendations and other references	City of Oregon City of Oregon	2004- 2005	complete	stricter BMPs, ordinances that are more protective of stream health	Chapter 5	Otter Creek within Oregon (RM 0.5- 6.5)		;	κ								
habitat modifications	construction	Propose alternative development designs/layouts and BMPs that protect habitat and water quality		Duck and Otter Creeks Partnership, Inc.; US Coking; other new businesses	2004-	ongoing					;	<								
habitat modifications	construction	Regional Storm Water Standards Manua (Phase 1)	1) Determine contents for manual	RAP Urban Runoff Lake Erie Protection Action Group, Fund MRRSWC	2002	complete	Implement a regional/watershed management program: a) control increases in runoff rates, b) prevent losses in infiltration, c) prevent runoff pollution		all of AOC		;	<								
habitat modifications	construction	Regional Storm Water Standards Manua (Phase 1)	2) Write manual			complete					;	<								
habitat modifications	construction	Regional Storm Water Standards Manua (Phase 1)	 3) Identify alternative development designs/layouts that protect water quality 			complete					;	<								
habitat modifications	construction		4) Encourage local jurisdications to adopt	1		complete					;	<								
habitat modifications	construction	(Phase 1) Regional Storm Water Standards Manua (Phase 2)	manual as their standards 1) Review existing manual	Maumee RAP Urban GLC Runoff Action Group, SWC	2005-2007	in progress	Completion and distribution of revised manual	Chapter 10.5; 5.7.1	all of watershed		;	<								
habitat modifications	construction	Regional Storm Water Standards Manua (Phase 2)	 2) Update chapters with new content and regulations 			in progress					;	(
habitat modifications	construction		 Conduct workshops and site visits for consultants, developers, contractors on stormwater plan preparation and post- construction BMPs 			in progress	50 percent of consultants, developers, contractors that work in the area participate				;	K								
habitat modifications	construction	Regional Storm Water Standards Manua (Phase 3)	Maintain and update manual as needed			ongoing					;	<								
habitat modifications	construction	Work with new development/industries moving into the watershed to develop	Identify BMPs to recommend and literature to support it; become familiar with local storm water rules, wetland and stream mitigation rules, etc	Duck and Otter none needed Creeks Partnership, Inc.; US Coking; other new businesses	2004-2006	ongoing		5.3.1; 5.3.2			2	K							х	
habitat modifications	removal of riparian vegetation	Conduct ash tree replacement program for private property owners whose ash trees removed due to emerald ash tree borer invasion	1) Identify and map trees removed or slated for removal in watershed	Duck and Otter Creeks Partnership, Inc; MetroParks or local parks dept.; Cities; Maumee RAP	2006-2007	concept	# of trees replaced; # of landowners enrolled		Otter Creek		;	<							×	
habitat modifications	removal of riparian vegetation	Conduct ash tree replacement program for private property owners whose ash trees removed due to emerald ash tree borer invasion	2) Secure funding			concept					;	<							×	
habitat modifications	removal of riparian vegetation	Conduct ash tree replacement program for private property owners whose ash trees removed due to emerald ash tree borer invasion	3) Enroll landowners			concept					;	<							×	

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed				BUI E		UI BUI	BUI		BUI BU #12 #13	BUI	Comments & Misc. Info.
habitat modifications	removal of riparian vegetation	Conduct ash tree replacement program for private property owners whose ash trees removed due to emerald ash tree borer invasion	4) Distribute replacement trees				concept					×								×	
habitat modifications	removal of riparian vegetation		1) Develop scope and tasks for project	Duck and Otter Creeks Partnership; Sunoco; BP Amoco; Port Authority	US EPA CZM grant	2002-2003	complete	21 preliminary wetland sites id'd on Otter Creek; 5 detailed restoration plans developed	8.3.1; 8.3.2; 8.3.3	Otter Creek and riparian corridor w/in 500 feet		×			x					x	
habitat modifications	removal of riparian vegetation	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	2) Distribute RFP and hire consultants			2002	complete					×			x					×	
habitat modifications	removal of riparian vegetation	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	 Desktop review of watershed to id preliminary wetland sites 			2002-2003	complete					×			x					x	
habitat modifications	removal of riparian vegetation	sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	 Secure property owner permission for site access for field visits 			2003	complete					×			x					x	
habitat modifications	removal of riparian vegetation	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	priority site			2003	complete					×			x					x	
habitat modifications	removal of riparian vegetation	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	 Develop detailed conceptual plans an cost estimates for restoration/enhancement of identified wetlands 	d		2003	complete					×			x					x	
habitat modifications	removal of riparian vegetation	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	7) Distribute WIRP to interested stakeholders, agencies, etc			2004	complete					×			x					x	
habitat modifications	removal of riparian vegetation	Propose alternative development designs/layouts and BMPs that protect habitat and water quality		Duck and Otter Creeks Partnership, Inc.; US Coking; other new businesses		2004-2005	ongoing													x	
habitat modifications	removal of riparian vegetation	Re-planting program	Secure grant and identify available spac along creeks for replanting				concept		5.5.1; 7.6.1			×								x	
habitat modifications	removal of riparian vegetation	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	 Identify and evaluate existing wetland using remote sensing 	s University of Toledo, Maumee RAP, TMACOG, Lucas Co.	OEPA 319	1999-2003	complete			portion in watershed in Lucas Co	5	×			x					x	
habitat modifications	removal of riparian vegetation	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	2) create GIS map of wetlands and potential wetlands				complete					×			х					х	
habitat modifications	removal of riparian vegetation	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)					complete					×			x					x	
habitat modifications	removal of riparian vegetation		1) Identify and evaluate existing wetland using remote sensing		LEPF, USEPA , GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	planning			portion in watershed in Wood Co	i	>			x					×	
habitat modifications	removal of riparian	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	2) create GIS map of wetlands and potential wetlands				planning					×			x					x	
habitat modifications	removal of riparian	_, (3) Identify restoration needs				planning					×			x					x	
habitat modifications		Conduct ash tree replacement program for private property owners whose ash trees removed due to emerald ash tree borer invasion	1) Identify and map trees removed or slated for removal in watershed	Duck and Otter Creeks Partnership, Inc; MetroParks or local parks dept.; Cities; Maumee RAP	CZM; local partners or members	2006-2007	concept	# of trees replaced; # of landowners enrolled		Otter Creek		>								x	
habitat modifications	streambank modification	Conduct ash tree replacement program for private property owners whose ash trees removed due to emerald ash tree borer invasion	2) Secure funding				concept					×								×	
habitat modifications	streambank modification	Conduct ash tree replacement program for private property owners whose ash trees removed due to emerald ash tree borer invasion	3) Enroll landowners				concept					×								×	
habitat modifications	streambank modification	Conduct ash tree replacement program for private property owners whose ash trees removed due to emerald ash tree borer invasion	4) Distribute replacement trees				concept					×								×	
habitat modifications	streambank modificatior	Implement Wetland Id and Restoration Plan for Duck and Otter Creeks to	1) Solicit cooperation/support of landowners for 2 priority restorations sites on Otter Creek	Residential property owners, City of Toledo, City of Northwood, City of Oregon, etc.	USEPA GLNPO grants, ODNR Coastal Management grants, OEPA 319 grants, various foundations, project partners, mitigation monies, etc	March 2004- ?	in progress	Establish 1 wetland enhancement or restoration project within 5 years	8.3.1; 8.3.2; 8.3.3	Otter Creek- 5 identified sites		>			×					x	

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Causes of Impairment (Pollutant or Stressor)		Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed						BUI B		BUI BUI #11 #12	BUI B	UI Comments &
habitat modifications	streambank modificatior	Implement Wetland Id and Restoration Plan for Duck and Otter Creeks to identify and encourage priority areas for enhancement/restoration of wetlands	 Secure grant funding to implement wetland restoration activities 			2005	in progress					×		×	c				,	C
habitat modifications	streambank modification	Implement Wetland Id and Restoration Plan for Duck and Otter Creeks to identify and encourage priority areas for enhancement/restoration of wetlands	3) Implement wetland restoration				in progress					>	:	×	(,	
habitat modifications	streambank modification	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream		Duck and Otter Creeks Partnership; Sunoco; BP Amoco; Port Authority	US EPA CZM grant	2002-2003	complete	21 preliminary wetland sites id'd on Otter Creek; 5 detailed restoration plans developed	8.3.1; 8.3.2; 8.3.3	Otter Creek and riparian corridor w/in 500 feet		>		×	(>	
habitat modifications	streambank modificatior	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream				2002	complete					×		×	(,	c
habitat modifications		Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	preliminary wetland sites			2002-2003	complete					×		×	<				>	
habitat modifications		sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream				2003	complete					×		×	(>	
habitat modifications		Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	priority site			2003	complete					×	:	×	(,	
habitat modifications		sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	wetlands	c		2003	complete					×		×	(>	
habitat modifications		Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	stakeholders, agencies, etc			2004	complete		554 704			×		×	¢				,	
habitat modifications	streambank modification		Secure grant and identify available spac along creeks for replanting a 1) Identify and evaluate existing wetland				concept		5.5.1; 7.6.1	portion in		>	:)	
		1) (Lucas Co.)	using remote sensing	Maumee RAP, TMACOG, Lucas Co.	OEFA 319	1999-2003	complete			portion in watershed in Lucas Co	;	×		×	¢				>	:
habitat modifications	streambank modification	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	e 2) create GIS map of wetlands and potential wetlands				complete					×	:	×	c				>	:
habitat modifications	streambank modificatior	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	e 3) Identify restoration needs				complete					×		×	C I				>	:
habitat modifications	streambank modification		e 1) Identify and evaluate existing wetland using remote sensing		LEPF, USEPA , GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	planning			portion in watershed in Wood Co		>		×	(,	(
habitat modifications	streambank modification	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	e 2) create GIS map of wetlands and potential wetlands				planning					×	:	×	C)	(
habitat modifications	streambank modification	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	e 3) Identify restoration needs				planning					×		×	()	t -
nutrients	Cropland or pasture where manure is spread	Educate Horse owners on proper I disposal of manure	Implement Equine Environmental Assurance and Liability Program for Fulton, Lucas and Wood Counties	LSWCD,WSWCD Ohio Livestock Coalition, Farm Bureau	Ohio Livestock Coalition, Farm Bureau, ODRN- DSWC	2006	concept				x	>		×	(x	x	x		
Nutrients	Erosion and runoff from fertilized fields		Drive the transect points and mark in GPS and note land use.	USDA-NRCS, ODNR-SWCD, LSWCD	NRCS, ODNR- SWCD	2006-07	concept	Ability to calculate no-till acres and developed acres.				x		×	()	
nutrients	urban runoff	Conduct educational campaign for watershed awareness to encourage action by community members	1) Secure funding	Duck and Otter Creeks Partnership, Inc	Great Lakes Aquatic Habitat Nettwork and Fund, Lucas County Commissioners		complete	# of educational brochures distributed; # of attendees at meeting; # of new members or Friends of		Otter Creek	x	×						x		Over 11,000 ed brochures distributed; 23 attendees at Open House; at least 6 Friends ofto date
nutrients	urban runoff	Conduct educational campaign for watershed awareness to encourage action by community members	2) Hire consultant			Mar-05	complete				x	×	:					x		
nutrients	urban runoff	Conduct educational campaign for watershed awareness to encourage action by community members	3) Develop educational materials			Summer 2005	complete				x	×						x		
nutrients	urban runoff	Conduct educational campaign for watershed awareness to encourage action by community members	4) Distribute materials			Fall 2005	complete				x	×						x		
nutrients	urban runoff	Conduct educational campaign for watershed awareness to encourage action by community members	5) Hold Open House to highlight opportunities for involvement w/Partnership			Oct-05	complete				x	×						х		

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI #1						JI BUI I		BUI BU	
nutrients	urban runoff	Develop or adopt existing program for Fertilizer/pesticide education/reduction for general public and commercial users					concept		5.7.1; Chapter 10.5			;	(x	
nutrients	urban runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	1) Develop project	Maumee RAP, TMACOG, local Jurisdictions, US F&WS, ODNR	OEEF, local jurisdictions, US F&WS, ODNR, Maumee RAP, TMACOG	2003-2006	complete	Educate public on sources/pathways of nonpoint and point source pollution; pre- and post-campaign surveys show increased awareness of citizens	5.6.2; 5.7.1; Chapter 10.5	all of Otter Creek watershed	x	;	x	x						
nutrients	urban runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	2) Release RFP/Hire contractors			9/3/2004	complete				х)	(X	х						
nutrients	urban runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	3) Create and distribute TV, cinema and newspaper ads			10/03-4/05	complete				х)	x x	х						
nutrients	urban runoff	Give Water a Hand Campaign (Phase 1)	4) Create and distribute 6 tip cards &			10/03-4/05	complete				x)	(X	х						
nutrients	urban runoff	(Residential Campaign) Give Water a Hand Campaign (Phase 1)	· · · ·			12/03 & 5/05	complete				x	,	(X	х						
nutrients	urban runoff	(Residential Campaign) Give Water a Hand Campaign (Phase 2) (Business Campaign)	campaign phone survey 1) Develop project	Maumee RAP, TMACOG, local jurisdictions	Maumee RAP, TMACOG, local jurisdictions	2004-2006	in progress	Educate business owners, manager and employees on sources/pathways of nonpoint and point source pollution; show increased awareness of through the # of businesses voluntarily participating in campaign			x	,	< x	x						
nutrients	urban runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)	2) Create and distribute 4 Guidebooks for local businesses			8/05-12/06	in progress				х)	(X	х						
nutrients	urban runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)				10/05-12/06	in progress				×	;	x	x						
nutrients	urban runoff	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	buildurio	Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete				x	;	x x	x						
nutrients	urban runoff	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	2) Place bulk order for local jurisdictions and organizations	organizationo	organizationo	Jun-05	complete				х)	(X	х						
nutrients	urban runoff	Give Water a Hand Campaign (Phase 3)	3) Distribute signs for local jurisdictions			Jul-05	complete				x)	x x	х						
nutrients	urban runoff	(Watershed Awareness Campaign) Give Water a Hand Campaign and educational materials	and organizations to use Distribute info at events, programs and presentations	Duck and Otter Creeks Partnership, Inc; Maumee RAP; Lucas, Ottawa and and Wood SWCDs	Duck and Otter Creeks Partnership, Inc; Maumee RAP; Lucas, Ottawa and and Wood SWCDs	year round	ongoing	1) Distributed at Oregon Days annually 2) Distributed at CYS Days annually 3) Distributed at Partnership Open House biennially			x)	< x	x						2005: Distributed at Oregon Days, Open House
nutrients	urban runoff	periodic observations by watershed coordinator and/or other volunteers to determine if nuisance algae is present	Volunteer reports if nuisance algae is observed and its location, daytime temp, conditions, etc.	Partnership members/volunteers; community members?	none needed	2006	concept									x				
nutrients	urban runoff	Review existing dissolved oxygen data	Determine if creek meets Ohio WQS or i data is lacking	f	none needed	2006	concept									x				
organic enrichment	decaying plant/animal matter	Develop or obtain educational material to deter landowners from dumping grass clippings and such into creeks	1) Research available materials	City of Oregon	City of Oregon	2005	in progress	# of households reached; survey of indiviudal implementation?	Chapter 10.5	Otter Creek w/in City of Oregon)	¢	x					x	
organic enrichment	decaying plant/animal matter	Develop or obtain educational material to deter landowners from dumping grass clippings and such into creeks	2) Distribute to landowners, especially adjacent to creek	City of Oregon	City of Oregon	2006?	in progress					;	¢	x					x	
organic enrichment	decaying plant/animal matter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	 Design new Drains are for Rain storm drain stencils and companion door hangers 	Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete	# of supplies ordered; # of households given educational materials; # of purchasing	Chapter 10.5; 5.7.1			;	<	x				x	x	
organic enrichment	decaying plant/animal matter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	2) Place bulk order for local jurisdictions and organizations			Jun-05	complete)	(х				х	Х	
organic enrichment	decaying plant/animal matter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)		5		Jul-05	complete					;	<	х				x	x	
organic enrichment	decaying plant/animal matter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	 Design new Drains are for Rain storm drain stenciling Field Manuals 	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF; 319 grants; ODNR/CZM grants; foundations; local donations; cities	2003-2005	ongoing	# of stenciling manuals sold	Chapter 10.5; 5.7.1									x	x	
organic enrichment	decaying plant/animal matter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	2) Fill orders for local jurisdictions and organizations as placed				ongoing											х	х	

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Causes of Impairment (Pollutant or Stressor)	t) Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed									BUI BUI 12 #13	BUI Comments &
organic enrichment	decaying plant/animal matter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 3)	Conduct public Storm Drain Stenciling events	Duck and Otter Creeks Partnership, Maumee RAP, Jurisdictions, organizations BP Amoco, OEEF, ODNR/CZM grants; foundations, Maumee RAP, TMACOG, local jurisdictions, organizations	April - Oct	ongoing	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating										×		2005: 28 drains stenciled; approx 200 flyers/door hangers distribute 11 volunteers X stenciled; industries in watershed plan to stencil near their property in 2006
organic enrichment	discarded litter/food waste	CYS Day	1) Establish planning team	Maumee RAP; Duck and Otter Creeks Partnership; ORKA; Cities of Oregon, Northwood, Toledo; TMACOG; Lake Erie Commission; various other community partners	April - Sept (annually)	ongoing	Relative to previous years: 1) tons of garbage and debris removed from area streams; 2) number of volunteers that participate; 3) # of sites/RM cleaned 4) amount of support received for planning and funding the event	Chapter 10.5	sites vary each yea typically 3-6 sites between RM 4.0 and 7.0 on Otter Creek	ar	x		×				x		2005: 105 volunteers (for Duck, Otter, and Maumee Bay) 10 sites on Otter; Ov 2000 lbs plus 50 tires
organic enrichment	discarded litter/food	CYS Day	2) Solicit contributions and site captain		April - Sept	ongoing					Х		X				х		X
organic enrichment	discarded litter/food	CYS Day	3) Distribute promotional materials		June - Sept	ongoing					X		X				x		×
organic enrichment	waste discarded litter/food	CYS Day	4) Select waterways and sites to be		Aug	ongoing					Х		X				x		X
organic enrichment	discarded litter/food	CYS Day	cleaned 5) Conduct site captain training		Sept	ongoing					X		X				x		X
organic enrichment	discarded litter/food	CYS Day	6) Hold event and appreciation picnic		Sept	ongoing					х		×				x		X
organic enrichment	waste discarded litter/food waste	Work with local communities to encourage "adopt a stream segment" or neighborhood stewardship program		City of Toledo, City of Oregon, City of Northwood		concept					x								x
organic enrichment	human and animal excreta	Install pet waste bag/collection stations in Euclid Park and E. Moreland areas with educational signage		City of Oregon City of Oregon	2006-2007	concept	# of stations installed	Chapter 10.5	Otter Creek watershed: old E.Moreland area, Euclid Park		x		×						
organic enrichment	human and animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	 Design new Drains are for Rain storm drain stencils and companion door hangers 	Maumee RAP, Maumee RAP, TMACOG, local TMACOG, local jurisdictions, jurisdictions, organizations organizations	Spring 2005	complete	# of supplies ordered; # of households given educational materials; # of purchasing	Chapter 10.5; 5.7.1			x		x				x		x
organic enrichment	human and animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	 Place bulk order for local jurisdictions and organizations 		Jun-05	complete					х		X				х		x
organic enrichment	human and animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	 Distribute stencils and door hangers for local jurisdictions and organizations t use 	c	Jul-05	complete					x		x				х		x
organic enrichment	human and animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	 Design new Drains are for Rain storm drain stenciling Field Manuals 	Duck and Otter Creeks Partnership, Maumee RAP, jurisdictions, organizations	2003-2004	ongoing	# of stenciling manuals sold	Chapter 10.5; 5.7.1			x		×				x		x
organic enrichment	human and animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	2) Fill orders for local jurisdictions and organizations as placed			ongoing					Х		х				х		х
organic enrichment	human and animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 3)	Conduct public Storm Drain Stenciling events	Duck and Otter Creeks Partnership, Maumee RAP, jurisdictions, organizations Constructions DNR/CZM grants; foundations, Maumee RAP, TMACOG, local jurisdictions, organizations	April - Oct	ongoing	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating				x		×				x		2005: 28 drains stenciled; approx 200 flyers/door hangers distribute 11 volunteers X stenciled; industries in watershed plan to stencil near their property in 2006
organic enrichment	urban runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)		Maumee RAP, TMACOG, local Jurisdictions, US F&WS, ODNR F&WS, ODNR TMACOG	2003-2006	complete	Educate public on sources/pathways of nonpoint and point source pollution; pre- and post-campaign surveys show increased awareness of citizens	5.6.2; 5.7.1; Chapter 10.5	all of Otter Creek watershed	x	x	x	×						
organic enrichment		Give Water a Hand Campaign (Phase 1) (Residential Campaign)			9/3/2004	complete				х	х	х	Х						
organic enrichment	urban runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	newspaper ads		10/03-4/05	complete				х	х	х	х						
organic enrichment	urban runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	bonus items		10/03-4/05	complete				х	х	Х	х						
organic enrichment	urban runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	5) Create and Implement pre-/post- campaign phone survey		12/03 & 5/05	complete				х	х	х	х						

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed				BU	BUI	BUI E		JI BUI		II BUI BU 2 #13 #1	JI Comments &
organic enrichment	urban runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)	1) Develop project	Maumee RAP, TMACOG, local jurisdictions	Maumee RAP, TMACOG, local jurisdictions	2004-2006	in progress	Educate business owners, manager and employees on sources/pathways of nonpoint and point source pollution; show increased awareness of through the # of businesses voluntarily participating in campaign			x	;	< x		x						
organic enrichment	urban runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)	2) Create and distribute 4 Guidebooks for local businesses			8/05-12/06	in progress				х		x x		х						
organic enrichment	urban runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)	3) Create and distribute print ads (newspaper, magazines, newsletters, bulletins)			10/05-12/06	in progress				x	:	x x		x						
organic enrichment	urban runoff	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	1) Design watershed signs for 4 streams (Ottawa, Swan, Maumee & Lake Erie)	Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete				x	2	x x		x						
organic enrichment	urban runoff	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	2) Place bulk order for local jurisdictions and organizations			Jun-05	complete				х	1	x x		Х						
organic enrichment	urban runoff	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	 Distribute signs for local jurisdictions and organizations to use 			Jul-05	complete				х	1	x x		Х						
organic enrichment	urban runoff	Give Water a Hand Campaign and educational materials	Distribute info at events, programs and presentations	Duck and Otter Creeks Partnership, Inc; Maumee RAP; Lucas, Ottawa and and Wood SWCDs	Duck and Otter Creeks Partnership, Inc; Maumee RAP; Lucas, Ottawa and and Wood SWCDs	year round	ongoing	1) Distributed at Oregon Days annually 2) Distributed at CYS Days annually 3) Distributed at Partnership Open House biennially			x	:	x x		х						2005: Distributed a Oregon Days, Oper House
pathogens	animal waste	Implement baseline water quality sampling program	 Implement seasonal sampling for variety of parameter at fixed, repeated locations 	City of Oregon	Cities	2004-	ongoing	# of samples taken, # of locations sampled	Chapter 11	Otter Creek within Oregon (RM 0.5- 6.5)			ĸ		x						Oregon: 4 sample locations; Otter Creek parameters: depth, temp, DO, pH, conductivity, ORP, TSS, turbidity, ammonia, phosphates, nitrates, e coli, FOGs
pathogens	animal waste	Implement baseline water quality sampling program	2) Share data with other entities, such as UT LERC and Partnership	5	none needed		ongoing					1	K		Х						
pathogens	animal waste	Implement baseline water quality sampling program	3) Identify problems areas and/or trends				ongoing					1	K		Х						
Pathogens	Human & animal excreta	Educate Horse owners on proper disposal of manure	Implement Equine Environmental Assurance and Liability Program for Fulton, Lucas and Wood Counties	LSWCD,WSWCD Ohio Livestock Coalition, Farm	Ohio Livestock Coalition, Farm Bureau, ODRN-	2006	concept				x	:	ĸ		x		x	x	x		
pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	1) Scan paper copies to create electronic files of existing septic systems	Bureau TMACOG, Toledo/Lucas Count Health Dept, Lucas County Auditor's Office	DSWC LEPF, TMACOG, y Toledo/Lucas County Health Dept, Lucas County Auditor's Office	2002-2005	complete		5.6.2	all of Otter Creek watershed								x	x		
pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	2) Convert electronic data into GIS map files				complete											x	х		
pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	3) Intergrate with AERIS data				complete											x	х		
pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	4) Train Health Dept personnel to input data and use GIS system				in progress											x	x		
pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	1) Scan paper copies to create electronic files of existing septic systems	c TMACOG, Wood County Health Dept, Lucas County Auditor's Office, Northwest Regional Sewer District	Auditor's Office, Wood County Health	2005-2007	in progress		5.6.2	all of Otter Creek watershed								x	x		Oregon is aggressively extending sewers; few remaining septic systems
pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	2) Convert electronic data into GIS map files				in progress											х	x		
pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	3) Intergrate with AERIS data				in progress											х	x		
pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	4) Train Health Dept personnel to input data and use GIS system				in progress											х	x		
pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	1) Identify stream sampling locations	TMACOG, Toledo/Lucas Count Health Dept, Lucas County Auditor's Office, Wood County Health Dept		2004	complete	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage		RM 2.0								x	x		
pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	2) Identify septic system dye testing locations		1		complete											х	x		
pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	3) Conduct stream sampling and dye testing				complete											x	x		
pathogens	Septic systems	Stream and Septic System Sampling	 Prioritize areas for enforcement based 		1				1	1			_	-	-						

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI E #1	UI BU	JI BUI 3 #4	BUI #5	BUI BU #6 #7	II BUI 7 #8	BUI E #9 #	3UI BL 10 #1	UI <mark>BUI</mark> 11 #12 :	BUI BUI #13 #14	Comments & Misc. Info.
pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	5) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems			complete											x x			
pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	1) Conduct additional stream sampling and dye testing	TMACOG, WRDA 401, Ohio Toledo/Lucas County EPA 319 Health Dept, Lucas County Auditor's Office, Wood County Health Dept		concept	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage										x x	:		
pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	2) Modify priority areas (if necessary)			concept											x x	(
pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	3) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available)			concept											x x	:		
pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 3)	1) Continue to sample and dye test to identify problem areas	TMACOG, WRDA 401, Ohio Toledo/Lucas County EPA 319 Health Dept, Lucas County Auditor's Office, Wood County Health Dept		concept	Sample stream sites and dye test septic systems as needed per county to reduced discharges of unmeasurable amounts of inadequately treated sewage	5.6.2; Chapter 11									x x	:		
pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 3)	2) Continue to pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) until priority areas are addressed			concept											x x	:		
pathogens	urban runoff	Obtain and review current water quality data to id areas of high bacteria or nutrient loading	Contact City of Oregon to obtain current data	City of Oregon, University of Toledo, TMACOG, Health Depts	2004-2005	In progress			Otter Creek								×			
pathogens	urban runoff	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, Duck private donations and Otter Creeks Partnership,Inc; TMACOG, Ohio EPA, public and private schools	August - November	ongoing					×						x x	:	x x	one site usually
pathogens	urban runoff	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)			ongoing					×						x x		x x	
pathogens	urban runoff	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 		Sept	ongoing					X						x x		x x	
pathogens	urban runoff	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools		Sept	ongoing					×						x x		x x	
pathogens	urban runoff	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)	1	mid-Oct	ongoing					×						x x		x x	
pathogens	urban runoff	Student Watershed Watch	6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified	1	late Oct- early Nov	ongoing					×						x x	c	x x	
pathogens	urban runoff	Student Watershed Watch	Data Collector) 7) Student share data and finding at Student Summit		mid-Nov	ongoing					×						x x	c	x x	
pathogens	urban runoff	Student Watershed Watch	Expand Student Watershed Watch Program into additional schools	Maumee RAP, private donations TMACOG, Duck and Otter Creeks Partnership, BP, Cities of Toledo and Oregon, Clay High School and other schools	year round	ongoing	# of new sites added; # of students involved; # of samples taken	Chapter 10.5; Chapter 11			×						x x		x x	
pathogens	urban runoff	SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD	2006	concept					×						x x		x x	
pathogens	urban runoff	SWW Teacher Training/Creditable Data Certification	training			concept					×						x x	:	x x	
pathogens	urban runoff	SWW Teacher Training/Creditable Data Certification	3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC)			concept					×						x x		x x	
pathogens	urban runoff	Work with Health Dept to review available sediment and water data for creeks to identify if contact advisories	certification 1) Review data with Health Dept to id problem areas	Lucas and Wood Co. Health Dept? Health Depts; Ohio EPA	2004-2005	complete											x			
pathogens	urban runoff	should be posted Work with Health Dept to review available sediment and water data for creeks to identify if contact advisories should be posted	 Send available data to LC Health Dep for review 	t		complete											x			

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Causes of Impairmen (Pollutant or Stressor	t Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI	BUI B	и в	JI BU	I BUI	BUI	BUI B		BUI BU	UI <mark>BUI</mark> BI 12 #13 #1	UI Comments &
pathogens	urban runoff	Work with Health Dept to review available sediment and water data for creeks to identify if contact advisories should be posted	3) Meet with L.C. Health Dept. to determine next steps (I.e additional sampling?)			in progress											×			
pathogens	urban runoff	Work with University of Toledo to include bacteria sampling in future sediment		University of Toledo		concept		Chapter 11						T			x			
pesticides	all land where pesticide are used	sampling events Develop or adopt existing program for Fertilizer/pesticide education/reduction				concept		5.7.1; Chapter 10.5				×		T						
pesticides	all land where pesticide	for general public and commercial users Distribute info about existing Household	encourage local jurisdictions to host					5.7.1; Chapter 10.5												
	are used	Haz waste Disposal programs	collection days			concept					1	x x	:	X					· · ·	(
pesticides	all land where pesticide are used	Educational workshop for residents and other appliers (golf course staff, etc) to stress proper application and alternative management measures				concept		5.7.1; Chapter 10.5		x										
pesticides	sites of historical usage	Begin trial sampling program for metals in co-located water, sediment and plant samples at 10 locations on Otter Creek		UT Lake Erie Research Center: Research Experience for Undergraduates; Dr. Spongberg and students	Summer 2004	complete	# of samples taken in creek	Chapter 11	Otter Creek	×										10 locations, primarily at bridge crossings
pesticides	sites of historical usage	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 1)	1) Secure contractor	Duck and Otter US EPA GLNPO Creeks Partnership, Inc.	Phase 1: Oct 2004- Sept 2005	complete	project completion	Chapter 11	Otter Creek	х	:	x x	:	x						(e.g. heavy metals, PCBs, etc)
pesticides	sites of historical usage	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 1)	2) Compilation of existing data and integration w/GIS	Duck and Otter US EPA GLNPO Creeks Partnership, Inc.	Jan-Mar 2005	complete				x	:	x x	:	х						(e.g. heavy metals, PCBs, etc)
pesticides	sites of historical usage	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 1)	3) complete screening HHRA	Duck and Otter US EPA GLNPO Creeks Partnership, Inc.	Sep-05	complete				x	3	x x	:	x						(e.g. heavy metals, PCBs, etc)
pesticides	sites of historical usage	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 1)	4) complete workplans for Phase 2 sampling	Duck and Otter US EPA GLNPO Creeks Partnership, Inc.	Sep-05	complete				×	:	x x	:	x						(e.g. heavy metals, PCBs, etc)
pesticides	sites of historical usage	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 2)	1) Secure funding	Duck and Otter US EPA; Creeks Partnership, foundations, private Inc. donors	2006	planning			Otter Creek	x	1	x x	:	x						(e.g. heavy metals, PCBs, etc)
pesticides	sites of historical usage	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 2)	2) implement workplan from Phase 1			planning				×	:	x x		x						(e.g. heavy metals, PCBs, etc)
pesticides	sites of historical usage	Establish sampling (sediment and/or water) program for creek with the UT	1) Collaborate with UT professor	UT Lake Erie UT or grant Research Center or other dept.; Duck and Otter Creeks Partnership, Inc.	2004-2006	concept	# of samples taken in creek		Otter Creek	×	:	x x	:	x						(reside in sediment?)
pesticides	_	water) program for creek with the UT	2) Develop project workplan			concept				х	1	x x	:	Х						
pesticides	sites of historical usage	water) program for creek with the UT	 Secure additional funding or resources if necessary 			concept				×	:	x x		x						
pesticides	sites of historical usage	Hot Spot Delineation	1) Secure funding; 2) Develop workplan	Duck and Otter US EPA GLNPO Creeks Partnership, Inc.	2007-?	concept				×	:	××		x						(e.g. heavy metals, PCBs, etc)
pesticides	sites of historical usage	Locate other available data, if any, on watershed to specifically look for phenols and related chemicals		Duck and Otter none needed Creeks Partnership, Inc.		concept		Chapter 11			x									Old newspaper articles discussing phenols in creek; possible past industrial sources
pesticides	sites of historical usage	Remedial Alternatives (if needed) for sediment contamination	1) Secure funding; 2) Develop workplan	Duck and Otter US EPA GLNPO Creeks Partnership, Great Lakes Legacy	2008	concept					:	×								(e.g. heavy metals, PCBs, etc)
pesticides	urban runoff	Begin trial sampling program for metals in co-located water, sediment and plant samples at 10 locations on Otter Creek		UT Lake Erie Research Center: Research Experience for Undergraduates; Dr. Spongberg and students	Summer 2004	complete	# of samples taken in creek	Chapter 11	Otter Creek		2	x								10 locations, primarily at bridge crossings
pesticides	urban runoff	Conduct educational campaign for watershed awareness to encourage action by community members	1) Secure funding	Duck and Otter Creeks Partnership, Inc Great Lakes Aquatic Habitat Nettwork and Fund, Lucas County Commissioners		complete	# of educational brochures distributed; # of attendees at meeting; # of new members or Friends of		Otter Creek	x	;	×						x		Over 11,000 ed brochures distributed; 23 attendees at Open House; at least 6 Friends ofto date
pesticides	urban runoff	Conduct educational campaign for watershed awareness to encourage action by community members	2) Hire consultant		Mar-05	complete				х	:	×						x		
pesticides	urban runoff	Conduct educational campaign for watershed awareness to encourage action by community members	 Develop educational materials 		Summer 2005	complete				×	:	×						x		

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							Chattan (in and and	Desformentes	Caractel		5010				ipaneu			pared			
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI BU #1 #	JI BU 2 #?	I BUI #4	BUI E #5	3UI B #6 #	JI BU 7 #8	BUI #9	BUI B #10 #	UI BUI 11 #12	1 BUI BUI 2 #13 #14	Comments & Misc. Info.
pesticides	urban runoff	Conduct educational campaign for watershed awareness to encourage action by community members	4) Distribute materials			Fall 2005	complete				x	х							x		
pesticides	urban runoff	Conduct educational campaign for watershed awareness to encourage action by community members	5) Hold Open House to highlight opportunities for involvement w/Partnership			Oct-05	complete				х	х							x		
pesticides	urban runoff	Distribute contact information for household haz. waste disposal options	encourage local jurisdictions to host collection days				concept		5.7.1; Chapter 10.5		x	T	×								
pesticides	urban runoff	and existing programs for collection Distribute educational material to homeowners and commercial users on proper application techniques and					concept		5.7.1; Chapter 10.5		,	<									
pesticides	urban runoff	alternative BMPs Educational workshop for residents and other appliers (golf course staff, etc) to stress proper application and alternative					concept		5.7.1; Chapter 10.5		x										
pesticides	urban runoff	management measures Establish sampling (sediment and/or water) program for creek with the UT	1) Collaborate with UT professor	UT Lake Erie Research Center or other dept.; Duck and Otter Creeks Partnership, Inc.	UT or grant	2004-2006	concept	# of samples taken in creek		Otter Creek	x	x	x		x						
pesticides	urban runoff	Establish sampling (sediment and/or water) program for creek with the UT	2) Develop project workplan	r artriersnip, inc.			concept				x	x	x		x						
pesticides	urban runoff	Establish sampling (sediment and/or water) program for creek with the UT	 Secure additional funding or resource if necessary 				concept				x	x	x		x						
pesticides	urban runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	1) Develop project	Maumee RAP, TMACOG, local Jurisdictions, US F&WS, ODNR	OEEF, local jurisdictions, US F&WS, ODNR, Maumee RAP, TMACOG	2003-2006	complete	Educate public on sources/pathways of nonpoint and point source pollution; pre- and post-campaign surveys show increased awareness of citizens	5.6.2; 5.7.1; Chapter 10.5	all of Otter Creek watershed	x	x	x		x						
pesticides	urban runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	2) Release RFP/Hire contractors			9/3/2004	complete				х	х	х		х						
pesticides	urban runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	 Create and distribute TV, cinema and newspaper ads 	1		10/03-4/05	complete				х	Х	х		х						
pesticides	urban runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	4) Create and distribute 6 tip cards & bonus items			10/03-4/05	complete				х	х	х		х						
pesticides	urban runoff					12/03 & 5/05	complete				х	х	x		х						
pesticides	urban runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)		Maumee RAP, TMACOG, local jurisdictions	Maumee RAP, TMACOG, local jurisdictions	2004-2006	in progress	Educate business owners, manager and employees on sources/pathways of nonpoint and point source pollution; show increased awareness of through the # of businesses voluntarily participating in campaign			×	×	x		x						
pesticides	urban runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)	2) Create and distribute 4 Guidebooks for local businesses			8/05-12/06	in progress				х	x	х		х						
pesticides	urban runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)				10/05-12/06	in progress				x	×	x		x						
pesticides	urban runoff	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)		s Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete				x	x	x		x						
pesticides	urban runoff	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	 Place bulk order for local jurisdictions and organizations 	5		Jun-05	complete				х	х	х		х						
pesticides	urban runoff		 Distribute signs for local jurisdictions and organizations to use 			Jul-05	complete				х	x	х		х						
pesticides	urban runoff	Give Water a Hand Campaign and educational materials	Distribute info at events, programs and presentations	Duck and Otter Creeks Partnership, Inc; Maumee RAP; Lucas, Ottawa and and Wood SWCDs	Maumee RAP; Lucas, Ottawa and and Wood SWCDs	year round	ongoing	1) Distributed at Oregon Days annually 2) Distributed at CYS Days annually 3) Distributed at Partnership Open House biennially			x	x	x		x						2005: Distributed a Oregon Days, Ope House
pesticides	urban runoff	Implement baseline water quality sampling program	 Implement seasonal sampling for variety of parameter at fixed, repeated locations 	City of Oregon	Cities	2004-	ongoing	# of samples taken, # of locations sampled	Chapter 11	Otter Creek within Oregon (RM 0.5- 6.5)		x			x						Oregon: 4 sample locations; Otter Creek parameters depth, temp, DO, pH, conductivity, ORP, TSS, turbidity, ammonia phosphates, nitrates, e coli, FOGs
pesticides	urban runoff	Implement baseline water quality	2) Share data with other entities, such a	IS	none needed		ongoing					х			x						
		sampling program	UT LERC and Partnership				0 0					1									

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed					BUI B #7 #						Comments & Misc. Info.
pesticides	urban runoff	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	August - November	ongoing			all of watershed		х					x	x	x	x	one site usually
pesticides	urban runoff	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)				ongoing					x					x	х	x	х	
pesticides	urban runoff	Student Watershed Watch	3) Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector)			Sept	ongoing					х					x	x	x	x	
pesticides	urban runoff	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools			Sept	ongoing					х					х	х	x	х	
pesticides	urban runoff	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)			mid-Oct	ongoing					х					х	х	x	х	
pesticides	urban runoff	Student Watershed Watch	6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified			late Oct- early Nov	ongoing					x					х	x	x	х	
pesticides	urban runoff	Student Watershed Watch	Data Collector) 7) Student share data and finding at Student Summit			mid-Nov	ongoing					х					Х	х	х	х	
pesticides	urban runoff	Student Watershed Watch (Phase 2)	Student Summit Expand Student Watershed Watch Program into additional schools	Maumee RAP, TMACOG, Ohio EPA, public and	private donations	year round	ongoing					х					x	x	x	x	
pesticides	urban runoff	SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	private schools Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept					x					x	x	x	x	
pesticides	urban runoff	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training				concept					x					×	X	×	x	
pesticides	urban runoff	SWW Teacher Training/Creditable Data Certification	3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC) certification				concept					x					x	x	x	x	
pesticides	urban runoff	Wildlife officials surveyed to determine if reports of tainting; if unknown by wildlife officials, survey local residents to determine if eat fish and if so, if tainted?	certification	University; volunteer student; ODNR, Maumee RAP	unknown		concept				x										Ask wildlife officials? Mark S says probably not- ODNR would have heard reports, but tainting is
Pesticides	Urban/Suburban	Organic Lawn Care Clinic	Less fertilizer in urban/suburban runoff	SWCD/Black Swamp Conservancy	SWCD	Annual	ongoing	# of attendees				х		х							subjective
Refuse, litter	litter	Conduct educational campaign for watershed awareness to encourage action by community members	1) Secure funding	Duck and Otter Creeks Partnership, Inc	Great Lakes Aquatic Habitat Nettwork and Fund, Lucas County Commissioners	2005	complete	# of educational brochures distributed; # of attendees at meeting; # of new members or Friends of		Otter Creek	x	x						x			Over 11,000 ed brochures distributed; 23 attendees at Open House; at least 6 Friends ofto date
Refuse, litter	litter	Conduct educational campaign for watershed awareness to encourage action by community members	2) Hire consultant			Mar-05	complete				x	x						x			
Refuse, litter	litter	Conduct educational campaign for watershed awareness to encourage action by community members	3) Develop educational materials			Summer 2005	complete				x	x						x			
Refuse, litter	litter	Conduct educational campaign for watershed awareness to encourage action by community members	4) Distribute materials			Fall 2005	complete				x	х						х			
Refuse, litter	litter	Conduct educational campaign for watershed awareness to encourage action by community members	5) Hold Open House to highlight opportunities for involvement w/Partnership			Oct-05	complete				x	х						х			
Refuse, litter	litter	Continue/expand Sign our Streams program to increase community awareness of stream locations and increase stewardship of stream by the community (in turn, reduce dumping/aesthetic degradation)	Clearwater	Duck and Otter Creeks Partnership, City of Oregon, City of Northwood, City o Toledo		2003	complete	# of locations "signed"	Chapter 10.5	10 locations on Otter Creek								×			2005: 8 locations signed; 2 pending and more signs printing
Refuse, litter	litter	Continue/expand Sign our Streams program to increase community awareness of stream locations and increase stewardship of stream by the community (in turn, reduce dumping/aesthetic degradation)	 Identify sign locations at visible road crossings in community 			2004	complete											x			
Refuse, litter	litter	Continue/expand Sign our Streams program to increase community awareness of stream locations and increase stewardship of stream by the community (in turn, reduce dumping/aesthetic degradation)	3) Install signs			2005	In progress											x			

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI #1	BUI B #2 #	UI BL 13 #4	I BU	BUI	BUI	BUI B			BUI <mark>BUI</mark> #12 <mark>#13</mark>	BUI	Comments & Misc. Info.
Refuse, litter	litter	periodic observations by watershed coordinator or other volunteers to report noticeable "free froms"	1)Throughout year, compile list of potential CYS sites and areas that regularly have litter, etc	Partnership members, Friends of volunteers, community members; watershee coordinator	none needed	2004-	ongoing			all of Otter Creek									x			
Refuse, litter	litter	periodic observations by watershed coordinator or other volunteers to report noticeable "free froms"	2) enlist volunteers and discuss what to look for and report	watershed coordinator or volunteer	none needed	2006-2007	concept												x			
Refuse, litter, etc	litter	CYS Day	1) Establish planning team	Maumee RAP; Duck and Otter Creeks Partnership; ORKA; Cities of Oregon, Northwood, Toledo; TMACOG; Lake Erie Commission; various other community partners	Solicit private and public contributions, grants when available	April - Sept (annually)	ongoing	Relative to previous years: 1) tons of garbage and debris removed from area streams; 2) number of volunteers that participate; 3) # of sites/RM cleaned 4) amount of support received for planning and funding the event	Chapter 10.5			:	x		x				x			
Refuse, litter, etc	litter	CYS Day	2) Solicit contributions and site captain support			April - Sept	ongoing					:	×		x				x			
Refuse, litter, etc	littor	CYS Day	3) Distribute promotional materials			June - Sept	ongoing						~		v				X			
Refuse, litter, etc	litter litter	CYS Day	4) Select waterways and sites to be			Aug	ongoing ongoing						×		×				X			
Refuse, litter, etc	litter	CYS Day	cleaned 5) Conduct site captain training			Sept	ongoing						x		X				X			
Refuse, litter, etc	litter	CYS Day	6) Hold event and appreciation picnic			Sept	ongoing						X		X				X			
Refuse, litter, etc	litter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	 Design new Drains are for Rain storm drain stencils and companion door hangers 	Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete	# of supplies ordered; # of households given educational materials; # of purchasing	Chapter 10.5; 5.7.1			:	×		x				x		x	
Refuse, litter, etc	litter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	 Place bulk order for local jurisdictions and organizations 			Jun-05	complete					2	x		х				х		х	
Refuse, litter, etc	litter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)		0		Jul-05	complete					:	x		x				x		x	
Refuse, litter, etc	litter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	 Design new Drains are for Rain storm drain stenciling Field Manuals 	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF; 319 grants; ODNR/CZM grants; foundations; local donations; cities		ongoing	# of stenciling manuals sold	Chapter 10.5; 5.7.1										x			
Refuse, litter, etc	litter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)					ongoing												Х			
Refuse, litter, etc	litter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 3)	organizations as placed Conduct public Storm Drain Stenciling events	Duck and Otter Creeks Partnership, Maumee RAP, TIMACOG, local jurisdictions, organizations	BP Amoco, OEEF, ODNR/CZM grants; foundations, Maumee RAP, TMACOG, local jurisdictions, organizations	April - Oct	ongoing	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating											x		ste 20 ha 11 ste ino wa	2005: 28 drains lenciled; approx. 200 flyers/door angers distributed 1 volunteers enciled; dustries in atershed plan to lencil near their roperty in 2006
salinity	road deicing	Implement alternative deicing products (such as corn-based products) and other control measures	Begin using alternative deicing products	City of Oregon	City of Oregon	2003-	ongoing	% of salt use reduced; # of miles of road where alternative applied		Otter Creek watershed in City c Oregon limits (RM 1.5-6.5)		:	×		х						×	
salinity	road deicing	Install computerized spreaders on all salt trucks to control application rate	t	City of Oregon	City of Oregon	2004-	In progress	# of trucks converted; % of salt use reduced	5.8.4			:	×		x						x	
salinity	road deicing	Sampling program for conductivity, pH, and other salinity factors during winter months	Determine if salinity is a limiting factor or concentrated pollutant leading to fish/habitat impairments	UT LERC; Cities		2004-	in progress		Chapter 11			:	×		x						x	
sediment/siltation	construction	Regional Storm Water Standards Manua (Phase 1)	1) Determine contents for manual	RAP Urban Runoff Action Group, MRRSWC	Lake Erie Protection Fund	2002	complete	Implement a regional/watershed management program: a) contro increases in runoff rates, b) prevent losses in infiltration, c) prevent runoff pollution		all of AOC									x		x	
sediment/siltation	construction	Regional Storm Water Standards Manua (Phase 1)	l 2) Write manual				complete												×		Х	
sediment/siltation	construction	Regional Storm Water Standards Manua (Phase 1)	3) Identify alternative development designs/layouts that protect water quality	/			complete												x		x	

											BUI	Color C	ode:		Impai	red	N	t Impaire	d 📃 Un	known	Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI 8 #1	BUI B	UI BU 3 #4	BUI #5	BUI #6	BUI E #7	3UI B #8 #	UI BUI 9 #10	BUI B #11 #1	UI <mark>BUI</mark> 12 #13	BUI Comments & #14 Misc. Info.
sediment/siltation	construction	Regional Storm Water Standards Manua (Phase 1)	 A) Encourage local jurisdictions to adopt manual as their standards 				complete												x		X recommend in code by end of 2005
sediment/siltation	construction	Regional Storm Water Standards Manua (Phase 2)	I1) Review existing manual	Maumee RAP Urban Runoff Action Group, SWC	GLC	2005-2007	in progress	Completion and distribution of revised manual	Chapter 10.5; 5.7.1	all of watershed									x		X
sediment/siltation	construction	Regional Storm Water Standards Manua (Phase 2)	I2) Update chapters with new content and regulations	0110		2005-2006	in progress												X		x
sediment/siltation	construction	(Phase 2) Regional Storm Water Standards Manua (Phase 2)	 a) Conduct workshops and site visits for consultants, developers, contractors on stormwater plan preparation and post- construction BMPs 			2006-2007	in progress	50 percent of consultants, developers, contractors that work in the area participate											x		x
sediment/siltation	construction	Review all site plan and require pre/post construction controls for water quality, even for sites < 1 acre		City of Oregon	City of Oregon	2004-	ongoing		5.3.1; 5.3.2; 5.3.3; 5.4.1; 5.4.2	Otter Creek within Oregon (RM 0.5- 6.5)											X feature on site to reduce urban runoff
sediment/siltation	construction	Revise storm water regulations and ordinances; may incorporate Maumee RAP manual, ODNR Rainwater manual, regional Storm Water Coalition recommendations and other references		City of Oregon	City of Oregon	2004-2005	complete	stricter BMPs, ordinances that are more protective of stream health	Chapter 5	Otter Creek within Oregon (RM 0.5- 6.5)											x
sediment/siltation	construction	Work with new development/industries moving into the watershed to develop strategies to minimize their impact on the creeks (for instance, storm water BMPs, setbacks. habitat buffers. etc)		Duck and Otter Creeks Partnership, Inc.; US Coking; other new businesses	none needed	2004-2006	ongoing		5.3.1; 5.3.2			>	<		x				x		
Sediment/Siltation	Pasture	Cost share to install all-weather paddocks for horse owners	Install demonstration paddock in Lucas County	ODNR-DSWC, SWCD, NRCS	NRCS, ODNR- SWCD		concept				x)	(x		x	х	x		
sediment/siltation	roads	Implement alternative deicing products (such as corn-based products) and other control measures	Begin using alternative deicing products	,	City of Oregon	2004-	ongoing	% of salt use reduced; # of miles of road where alternative applied	5.8.4 I	Otter Creek watershed in City o Oregon limits (RM 1.5-6.5)	of)	(x						×
sediment/siltation	roads	Install computerized spreaders on all sal trucks to control application rate	t	City of Oregon	City of Oregon	2004-	ongoing	# of trucks converted; % of salt use reduced	5.8.4	1.0 0.0)					Х						
sediment/siltation	roads	Review all site plan and require pre/post construction controls for water quality, even for sites < 1 acre		City of Oregon	City of Oregon	2004-	ongoing	use reduced	5.3.1; 5.3.2; 5.3.3; 5.4.1; 5.4.2	Otter Creek within Oregon (RM 0.5- 6.5)					x						Oregon requires a water quality feature on site to reduce urban runoff
sediment/siltation	roads	Revise storm water regulations and ordinances; may incorporate Maumee RAP manual, ODNR Rainwater manual, regional Storm Water Coalition recommendations and other references		City of Oregon	City of Oregon	2004-2005	complete	stricter BMPs, ordinances that are more protective of stream health	Chapter 5	Otter Creek within Oregon (RM 0.5- 6.5)					x						
sediment/siltation	streambanks	Establish sampling (sediment and/or water) program for creek with the UT	1) Collaborate with UT professor	UT Lake Erie Research Center or other dept.; Duck and Otter Creeks Partnership, Inc.	UT or grant	2004-2006	concept	# of samples taken in creek		Otter Creek	x	>	×		x						(e.g. heavy metals, PCBs, etc)
sediment/siltation	streambanks	Establish sampling (sediment and/or water) program for creek with the UT	2) Develop project workplan				concept				x)	(x		x						(e.g. heavy metals, PCBs, etc)
sediment/siltation	streambanks	Establish sampling (sediment and/or water) program for creek with the UT	3) Secure additional funding or resources if necessary				concept				×)	x		x						(e.g. heavy metals, PCBs, etc)
sediment/siltation	streambanks	Identify and/or establish program to provide incentive to landowners for filter strips and replanting/preserving habitat along creek	 Identify grant opportunities for this program, 2) identify target areas in watershed to maintain or re-plant habitat 	Maumee RAP or Duck and Otter Creeks Partnership, Inc; landowners; Cities of Oregon, Toledo, and Northwood	319 program, ODNR/CZM grants; private foundations, National Fish and Wildlife Foundation, US EPA	2006	concept		5.5.1; 7.6.1			>	<								
sediment/siltation	streambanks	Identify areas of creek where stream bank stabilization is needed	Continue "walking" creek and general observations	City of Oregon; Duck and Otter Creeks Partnership staff and/or volunteers		2004-?	ongoing		7.6.1; 8.3.3			>	<								x
sediment/siltation	streambanks	Implement Wetland Id and Restoration Plan for Duck and Otter Creeks to identify and encourage priority areas for enhancement/restoration of wetlands	1) Solicit cooperation/support of landowners for 2 priority restorations sites on Otter Creek	Residential property owners, City of Toledo, City of Northwood, City of Oregon, etc.	USEPA GLNPO grants, ODNR Coastal Management grants, OEPA 319 grants, various foundations, project partners, SEP monies, mitigation monies, etc	March 2004- ?	in progress	Establish 1 wetland enhancement or restoration project within 5 years	8.3.1; 8.3.2; 8.3.3	Otter Creek- 5 identified sites)	(x						x

										BUI	Color Co	de:	Impa	aired	Not Ir	npaired	Unknown	Not Applicable
Causes of Impairmen (Pollutant or Stressor	t) Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI E		I BUI I		I BUI B	BUI BUI	BUI BUI	BUI BUI #12 #13	BUI Comments &
sediment/siltation	streambanks	Implement Wetland Id and Restoration Plan for Duck and Otter Creeks to identify and encourage priority areas for enhancement/restoration of wetlands	 Secure grant funding to implement wetland restoration activities 		2005	planning					x		x					x
sediment/siltation	streambanks	Implement Wetland Id and Restoration Plan for Duck and Otter Creeks to identify and encourage priority areas for enhancement/restoration of wetlands	3) Implement wetland restoration			planning					x		x					x
sediment/siltation	streambanks	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream		Duck and Otter US EPA CZM grant Creeks Partnership; Sunoco; BP Amoco; Port Authority	2002-2003	complete	21 preliminary wetland sites id'd on Otter Creek; 5 detailed restoration plans developed	8.3.1; 8.3.2; 8.3.3	Otter Creek and riparian corridor w/in 500 feet									x
sediment/siltation	streambanks	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	2) Distribute RFP and hire consultants		2002	complete												x
sediment/siltation	streambanks	Inventory watershed for existing wetland	 Desktop review of watershed to id preliminary wetland sites 		2002-2003	complete												x
sediment/siltation	streambanks	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	4) Secure property owner permission for site access for field visits		2003	complete												x
sediment/siltation	streambanks	Inventory watershed for existing wetland	5) Conduct detailed survey of each priority site		2003	complete												x
sediment/siltation	streambanks	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	cost estimates for		2003	complete												x
sediment/siltation	streambanks	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	 Distribute WIRP to interested stakeholders, agencies, etc 		2004	complete												x
sediment/siltation	streambanks	Regional Storm Water Standards Manual (Phase 1)		RAP Urban Runoff Lake Erie Protection Action Group, Fund MRRSWC	2002	complete	Implement a regional/watershed management program: a) contro increases in runoff rates, b) prevent losses in infiltration, c) prevent runoff pollution		all of AOC		x		×			x		
sediment/siltation	streambanks	Regional Storm Water Standards Manual (Phase 1)	2) Write manual			complete					Х		Х			X		
sediment/siltation	streambanks	Regional Storm Water Standards Manual	 Identify alternative development designs/layouts that protect water quality 			complete					x		x			x		
sediment/siltation	streambanks	Regional Storm Water Standards Manual (Phase 1)	 Encourage local jurisdictions to adopt manual as their standards 			complete					X		X			X		
sediment/siltation	streambanks	Regional Storm Water Standards Manual (Phase 2)		Maumee RAP Urban GLC Runoff Action Group, SWC	2005-2007	in progress	Completion and distribution of revised manual	Chapter 10.5; 5.7.1	all of watershed		x		x			x		
sediment/siltation	streambanks	Regional Storm Water Standards Manual (Phase 2)	 Update chapters with new content and regulations 		2005-2006	in progress					х		x			х		
sediment/siltation	streambanks		3) Conduct workshops and site visits for consultants, developers, contractors on stormwater plan preparation and post- construction BMPs		2006-2007	in progress	50 percent of consultants, developers, contractors that work in the area participate				x		x			×		
Sediment/Siltation	Urban/Suburban	Pond Clinic	Educate landowners on proper application of herbicides and alternate approaches to pond management; proper construction techniques including storm water BMPs.	Fisherman's Club	Annual	ongoing					x	x	x x			x x		
thermal stress/sunlight	riparian corridor destruction	Encourage landowners re-planting or maintaining of buffers along creeks		Duck and Otter Creeks Partnership, Inc		concept		5.5.1; 7.6.1			x				x			x
toxic substances	industrial discharges (current or old)	in co-located water, sediment and plant		UT LERC and NSF grant	Summer 2004	Complete	# of samples taken in creek	Chapter 11	Otter Creek, 10 sites				x					RM?
toxic substances	industrial discharges (current or old)	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 1)	1) Secure contractor	Duck and Otter US EPA GLNPO Creeks Partnership, Inc.	Oct 2004- Sept 2005	complete	project completion	Chapter 11	Otter Creek	x	x	х	х					(e.g. heavy metals, PCBs, etc)
toxic substances	industrial discharges (current or old)	Conduct Ecological and Human Health	integration w/GIS	Duck and Otter US EPA GLNPO Creeks Partnership, Inc.	Jan-Mar 2005	complete				x	х	х	х					(e.g. heavy metals, PCBs, etc)

											BUIC	Color C	ode:	Imp	aired	No	t Impaired	I 🗌 Un	nknown		Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed					UI BUI	BUI BU	UI BUI 9 #10	BUI B			Comments & Misc. Info.
toxic substances	industrial discharges (current or old)	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 1)	3) complete screening HHRA	Duck and Otter Creeks Partnership,	US EPA GLNPO	Sep-05	complete				x	×	x	×	:						(e.g. heavy metals, PCBs, etc)
toxic substances	industrial discharges (current or old)	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 1)	4) complete workplans for Phase 2 sampling	Duck and Otter Creeks Partnership,	US EPA GLNPO	Sep-05	complete				x	×	x	×	:						(e.g. heavy metals, PCBs, etc)
toxic substances	industrial discharges (current or old)	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 2)	1) Secure funding	Duck and Otter Creeks Partnership,	US EPA; foundations, private donors	2006	planning			Otter Creek	x	×	×	×						(י F	(e.g. heavy metals, PCBs, etc)
toxic substances	industrial discharges (current or old)	Conduct Ecological and Human Health Risk Assessment for Duck and Otter	2) implement workplan from Phase 1	inc.	donors		planning				x	×	x	×	:					() F	(e.g. heavy metals, PCBs, etc)
toxic substances	industrial discharges (current or old)	Creeks watersheds (Phase 2) Continue to add new information to GIS inventory	Map of NPDES locations; basic information on type of discharge, frequency of use, permit parameters, etc	university volunteer or graduate student in GIS		2002-2006	ongoing				x									ir W	No hunting allowed in city limits; watershed w/in city
toxic substances	industrial discharges (current or old)	Determine where active NPDES discharges are located and what parameters are sampled for and compliance rates	Map of NPDES locations; basic information on type of discharge, frequency of use, permit parameters,	OEPA; Partnership members		2004-2005	in progress					×	:								limits
toxic substances	industrial discharges (current or old)	Establish sampling (sediment and/or water) program for creek with the UT	1) Collaborate with UT professor	UT Lake Erie Research Center or other dept.; Duck and Otter Creeks Partnership, Inc.	UT or grant	2004-2006	concept	# of samples taken in creek		Otter Creek	x	×	×	×							
toxic substances	industrial discharges (current or old)	Establish sampling (sediment and/or water) program for creek with the UT	2) Develop project workplan	r arthership, mc.			concept				x	×	: x	×							
toxic substances	industrial discharges (current or old)	Establish sampling (sediment and/or water) program for creek with the UT	 Secure additional funding or resources if necessary 				concept				x	×	x	×	-						
toxic substances	industrial discharges (current or old)	Hot Spot Delineation	 Secure funding; 2) Develop workplan 	Duck and Otter Creeks Partnership, Inc	US EPA GLNPO	2007-?	concept				x	×	×	×	:						(e.g. heavy metals, PCBs, etc)
toxic substances	industrial discharges (current or old)	Identify NPDES permits (current or recent past) that include testing for phenols; research historical usage/disposal in watershed	Map of NPDES locations; basic information on type of discharge, frequency of use, permit parameters, etc.	OEPA; Partnership members or staff		2006-2007	concept		Chapter 11	all of Otter Creek	x	×	×	×	x		x	x	x x	x p x C	found old newspaper articles about historic problems w/releases into Otter creek incl. Phenol-related compounds
toxic substances	industrial discharges (current or old)	Implement baseline water quality sampling program	 Implement seasonal sampling for variety of parameter at fixed, repeated locations 	City of Oregon	Cities	2004-	ongoing	# of samples taken, # of locations sampled	Chapter 11	Otter Creek within Oregon (RM 0.5- 6.5)		х		×						C d D C t t	Oregon: 4 sample locations; Otter Creek parameters: depth, temp, DO, pH, conductivity, ORP, TSS, turbidity, ammonia, phosphates, nitrates, e coli, FOGs
toxic substances	industrial discharges	Implement baseline water quality	2) Share data with other entities, such as		none needed		ongoing					×		×							
toxic substances	(current or old) industrial discharges	sampling program Implement baseline water quality	UT LERC and Partnership 3) Identify problems areas and/or trends				ongoing					×		×							
Toxic substances	(current or old) Industrial discharges	sampling program NPDES permit GIS inventory (Phase 1)	1) Collect GIS coordinates for all current	Ohio EPA DSW	Ohio EPA	2005-07	in progress	Coordinates for all permits			x	×	x	×			x	x)	x x	x	
Toxic substances	(current or old) Industrial discharges (current or old)	NPDES permit GIS inventory (Phase 1)	NPDES permits 2) Convert electronic data into GIS map files				in progress	collected			x	×	: X	×	: x		x	x)	x x	x	
Toxic substances	Industrial discharges (current or old)	NPDES permit GIS inventory (Phase 2)	Integrate with AERIS data	TMACOG, Lucas County Auditor's Office	Maumee RAP		planning				x	×	x	×	x		x	x	x x	x	
toxic substances	industrial discharges (current or old)	Remedial Alternatives (if needed) for sediment contamination	1) Secure funding; 2) Develop workplan	Duck and Otter Creeks Partnership,	US EPA GLNPO Great Lakes Legacy	2008	concept				x		x	×	:					() F	(e.g. heavy metals, PCBs, etc)
toxic substances	industrial discharges (current or old)	Work with Health Dept to review available sediment and water data for creeks to identify if contact advisories should be posted	1) Review data with Health Dept to id problem areas	Lucas and Wood Co Health Depts; Ohio EPA	. Health Dept?	2004-2005	complete			all of Otter Creek	x										
toxic substances	industrial discharges (current or old)	Work with Health Dept to review available sediment and water data for creeks to identify if contact advisories should be posted	2) Send available data to LC Health Dept for review				complete				x										
toxic substances	industrial discharges (current or old)	Work with Health Dept to review available sediment and water data for creeks to identify if contact advisories should be posted	 Meet with L.C. Health Dept. to determine next steps (I.e additional sampling?) 				ongoing				x										
toxic substances	landfills (current or old)	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 1)	1) Secure contractor	Duck and Otter Creeks Partnership, Inc.	US EPA GLNPO	Oct 2004- Sept 2005	complete	project completion	Chapter 11	Otter Creek	x	×	×	×							(e.g. heavy metals, PCBs, etc)
toxic substances	landfills (current or old)	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 1)	2) Compilation of existing data and integration w/GIS	Duck and Otter Creeks Partnership, Inc.	US EPA GLNPO	Jan-Mar 2005	complete				x	×	x	×	:						(e.g. heavy metals, PCBs, etc)

											BUI (olor Co	de:	Imp	aired	No	Impaired	Unkn	nown	Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI B #1	UI BU 2 #3	I BUI #4	BUI BU	JI <mark>BUI</mark> 6 #7	BUI BU	JI BUI E #10 #	BUI BUI #11 #12	BUI E #13 #	BUI Comments & #14 Misc. Info.
toxic substances	landfills (current or old)	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 1)	3) complete screening HHRA	Duck and Otter Creeks Partnership, Inc.	US EPA GLNPO	Sep-05	complete				x	х	х	×						(e.g. heavy metals, PCBs, etc)
toxic substances	landfills (current or old)	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 1)	4) complete workplans for Phase 2 sampling	Duck and Otter Creeks Partnership, Inc.	US EPA GLNPO	Sep-05	complete				x	х	х	×	:					(e.g. heavy metals, PCBs, etc)
toxic substances	landfills (current or old)	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 2)	1) Secure funding	Duck and Otter Creeks Partnership, Inc.; UT Lake Erie Research Center	US EPA; foundations, private donors	2006	planning			Otter Creek	x	x	x	×						(e.g. heavy metals, PCBs, etc)
toxic substances	landfills (current or old)	Conduct Ecological and Human Health Risk Assessment for Duck and Otter Creeks watersheds (Phase 2)	2) implement workplan from Phase 1	Research Conter			planning				x	x	x	×	:					(e.g. heavy metals, PCBs, etc)
toxic substances	landfills (current or old)	Establish sampling (sediment and/or water) program for creek with the UT	1) Collaborate with UT professor	UT Lake Erie Research Center or other dept.; Duck and Otter Creeks Partnership, Inc.	UT or grant	2004-2006	concept	# of samples taken in creek		Otter Creek	x	x	x	×	:					
toxic substances	landfills (current or old)	Establish sampling (sediment and/or water) program for creek with the UT	2) Develop project workplan				concept				x	x	x	×						
toxic substances	landfills (current or old)	Establish sampling (sediment and/or water) program for creek with the UT	3) Secure additional funding or resources if necessary	s			concept				x	x	x	×						
toxic substances	landfills (current or old)		 1) Secure funding; 2) Develop workplan 	Duck and Otter Creeks Partnership,	US EPA GLNPO	2007-?	concept				x	x	x	×						(e.g. heavy metals, PCBs, etc)
toxic substances	landfills (current or old)	Implement baseline water quality sampling program	 Implement seasonal sampling for variety of parameter at fixed, repeated locations 	Inc. City of Oregon	Cities	2004	ongoing	# of samples taken, # of locations sampled	Chapter 11	Otter Creek within Oregon (RM 0.5- 6.5)										Oregon: 4 sample locations; Otter Creek parameters: depth, temp, DO, pH, conductivity, ORP. TSS.
						2004-	ongoing					X		×						ORP, TSS, turbidity, ammonia, phosphates, nitrates, e coli, FOGs
toxic substances	landfills (current or old)	Implement baseline water quality sampling program	 Share data with other entities, such as UT LERC and Partnership 	5	none needed		ongoing					Х		×						
toxic substances	landfills (current or old)	Implement baseline water quality	3) Identify problems areas and/or trends				ongoing					Х		×						
toxic substances	landfills (current or old)	sampling program Remedial Alternatives (if needed) for sediment contamination	1) Secure funding; 2) Develop workplan	Duck and Otter Creeks Partnership,	US EPA GLNPO Great Lakes Legacy	2008	concept													(e.g. heavy metals, PCBs, etc)
toxic substances	urban runoff	Begin trial sampling program for metals in co-located water, sediment and plant samples at 10 locations on Otter Creek		UT Lake Erie Research Center: Research Experience for Undergraduates; Dr. Spongberg and students	UT LERC and NSF grant	Summer 2004	complete	# of samples taken in creek	Chapter 11	Otter Creek , 10 sites			x							
toxic substances	urban runoff	Conduct survey of local residents to determine if fish and/or turtles caught in creek are eaten	Obtain funding or student volunteer	University of Toledo; Bowling Green State		2006-2007	concept			all of Otter Creek	x									
toxic substances	urban runoff	Establish sampling (sediment and/or water) program for creek with the UT	1) Collaborate with UT professor	UT Lake Erie Research Center or other dept.; Duck and Otter Creeks Partnership, Inc.	UT or grant	2004-2006	concept	# of samples taken in creek		Otter Creek	x	x	x	×						
toxic substances	urban runoff	Establish sampling (sediment and/or water) program for creek with the UT	2) Develop project workplan				concept				x	x	x	×						
toxic substances	urban runoff	Establish sampling (sediment and/or water) program for creek with the UT	3) Secure additional funding or resources if necessary	s			concept				x	х	X	×						
toxic substances	urban runoff	periodic observations by watershed coordinator or other volunteers to report noticeable "free froms"	enlist volunteers and discuss what to look for and report	Partnership members or staff, Friends of volunteers, community members	none needed	2006-2007	concept			all of Otter Creek								x		
toxic substances	urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	1) Design new Drains are for Rain storm drain stencils and companion door hangers	Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete	# of supplies ordered; # of households given educational materials; # of purchasing	Chapter 10.5; 5.7.1	all of watershed		x		×				x		x
toxic substances	urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	2) Place bulk order for local jurisdictions and organizations			Jun-05	complete					х		×				х		x
toxic substances	urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	 Distribute stencils and door hangers for local jurisdictions and organizations to use 	c		Jul-05	complete					х		×				x		x
toxic substances	urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)		Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF; 319 grants; ODNR/CZM grants; foundations; local donations; cities		ongoing	# of stenciling manuals sold	Chapter 10.5; 5.7.1	all of watershed								x		

											BUI C	olor Cod	e:	Impa	aired	No	Impaired	i 📃 Un	nknown		Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed					JI BUI 5 #7					JI BUI 3 #14	
toxic substances	urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	2) Fill orders for local jurisdictions and organizations as placed				ongoing											х			
toxic substances	urban runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 3)	events	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	BP Amoco; OEEF, ODNR/CZM grants; foundations, Maumee RAP, TMACOG, local jurisdictions, organizations	April - Oct	ongoing	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating										x			2005: 28 drains stenciled; approx. 200 flyers/door hangers distributed; 11 volunteers stenciled ; industries in watershed plan to stencil near their property in 2006
toxic substances	urban runoff	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	August - November	ongoing		e	III of Otter Creek		х					x	x	x	x	one site usually
toxic substances	urban runoff	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)	printice controlic			ongoing					х					х	х	x	x	
toxic substances	urban runoff	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 			Sept	ongoing					х					x	х	x	х	
toxic substances	urban runoff	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools			Sept	ongoing					Х					х	х	x	Х	
toxic substances	urban runoff	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (preferably)	1		mid-Oct	ongoing					х					х	х	x	х	
toxic substances	urban runoff	Student Watershed Watch	 B) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector) 	1		late Oct- early Nov	ongoing					х					х	х	x	х	
toxic substances	urban runoff	Student Watershed Watch	7) Student share data and finding at Student Summit			mid-Nov	ongoing					Х					Х	х	X	Х	
toxic substances	urban runoff	Student Watershed Watch	Expand Student Watershed Watch Program into additional schools	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	year round	ongoing		e	III of Otter Creek		х					х	х	x	х	
toxic substances	urban runoff	SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept					x					x	x	x	x	
toxic substances	urban runoff	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training				concept					Х					x	х	x	x	
toxic substances	urban runoff	SWW Teacher Training/Creditable Data Certification	3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC) certification				concept					x					x	x	x	x	

Wolf Creek and Berger Ditch Watershed Project Table

											BUI	Color C	ode:	Imp	aired	Not I	npaired	Jnknown		Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI B	UI BI	JI BUI		JI BUI		BUI BUI #10 #11	BUI BUI	BUI	Comments & Misc. Info.
All	All	Conduct a TMDL	1) Design watershed survey, 2) Collect water quality data, 3) Assess waterbodies, 4) Identify target conditions, 5) Develop restoration projects,6) Select restoration scenerio, 7) Prepare implementation plan, 8) Submit TMDL report, 9) Implement TMDL (inside Ohio EPA), 10) Implement TMDL (outside OEPA), 11) Annual validation activities, and 12) Validate water quality status	OEPA	OEPA	2008-2010	concept			HUC 04100010010	x	,		×			x		S	iource: OEPA
All	All	GIS Water Quality database (Phase 1)	1) Create relational database from OEPA water resources inventory data for Maumee AOC	Universitry of Toledo Maumee RAP	, US EPA GLNPO	2004-2005	complete				x	>	:	×	:				×	
All	All	GIS Water Quality database (Phase 1)	2) Export LE Tribs data to a GIS format				complete				x)	:	×	:				x	
All	All	GIS Water Quality database (Phase 1)	3) Publish relational database and GIS				in progress				х	>	:	X	•				x	
All	All	GIS Water Quality database (Phase 2)	Expand GIS to entire AOC				in progress				Х	>		Х					X	
Flow Alterations	Changing Land Uses	Lucas County Floodplain Map		Lucas County Engineer and Auditor Offices, FEMA	Lucas County, FEMA r	2005-2010	in progress	Study 60+ miles of stream to determine the current floodplain			x	x		×			x		x	
Flow Alterations	Changing Land Uses	Lucas County Floodplain Map	2) Conduct new studies			2005-2008	in progress				Х	x >		X			Х		X	
Flow Alterations Flow Alterations	Changing Land Uses Changing Land Uses	Lucas County Floodplain Map Lucas County Floodplain Map	3) Redelinate existing studies4) Request public comment on draft			2005-2008 2009	in progress in progress				X X	X >		X			X X		X	
Flow Alterations	Changing Land Uses	Lucas County Floodplain Map	maps 5) Finalize maps and release			2003	in progress				×	x x			·		×		×	
Flow alterations	channelization	Stream restoration demonstration project	electronically (1) Identify potential partners	Maumee RAP Rural	Lake Frie Protection	2010	in progress			entire watershed	-						~		\rightarrow	
				Runoff Action Group SWCD [Lucas, Wood, Ottawa Co]	Fund, USEPA GLNPO, OEPA 319, Army Corps of Engineers	2005-2010	concept					>		×	:				×	
Flow alterations	channelization	Stream restoration demonstration project	t 2) Assess possible stream restoration projects				concept					>	:	X					×	
Flow alterations	channelization	Stream restoration demonstration project	3) Select demonstration sites				concept					>	:	X	:				×	
Flow alterations	channelization	Stream restoration demonstration project	t 4) Conduct landowner contact				concept					>	:	X					x	
Flow alterations	channelization	Stream restoration demonstration project	t 5) Conduct public education				concept					>	:	X					×	
Flow alterations	channelization	Stream restoration demonstration project	t 5) Complete project				concept					>	:	X					x	
Flow alterations	channelization	Stream restoration demonstration projec	t 6) Assess and monitor results				concept					>	:	×					×	
flow alterations	streambank modifications	Identify areas of creek where stream bank stabilization is needed	Continue "walking" creek and general observations annually	City of Oregon; and/or volunteers		2004-	ongoing		5.5.1; 7.6.1			>							×	
Habitat modification		Land use/ land cover analysis and mapping of AOC	major land use/land cover types	Maumee RAP, TMACOG, Lucas, Wood, Ottawa Co., University of Toledo	GLNPO, OEPA 319,	2005-2006	concept			HUC 04100010010		>	:	×	:				×	
Habitat modification	Changing land uses in the watershed	Volunteer monitoring of wildlife populations	Volunteers report sightings of rare birds and wildlife	Ottawa National Wildlife refuge			ongoing			HUC 04100010010									х	
	the watershed	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	wetlands using remote sensing	University of Toledo, Maumee RAP, TMACOG, Lucas Co.	OEPA 319	1999-2003	complete			portion of watershed in Lucas Co	5	>		x					x	
Habitat modification	Changing land uses in the watershed	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	 create GIS map of wetlands and potential wetlands 				complete					>		x					х	
Habitat modification		Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)					complete		<u> </u>			>		X					х	
Habitat modification	Changing land uses in the watershed	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	 Indentify and evaluate existing wetlands using remote sensing 	Maumee RAP, TMACOG, Wood, Ottawa Co., University of Toledo	Lake Erie Protection Fund, USEPA GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	planning			portion of watershed in Wood Co		,	:	×					x	
Habitat modification	Changing land uses in the watershed	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	2) Create GIS map of wetlands and potential wetlands				planning					,		X					X	
Habitat modification	the watershed Changing land uses in the watershed	2) (Wood Co.) Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	3) Identify restoration needs				planning			1		>		X					X	
Habitat modification	Changing land uses in the watershed	Wetlands Inventory and Mapping (Phase 3) (Ottawa Co.)		Maumee RAP, TMACOG, Wood, Ottawa Co., University of Toledo	Lake Erie Protection Fund, USEPA GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	concept			portion of watershed in Ottawa Co		,	:	×					x	
Habitat modification	Changing land uses in the watershed	Wetlands Inventory and Mapping (Phase 3) (Ottawa Co.)	2) Create GIS map of wetlands and potential wetlands				concept	1				>	:	×					x	
Habitat modification	Changing land uses in	Wetlands Inventory and Mapping (Phase			1		concept	1		1		,							x	
	the watershed	3) (Ottawa Co.)					σοποσρι													

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI B #1 #				BUI BU #7 #8				UI BUI 12 #13		Comments & Misc. Info.
Habitat modification	Removal of riparian vegetation	Land use/ land cover analysis and mapping of AOC	Use remote sensing and GIS to classify major land use/land cover types	Maumee RAP, TMACOG, Lucas, Wood, Ottawa Co., University of Toledo	LEPF, USEPA GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	concept			HUC 04100010010		×	:	x						×	
Habitat modification	Removal of riparian vegetation	Watershed Wildlife Habitat Inventory and assessment	1) Determine wildlife habitat types	Maumee RAP, TMACOG, Lucas, Wood, Ottawa Co., Local municipalities	LEPF, USEPA GLNPO, OEPA 319	2005-2006	concept			Maumee AOC		x		x						x	
Habitat modification	Removal of riparian vegetation	Watershed Wildlife Habitat Inventory and assessment	2) Identify and map habitat types				concept					X	:	x						x	
Habitat modification	Removal of riparian vegetation	Watershed Wildlife Habitat Inventory and assessment	 Field assessment of habitat conditions and quality 				concept					X	:	x						x	
Habitat modification	Removal of riparian vegetation	Watershed Wildlife Habitat Inventory and assessment					concept					X	:	x						x	
Habitat modification	Streambank modification/ flow alterations	Stream restoration demonstration projec	t1) Identify potential partners	Maumee RAP Rural Runoff Action Group, SWCD [Lucas, Wood, Ottawa Co]	LEPF, USEPA , GLNPO, OEPA 319, Army Corps of Engineers	2005-2010	concept			entire watershed		×	:	x						x	
Habitat modification	Streambank modification/ flow alterations	Stream restoration demonstration projec	t 2) assess possible stream restoration projects				concept					x	:	x						x	
Habitat modification	Streambank modification/ flow alterations	Stream restoration demonstration projec	t 3) Select demonstration sites				concept					×	:	x						×	
Habitat modification	Streambank modification/ flow alterations	Stream restoration demonstration projec	t4) conduct landowner contact				concept					×	:	x						x	
Habitat modification	Streambank modification/ flow alterations	Stream restoration demonstration projec	t5) conduct public education				concept					×	:	x						x	
Habitat modification	Streambank modification/ flow alterations	Stream restoration demonstration projec	t 5) complete project				concept					×		x						×	
Habitat modification	Streambank modification/ flow alterations	Stream restoration demonstration projec	t 6) assess and monitor results				concept					×	:	x						×	
habitat modifications	changing land use	Implement the Phase 2 storm water management program		Cities of Toledo, Oregon, Northwood and/or Wood and Lucas county	local jurisdictions; additional grants if necessary	2004-	ongoing					×	:								
habitat modifications	changing land use	Implement the Phase 2 storm water management program	Review all site plan and require pre/post construction controls for water quality, even for sites < 1 acre	City of Oregon	City of Oregon	2004-	ongoing		5.3.1; 5.3.2; 5.3.3; 5.4.1; 5.4.2			×								wa fea	Pregon requires a vater quality eature on site to educe urban runoff
habitat modifications	changing land use	Implement the Phase 2 storm water management program	Revise storm water regulations and ordinances; may incorporate Maumee RAP manual, ODNR Rainwater manual, regional Storm Water Coalition recommendations and other references	City of Oregon	City of Oregon	2004- 2005	complete	stricter BMPs, ordinances that are more protective of stream health	Chapter 5			x									
habitat modifications	construction	Implement the Phase 2 storm water management program		Cities of Toledo, Oregon, Northwood and/or Wood and Lucas county	local jurisdictions; additional grants if necessary	2004-	ongoing					×									
habitat modifications	construction	Implement the Phase 2 storm water management program	Review all site plan and require pre/post construction controls for water quality, even for sites < 1 acre	City of Oregon	City of Oregon	2004-	ongoing		5.3.1; 5.3.2; 5.3.3; 5.4.1; 5.4.2			×								wa fea	Pregon requires a vater quality eature on site to educe urban runoff
habitat modifications	construction	Implement the Phase 2 storm water management program	Revise storm water regulations and ordinances; may incorporate Maumee RAP manual, ODNR Rainwater manual, regional Storm Water Coalition recommendations and other references	City of Oregon	City of Oregon	2004- 2005	complete	stricter BMPs, ordinances that are more protective of stream health	Chapter 5			x									
nutrients	Cropland or pasture where manure is spread	Educate Horse owners on proper disposal of manure	Implement Equine Environmental Assurance and Liability Program for Fulton, Lucas and Wood Counties	LSWCD,WSWCD Ohio Livestock Coalition, Farm Bureau	Ohio Livestock Coalition, Farm Bureau, ODRN- DSWC	2006	concept				×	×		x	×		x	x			
Nutrients	Cropland or pasture where manure is spread	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards				concept					×					x	x		x	
Nutrients	Cropland or pasture where manure is spread	Establish/Utilize volunteer stream monitoring networks	2) Develop framewprk for publishing and updating data via online GIS				concept					×					x	x		x	

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Causes of Impairment (Pollutant or Stressor)		Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI B		I BUI	BUI	BUI	BUI BU #7 #8	BUI	BUI	BUI B	UI BUI	BUI	Comments & Misc. Info.
Nutrients	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	1) Identify potential Partners	Maumee RAP Rural LEPF, USEPA Runoff Action Group, GLNPO, OEPA 319, SWCD [Lucas, GLC Great Lakes Wood, Ottawa Co] Basin Program for Soil Erosion and Sediment Control	2005-2010	concept			HUC 04100010010		x						x	x		x	
Nutrients	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	2) Assess possible BMPs			concept					x						x	x		×	
Nutrients	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	3) Select demonstration sites			concept					x						x	x		x	
Nutrients	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	4) conduct land owner contact			concept					x						x	x		x	
Nutrients	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	5) conduct public education			concept					×						x	x		×	
Nutrients	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	6) complete project			concept					x						x	x		x	
Nutrients	Erosion & runoff from fertilized fields	Encourage buffer strips to trap sediments		Lucas and Wood SWCD	Ongoing	ongoing							H	+			х	х		×	
Nutrients	Erosion & runoff from fertilized fields	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards			concept					X						x	x		×	
Nutrients	Erosion & runoff from fertilized fields	Establish/Utilize volunteer stream monitoring networks	2) Develop framewprk for publishing and updating data via online GIS			concept					x		/ //				x	x		×	
Nutrients	Erosion & runoff from fertilized fields	Expand Student Watershed Watch Program into additional schools		Maumee RAP, private donations TMACOG, Ohio EPA, public and private schools	year round	ongoing					x						х	x		×	
Nutrients	Erosion & runoff from fertilized fields	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed	1) Survey SWCDs to determine extent of BMP implementation	Maumee RAP Rural LEPF, USEPA Runoff Action Group, GLNPO, OEPA 319, SWCD [Lucas, GLC Great Lakes Wood, Ottawa Co], Basin Program for Area Universities Soil Erosion and Sediment Control Sediment Control	2005-2010	concept			entire watershed		x						x	x		x	
Nutrients	Erosion & runoff from fertilized fields	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed				concept					×						×	x		×	
Nutrients	Erosion & runoff from fertilized fields	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed				concept					x						x	x		×	
Nutrients	Erosion & runoff from fertilized fields	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed				concept					x						x	x		×	
Nutrients	Erosion & runoff from fertilized fields	Implementation of Agricultural BMPs	1) Identify potential Partners	Maumee RAP Rural Lake Erie Protection Runoff Action Group, Fund, USEPA SWCD [Lucas, GLNPO, OEPA 319, Wood, Ottawa Co] Great Lkes Commission Great Lakes Basin Program for Soil Erosion and Sediment Control	2005-2010	concept			HUC 04100010010		x						x	x		×	
Nutrients	Erosion & runoff from fertilized fields	Implementation of Agricultural BMPs	2) Assess possible BMPs			concept					x						x	х		x	
Nutrients	Erosion & runoff from fertilized fields	Implementation of Agricultural BMPs	3) Select demonstration sites			concept					x						x	х		x	
Nutrients	Erosion & runoff from fertilized fields	Implementation of Agricultural BMPs	4) conduct land owner contact			concept					x						x	x		x	
Nutrients	Erosion & runoff from fertilized fields	Implementation of Agricultural BMPs	5) conduct public education			concept					x						x	х		x	
Nutrients	Erosion & runoff from fertilized fields	Implementation of Agricultural BMPs	6) complete project			concept					x						x	x		x	
Nutrients	Erosion & runoff from fertilized fields	Incentive programs for implementation or agricultural BMPs such as filter strips & conservation tillage, fertilizer/pesticide management	f Continue to promote and support the implementation of these programs	Ohio Lake Erie Commission, USDA - Commission USDA - NRCS, SWCDs (Fulton & Lucas in Ohio)		ongoing					x						x	x		x	
Nutrients	Erosion & runoff from fertilized fields	Reduce the impact of erosion of water quality	Educate watershed landowners of their impact on water quality and of the benefits of riparian habitat protection or restoration			concept					x						x	×		×	
Nutrients	Erosion & runoff from fertilized fields	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, private donations TMACOG, Ohio EPA, public and private schools	August - November	ongoing					х						х	х		×	
Nutrients	Erosion & runoff from fertilized fields	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)			ongoing					x						х	х		x	

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI B	UI BI	JI BUI	BUI	BUI		JI BU	BUI	BUI	BUI BU #12 #1		Comments &
Nutrients	Erosion & runoff from fertilized fields	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 			Sept	ongoing					>	[х	х		×	
Nutrients	Erosion & runoff from fertilized fields	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools			Sept	ongoing					>	(х	х		X	
Nutrients	Erosion & runoff from fertilized fields	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)	1		mid-Oct	ongoing					>	(х	x		x	
Nutrients	Erosion & runoff from fertilized fields	Student Watershed Watch	 b) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector) 	1		late Oct- early Nov	ongoing					>	(х	х		х	
Nutrients	Erosion & runoff from fertilized fields	Student Watershed Watch	7) Student share data and finding at Student Summit			mid-Nov	ongoing					>	(Х	х	1	X	
Nutrients	Erosion & runoff from fertilized fields	SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept					>						x	x		x	
Nutrients	Erosion & runoff from	SWW Teacher Training/Creditable Data	2) Award a certificate completion for				concept)	:					х	×		x	
Nutrients	fertilized fields Erosion & runoff from fertilized fields	Certification SWW Teacher Training/Creditable Data Certification	3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC) certification				concept)	:					x	x		x	
Nutrients	Erosion and runoff from fertilized fields	Tillage Transect	Drive the transect points and mark in GPS and note land use.	USDA-NRCS, ODNR-SWCD, LSWCD	NRCS, ODNR- SWCD	2006-07	concept	Ability to calculate no-till acres and developed acres.				×			x						x	
Nutrients	Urban Runoff	Establish/Utilize volunteer stream	1) Train volunteers in as per EPA QA	201102			concept)	:					х	x		X	
Nutrients	Urban Runoff	monitoring networks Establish/Utilize volunteer stream	standards 2) Develop framewprk for publishing and				concept					5						x	x		×	<u> </u>
Nutrients	Urban Runoff	monitoring networks Expand Student Watershed Watch Program into additional schools	updating data via online GIS	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	year round	ongoing					>	· · · · · · · · · · · · · · · · · · ·					x	x		x	
Nutrients	Urban Runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	1) Develop project	Maumee RAP, TMACOG, local Jurisdictions, US F&WS, ODNR	OEEF, local jurisdictions, US F&WS, ODNR, Maumee RAP, TMACOG	2003-2006	complete	Educate public on sources/pathways of nonpoint and point source pollution; pre- and post-campaign surveys show increased awareness of citizens	5.6.2; 5.7.1; Chapter 10.5			>	(x	x		x	
Nutrients	Urban Runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	2) Release RFP/Hire contractors			9/3/04	complete					>	:					х	х		X	
Nutrients	Urban Runoff	Give Water a Hand Campaign (Phase 1)	3) Create and distribute TV, cinema and			10/03-4/05	complete)	:					х	x		X	
Nutrients	Urban Runoff	(Residential Campaign) Give Water a Hand Campaign (Phase 1)	newspaper ads4) Create and distribute 6 tip cards &			10/03-4/05	complete						,		_			x	x		x	
Nutrients	Urban Runoff	(Residential Campaign) Give Water a Hand Campaign (Phase 1)	bonus items 5) Create and Implement pre-/post-				•					-	-		_	_		_				
Nutrients	Urban Runoff	(Residential Campaign) Give Water a Hand Campaign (Phase 2)	campaign phone survey	Maumee RAP,	Maumee RAP,	12/03 & 5/05	complete	Educate business owners,				>			_			Х	Х		×	
Nutrento	Undan Kunon	(Business Campaign)		TMACOG, local	TMACOG, local jurisdictions	2004-2006	in progress	manager and employees on sources/pathways of nonpoint and point source pollution; show increased awareness of through the # of businesses voluntarily participating in campaign				>	:					x	x		x	
Nutrients	Urban Runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)	2) Create and distribute 4 Guidebooks for local businesses			8/05-12/06	in progress)	:					х	x		x	
Nutrients	Urban Runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)				10/05-12/06	in progress					>	:					x	x		x	
Nutrients	Urban Runoff	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	 Design watershed signs for 4 streams (Ottawa, Swan, Maumee & Lake Erie) 	Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete					>	(x	x		x	
Nutrients	Urban Runoff		2) Place bulk order for local jurisdictions	organizationo	organizations	Jun-05	complete					>	:					х	x		x	t
Nutrients	Urban Runoff		and organizations 3) Distribute signs for local jurisdictions			Jul-05	complete											x	x		x	<u> </u>
Nutrients	Urban Runoff	(Watershed Awareness Campaign) Give Water a Hand Campaign and educational materials	and organizations to use Distribute info at events, programs and presentations		Maumee RAP; Lucas, Ottawa and and Wood SWCDs	year round	ongoing	_				>	(×	x		X	<u> </u>
Nutrients	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	1) Design new Drains are for Rain storm drain stencils and companion door hangers	Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete	# of supplies ordered; # of households given educational materials; # of purchasing	Chapter 10.5; 5.7.1			>	(x				x		x	
Nutrients	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	2) Place bulk order for local jurisdictions			Jun-05	complete					>			х				х		х	
Nutrients	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	and organizations 3) Distribute stencils and door hangers for local jurisdictions and organizations to use	2		Jul-05	complete					>	:		х				x		x	

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Causes of Impairment (Pollutant or Stressor)) Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI #1	UI BI	JI BUI 3 #4	BUI #5	BUI #6	BUI E #7	BUI #8	3UI B #9 #	UI BL 10 #1	JI <mark>BU</mark> 1 #12	I BUI 2 #13	BUI #14	Comments & Misc. Info.
Nutrients	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	 Design new Drains are for Rain storm drain stenciling Field Manuals 	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF; 319 grants; ODNR/CZM grants; foundations; local donations; cities	year round	ongoing	# of stenciling manuals sold	Chapter 10.5; 5.7.1			>			х				х			Х	
Nutrients	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	 Fill orders for local jurisdictions and organizations as placed 			year round	ongoing					>	(х				Х	(х	
Nutrients	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 3)	Conduct public Storm Drain Stenciling events	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF, ODNR/CZM grants; foundations, Maumee RAP, TMACOG, local jurisdictions, organizations	April - Oct	ongoing	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating				>	[x				x			x	
Nutrients	Urban Runoff	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	August - November	ongoing					>	(;	x x			х	
Nutrients	Urban Runoff	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)				ongoing					>						;	x x			х	
Nutrients	Urban Runoff	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 			Sept	ongoing					>	(:	x x	(х	
Nutrients	Urban Runoff	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools			Sept	ongoing			1		>	:						x x			х	
Nutrients	Urban Runoff	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)			mid-Oct	ongoing					>	(:	x x	(х	
Nutrients	Urban Runoff	Student Watershed Watch	 6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector) 			late Oct- early Nov	ongoing					>	(:	x x	(х	
Nutrients	Urban Runoff	Student Watershed Watch	7) Student share data and finding at			mid-Nov	ongoing					>			\square		\neg		x x	(Х	
Nutrients	Urban Runoff	SWW Teacher Training/Creditable Data Certification	Student Summit 1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept					>						;	x x	:		x	
Nutrients	Urban Runoff	SWW Teacher Training/Creditable Data					concept)	:		\vdash				x x			х	
Nutrients	Urban Runoff	Certification SWW Teacher Training/Creditable Data Certification	training 3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC) certification				concept					>	(T	:	x x	:		x	
organic enrichment	decaying plant/animal matter	Develop or obtain educational material to deter landowners from dumping grass clippings and such into creeks	1) Research available materials	City of Oregon	City of Oregon	2005	in progress	# of households reached; survey of indiviudal implementation?	Chapter 10.5)	:		x							x	
organic enrichment	decaying plant/animal matter	Develop or obtain educational material to deter landowners from dumping grass clippings and such into creeks	 Distribute to landowners, especially adjacent to creek 	City of Oregon	City of Oregon	2006?	in progress					>	(x							x	
Organic enrichment	Human & animal excreta	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards				concept					>	:		x			;	x x			x	
Organic enrichment	Human & animal excreta	Establish/Utilize volunteer stream monitoring networks	 Develop framewprk for publishing and updating data via online GIS 				concept					>	:		x			;	x x	:		х	
Organic enrichment	Human & animal excreta	Expand Student Watershed Watch Program into additional schools		Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	year round	ongoing					>			×				×			x	
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 1)	 Scan paper copies to create electronic files of existing septic systems 	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office	Lake Erie Protection Fund, TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office	2002-2005	complete		5.6.2;			>	(x				x	(x	
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 1)	2) Convert electronic data into GIS map				complete					>	:		х				x	:		х	
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 1)	3) Intergrate with AERIS data				complete					>	:		х				x	:		х	
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 1)	4) Train Health Dept personnel to input data and use GIS system				complete					>	:		x				x	:		х	
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 2)	1) Scan paper copies to create electronic files of existing septic systems	TMACOG, Wood County Health Dept, Lucas County Auditor's Office, Northwest Regional Sewer District	Lake Erie Protection Fund, TMACOG, Lucas County Auditor's Office, Wood County Health Dept	2005-2007	in progress		5.6.2;			>	:		x				x			x	
Organic enrichment	Human & animal excreta		files				in progress)	:		x				x	:		x	
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 2)					in progress					>	:		x				Х			x	
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 2)	4) Train Health Dept personnel to input data and use GIS system				in progress					>			х				X			х	

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Causes of Impairmen (Pollutant or Stressor	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI BU #1 #2	л ви	I BUI	BUI	BUI	BUI BU #7 #8		BUI			BUI	Comments & Misc. Info.
Organic enrichment	Human & animal excreta	Identify and assess package plant discharges	1) Locate package plants	Maumee RAP, Lake Erie Protection TMACOG, Wood, Fund, Ohio Sea Lucas, Ottawa Co., Grant, USEPA, Health Depts., OEPA OEPA	2005-2006	concept			entire watershed		×			×				x		×	
Organic enrichment	Human & animal excreta	Identify and assess package plant discharges	2) Review NPDES permits			concept					x			x				х		x	
Organic enrichment	Human & animal	Identify and assess package plant	3) Identify plants operating without permi	1		concept					x			x				х		X	
Organic enrichment	excreta Human & animal	discharges Identify and assess package plant	4) Sample adjecent streams			concept					x			x		+		x		×	
Organic enrichment	excreta Human & animal	discharges Identify and assess package plant	5) Assess water quality impacts			concept					x			x		+		x		×	
Organic enrichment	excreta Human & animal excreta	discharges Plankton Survey and Bioassay	1) Establish Methodology	Maumee RAP, TMACOG, Wood, Lucas, Ottawa Co., Health Depts.,University of Toledo, OEPA	2005-2006	concept			entire watershed		x			x				x		×	
Organic enrichment	Human & animal excreta	Plankton Survey and Bioassay	2) Identify sample sites			concept			entire watershed		x			x				х		×	
Organic enrichment	Human & animal excreta	Plankton Survey and Bioassay	3) Conduct sampling			concept					x			x				х		x	
Organic enrichment	Human & animal excreta	Plankton Survey and Bioassay	4) Analyze data			concept					x			x				х		×	
Organic enrichment	Human & animal	Plankton Survey and Bioassay	5) Determine status			concept					x			x				х		x	
Organic enrichment	excreta Human & animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	1) Design new Drains are for Rain storm drain stencils and companion door hangers	Maumee RAP, Maumee RAP, TMACOG, local TMACOG, local jurisdictions, jurisdictions, organizations organizations	Spring 2005	complete	# of supplies ordered; # of households given educational materials; # of purchasing	Chapter 10.5; 5.7.1			x			x				x		×	
Organic enrichment	Human & animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	2) Place bulk order for local jurisdictions and organizations		Jun-05	complete					х			х				х		х	
Organic enrichment	Human & animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	 Distribute stencils and door hangers for local jurisdictions and organizations to use 		Jul-05	complete					x			x				x		x	
Organic enrichment	Human & animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	 Design new Drains are for Rain storm drain stenciling Field Manuals 	Duck and Otter OEEF; 319 grants; Creeks Partnership, ODNR/CZM grants; Maumee RAP, foundations; local TMACOG, local donations; cities jurisdictions, organizations	year round	ongoing	# of stenciling manuals sold	Chapter 10.5; 5.7.1			x			x				х		x	
Organic enrichment	Human & animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	2) Fill orders for local jurisdictions and organizations as placed	organizationo	year round	ongoing					Х			х				Х		х	
Organic enrichment	Human & animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 3)		Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, orranizations	April - Oct	ongoing	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating				×			x				x		×	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	1) Identify stream sampling locations	TMACOG, US ACE [WRDA Toledo/Lucas County sec. 401] Health Dept, Lucas County Auditor's Office, Wood County Health Dept	2004	complete	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage				x			x				x		x	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	2) Identify septic system dye testing locations			complete					х			х				х		х	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	3) Conduct stream sampling and dye testing			complete					x			х				х		x	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	 Prioritize areas for enforcement based on testing results 			complete					x			х				х		х	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	5) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems			complete					x			x				x		x	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 2)	1) Conduct additional stream sampling and dye testing	TMACOG, WRDA 401, Ohio Toledo/Lucas County EPA 319 Health Dept, Lucas County Auditor's Office, Wood County Health Dept	2005	concept	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage				x			x				x		x	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 2)	2) Modify priority areas (if necessary)			concept					x			x				x		x	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 2)	3) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available)			concept					x			×				x		×	

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed				BUI E	BUI BU #6 #7							Comments & Misc. Info.
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 3)	1) Continue to sample and dye test to identify problem areas	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept	WRDA 401, Ohio /EPA 319	2006 - ?	concept	Sample stream sites and dye test septic systems as needed per county to reduced discharges of unmeasurable amounts of inadequately treated sewage				×			x			>	(x	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 3)	2) Continue to pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) until priority areas are addressed				concept					×			x			>	(x	
Organic enrichment	Human & animal excreta	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	August - November	ongoing					×			×			X	<		x	
Organic enrichment	Human & animal excreta	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)				ongoing					×			x			×	(x	
Organic enrichment	Human & animal excreta	Student Watershed Watch	3) Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector)			Sept	ongoing					×			×			×	(x	
Organic enrichment	Human & animal excreta	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools			Sept	ongoing					×			x			×	(x	
Organic enrichment	Human & animal excreta	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)			mid-Oct	ongoing					×			x			X	(x	
Organic enrichment	Human & animal excreta	Student Watershed Watch	 6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector) 	1		late Oct- early Nov	ongoing					×			x			×	(×	
Organic enrichment	Human & animal excreta	Student Watershed Watch	7) Student share data and finding at Student Summit			mid-Nov	ongoing					×			x			X	(х	
Organic enrichment	Human & animal excreta	SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept					×			x			×	(x	
Organic enrichment	Human & animal excreta	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training				concept					×			x			×	(x	
Organic enrichment	Human & animal excreta	SWW Teacher Training/Creditable Data Certification	3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC) certification				concept					×			x			×	(x	
pathogens	animal waste	Implement baseline water quality sampling program	1) Implement seasonal sampling for variety of parameter at fixed, repeated locations	City of Oregon, City of Toledo	Cities	2004-	ongoing	# of samples taken, # of locations sampled	Chapter 11			×			x						Cree dept pH, ORF turbi phos	egon: Otter ek parameters: tth, temp, DO, conductivity, P, TSS, joidity, ammonia, psphates, ates, e coli, Gs
pathogens	animal waste	Implement baseline water quality sampling program	 Share data with other entities, such as UT LERC and Partnership 	5	none needed		ongoing					×			x							
pathogens	animal waste	Implement baseline water quality sampling program	3) Identify problems areas and/or trends				ongoing					×			x							
Pathogens	Cropland or pasture where manure is spread	Biosolids Analysis of agricultural	1) Select study sites (ag fields where sewage sludge is applied)	University of Toledo, BGSU and U of M	USDA	2003-	in progress									Γ		x	(
Pathogens	Cropland or pasture where manure is spread	Biosolids Analysis of agricultural drainage	2) Determine background ecoli levels and DNA fingerprint for analysis				in progress											x	(
Pathogens	Cropland or pasture where manure is spread		3	Lucas and Wood Soi and Water Conservation Districts		Ongoing	ongoing											××	(
Pathogens	Cropland or pasture where manure is spread	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards				concept											xx	(
Pathogens	Cropland or pasture where manure is spread	Establish/Utilize volunteer stream monitoring networks	2) Develop framewprk for publishing and updating data via online GIS				concept											x	(
Pathogens	Cropland or pasture where manure is spread	Expand Student Watershed Watch Program into additional schools		Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	year round	ongoing											x x	(

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Causes of Impairment (Pollutant or Stressor)		Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source	e(s) Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI #1	BUI BU	JI BUI 3 #4	BUI #5	BUI F #6		JI BUI	BUI	BUI E	BUI BU	Comments & Misc. Info.
Pathogens	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs		Maumee RAP Rural Lake Erie Protect Runoff Action Group, Fund, USEPA SWCD [Lucas, GLNPO, OEPA 3 Wood, Ottawa Co] Great Lkes Commission Grea Lakes Basin Program for Soil Erosion and Sediment Contro	19,	concept			HUC 04100010010								×	x		
Pathogens	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	2) Assess possible BMPs			concept											x	x		
Pathogens	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	3) Select demonstration sites			concept											x	x		
Pathogens	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	4) conduct land owner contact			concept											x	x		
Pathogens	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	5) conduct public education			concept											×	x		
Pathogens	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	6) complete project			concept											x	x		
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, private donations TMACOG, Ohio EPA, public and private schools	August - November	ongoing											x	x		
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)			ongoing											х	х		
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 		Sept	ongoing											x	x		
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools		Sept	ongoing											х	x		
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day		mid-Oct	ongoing											х	х		
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	(perferably) 6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified	1	late Oct- early Nov	ongoing											х	х		
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	Data Collector) 7) Student share data and finding at Student Summit		mid-Nov	ongoing											х	х		
Pathogens	Cropland or pasture where manure is spread	SWW Teacher Training/Creditable Data	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD	2006	concept											x	x		
Pathogens	Cropland or pasture where manure is spread	SWW Teacher Training/Creditable Data	2) Award a certificate completion for training			concept											x	x		
Pathogens	Cropland or pasture where manure is spread	SWW Teacher Training/Creditable Data	Level 1 Qualified Data Collector (QDC)			concept											x	x		
Pathogens	Human & animal excreta	Educate Horse owners on proper disposal of manure	certification Implement Equine Environmental Assurance and Liability Program for Fulton, Lucas and Wood Counties	LSWCD,WSWCD Ohio Livestock Ohio Livestock Coalition, Farm Coalition, Farm Bureau, ODRN- Bureau DSWC	2006	concept				x	×			x	x		x	x		
Pathogens	Human & animal excreta	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards			concept											x	x		
Pathogens	Human & animal excreta	Establish/Utilize volunteer stream monitoring networks	2) Develop framewprk for publishing and updating data via online GIS			concept											х	х		
Pathogens	Human & animal excreta	Expand Student Watershed Watch Program into additional schools		Maumee RAP, private donations TMACOG, Ohio EPA, public and	year round	ongoing											х	x		
Pathogens	Human & animal excreta	GIS Septic System Inventory (Phase 1)	 Scan paper copies to create electronic files of existing septic systems 	private schools TMACOG, Lake Erie Protect Toledo/Lucas County Fund, TMACOG, Health Dept, Lucas County Auditor's Office Office County Auditor's Office	unty as 2002-2005	complete		5.6.2;									x	x		
Pathogens	Human & animal excreta		2) Convert electronic data into GIS map files			complete											х	x		
Pathogens	Human & animal excreta	GIS Septic System Inventory (Phase 1)				complete											х	х		Ļ
Pathogens	Human & animal excreta	GIS Septic System Inventory (Phase 1)	4) Train Health Dept personnel to input data and use GIS system			In progress											х	x		<u> </u>

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Causes of Impairment (Pollutant or Stressor)		Projects	Major Tasks/ Milestones	Potential Project Partners Fundi	ling Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI B #1	UI BU 2 #:	JI BUI 3 #4	BUI E #5	3UI [#6	BUI BU #7 #8	I BUI #9	BUI #10	BUI <mark>B</mark> #11 #	UI BUI 12 #13	BUI #14	Comments & Misc. Info.
Pathogens	Human & animal excreta	GIS Septic System Inventory (Phase 2	 Scan paper copies to create electronic files of existing septic systems 	County Health Dept, Lucas County Auditor's Office, Auditor	Erie Protection TMACOG, County or's Office, County Health	2005-2007	planning		5.6.2;									x	x			
Pathogens	Human & animal excreta	GIS Septic System Inventory (Phase 2	2) Convert electronic data into GIS map files				planning											х	х			
Pathogens	Human & animal	GIS Septic System Inventory (Phase 2) 3) Intergrate with AERIS data				planning											Х	х			
Pathogens	Human & animal	GIS Septic System Inventory (Phase 2) 4) Train Health Dept personnel to input data and use GIS system				planning											х	х			
Pathogens	Human & animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)				Spring 2005	complete	# of supplies ordered; # of households given educational materials; # of purchasing	Chapter 10.5; 5.7.1			×	(x				x		x	
Pathogens	Human & animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	2) Place bulk order for local jurisdictions		Zaliono	Jun-05	complete					х	(х				х		х	
Pathogens	Human & animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	and organizations 3) Distribute stencils and door hangers for local jurisdictions and organizations to	0		Jul-05	complete					×	:		x				x		x	
Pathogens	Human & animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	use 1) Design new Drains are for Rain storm drain stenciling Field Manuals	Creeks Partnership, ODNR Maumee RAP, founda	; 319 grants; R/CZM grants; ations; local ions; cities	year round	ongoing	# of stenciling manuals sold	Chapter 10.5; 5.7.1			×	(×				x		×	
Pathogens	Human & animal		2) Fill orders for local jurisdictions and	organizations		year round	ongoing					X	(x				х		X	
Pathogens	excreta Human & animal excreta	are for Rain) (Phase 2) Storm Drain Stenciling Program (Drains are for Rain) (Phase 3)	organizations as placed Conduct public Storm Drain Stenciling events	Creeks Partnership, grants; Maumee RAP, Maume TMACOG, local TMACO jurisdictions, jurisdic	, ODNR/CZM s; foundations, lee RAP, COG, local ctions, izations	April - Oct	ongoing	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating				×	(x	T			x		×	
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	1) Identify stream sampling locations		CE [WRDA	2004	complete	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage										x	x			
Pathogens	Human & animal	Stream and Septic System Sampling	2) Identify septic system dye testing				complete											х	х			
Pathogens	excreta Human & animal	Project (Phase 1) Stream and Septic System Sampling	Iocations 3) Conduct stream sampling and dye				complete											х	х			
Pathogens	excreta Human & animal	Project (Phase 1) Stream and Septic System Sampling	4) Prioritize areas for enforcement based	3			complete							-	-		+		х	+		
Pathogens	excreta Human & animal excreta	Project (Phase 1) Stream and Septic System Sampling Project (Phase 1)	on testing results 5) Pursue enforcement requiring upgrades or replacement of failed or				complete						_					x				
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 2)	inadequate systems 1) Conduct additional stream sampling and dye testing	TMACOG, WRDA Toledo/Lucas County EPA 3 Health Dept, Lucas County Auditor's Office, Wood County Health Dept	A 401, Ohio 119	2005	concept	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage										x	x			
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 2)	2) Modify priority areas (if necessary)				concept											x	х			
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 2)	 Pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) 				concept											x	x			
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 3)	1) Continue to sample and dye test to identify problem areas	TMACOG, WRDA Toledo/Lucas County EPA 3 Health Dept, Lucas County Auditor's Office, Wood County Health Dept	4 401, Ohio 119	2006 - ?	concept	Sample stream sites and dye test septic systems as needed per county to reduced discharges of unmeasurable amounts of inadequately treated sewage										x	x			
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 3)	2) Continue to pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) until priority areas are addressed				concept											×	×			
Pathogens	Human & animal excreta	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, private TMACOG, Ohio EPA, public and private schools	e donations	August - November	ongoing											х	x			
Pathogens	Human & animal excreta	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)				ongoing											х	х			

											BUI	Color C	ode:	I	Impaired		Not In	npaired	U	nknown		Not Applicable
Causes of Impairmen (Pollutant or Stressor		Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI #1	BUI B #2 #	UI BUI 3 #4	BUI #5	BUI BU #6 #7	II BUI 7 #8	I BUI #9	BUI #10	BUI E #11 #	BUI BU 12 #1:	BUI 3 #14	Comments & Misc. Info.
Pathogens	Human & animal excreta	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 			Sept	ongoing											х	х			
Pathogens	Human & animal excreta	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools			Sept	ongoing											Х	х			
Pathogens	Human & animal excreta	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)			mid-Oct	ongoing											х	х			
Pathogens	Human & animal excreta	Student Watershed Watch	6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector)			late Oct- early Nov	ongoing											х	х			
Pathogens	Human & animal excreta	Student Watershed Watch	 Student share data and finding at Student Summit 			mid-Nov	ongoing											Х	х			
Pathogens	Human & animal excreta	SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept											x	×			
Pathogens	Human & animal excreta	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training				concept											x	x			
Pathogens	Human & animal excreta	SWW Teacher Training/Creditable Data Certification	3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC) certification				concept											x	x		Π	
Pathogens	Human & animal excreta	Wolf Creek Bacteria Sampling Study (expand Wolf Creek Bacterial Impact on Maumee Bay State Park Beach Project)	1) Review results from 2003 study	Maumee RAP, TMACOG, Wood, Lucas, Ottawa Co., Health Depts.,University of Toledo	Lake Erie Protection Fund, USEPA GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	planning			near Berger Ditch								x	x			
Pathogens	Human & animal excreta	Wolf Creek Bacteria Sampling Study (expand Wolf Creek Bacterial Impact on Maumee Bay State Park Beach Project)	2) select sample sites				planning											x	x			
Pathogens	Human & animal excreta	Wolf Creek Bacteria Sampling Study (expand Wolf Creek Bacterial Impact on Maumee Bay State Park Beach Project)	3) conduct sampling analysis				planning											x	x		Π	
Pathogens	Human & animal excreta	Wolf Creek Bacteria Sampling Study (expand Wolf Creek Bacterial Impact on Maumee Bay State Park Beach Project)	4) assess results				planning											x	x			
Pathogens	Human & animal excreta	Wolf Creek Bacterial Impact on Maumee Bay State Park Beach		of Toledo Lake Erie Center, Maumee Bay Bacterial Task Force	University of Toledo,	2001-2003	complete											x	x			
Pathogens	Septic systems	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards				concept											x	х			
Pathogens	Septic systems	Establish/Utilize volunteer stream monitoring networks	2) Develop framewprk for publishing and updating data via online GIS				concept											x	x			
Pathogens	Septic systems	Expand Student Watershed Watch Program into additional schools		Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	year round	ongoing											х	х			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	1) Scan paper copies to create electronic files of existing septic systems	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office	Lake Erie Protection Fund, TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office	2002-2005	complete		5.6.2;									x	x			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	2) Convert electronic data into GIS map				complete											х	х			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	3) Intergrate with AERIS data				complete											x	x			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	4) Train Health Dept personnel to input data and use GIS system				In progress											x	x			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	 Scan paper copies to create electronic files of existing septic systems 	TMACOG, Wood County Health Dept, Lucas County Auditor's Office, Northwest Regional Sewer District	Lake Erie Protection Fund, TMACOG, Lucas County Auditor's Office, Wood County Health Dept	2005-2007	In progress		5.6.2;									x	x			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	2) Convert electronic data into GIS map files				In progress											x	x			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	3) Intergrate with AERIS data				In progress											x	x			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	4) Train Health Dept personnel to input data and use GIS system				In progress											x	x			

											BUI	Color Co	ode:	lr	mpaired		Not Im	paired	Unk	nown	N	Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed										II BUI 2 #13		Comments & Misc. Info.
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)		TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept	US ACE [WRDA /sec. 401]	2004	complete	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage	5.6.2; Chapter 11									x	x			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	2) Identify septic system dye testing locations				complete											х	х			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	3) Conduct stream sampling and dye testing				complete											х	х			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	 4) Prioritize areas for enforcement based on testing results 				complete											х	х			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	5) Pursue enforcement requiring upgrades or replacement of failed or				complete											x	x			
Pathogens	Septic systems	Stream and Septic System Sampling	inadequate systems 1) Conduct additional stream sampling	TMACOG,	WRDA 401, Ohio		complete	Sample 50 stream sites and dye								╞	+	^	^	+	_	
		Project (Phase 2)		Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept	/EPA 319	2005	concept	test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage										×	×			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	2) Modify priority areas (if necessary)				concept											x	x			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	 Pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) 				concept											x	×			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 3)	1) Continue to sample and dye test to identify problem areas	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept	WRDA 401, Ohio EPA 319	2006 - ?	concept	Sample stream sites and dye test septic systems as needed per county to reduced discharges of unmeasurable amounts of inadequately treated sewage										x	x			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 3)	2) Continue to pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) until priority areas are addressed				concept											x	x			
Pathogens	Septic systems	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	August - November	ongoing											х	x			
Pathogens	Septic systems	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)				ongoing											х	x			
Pathogens	Septic systems	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 			Sept	ongoing											х	x			
Pathogens	Septic systems	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools			Sept	ongoing											Х	х			
Pathogens	Septic systems	Student Watershed Watch	 Teachers conduct student training and sampling on designated sampling day (perferably) 			mid-Oct	ongoing											х	x			
Pathogens	Septic systems	Student Watershed Watch	6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector)			late Oct- early Nov	ongoing											х	х			
Pathogens	Septic systems	Student Watershed Watch	7) Student share data and finding at Student Summit			mid-Nov	ongoing									\vdash		х	х			
Pathogens	Septic systems	SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept											x	x			
Pathogens	Septic systems	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training				concept											x	x			
Pathogens	Septic systems		3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC) certification				concept											x	x			
Pathogens	Urban Runoff	Establish/Utilize volunteer stream	1) Train volunteers in as per EPA QA				concept											x	x			
Pathogens	Urban Runoff	monitoring networks Establish/Utilize volunteer stream	standards 2) Develop framewprk for publishing and updating data via apling CIS				concept									\vdash						
Pathogens	Urban Runoff	monitoring networks Expand Student Watershed Watch Program into additional schools		Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	year round	ongoing											х	x			

											BUI	Color C	ode:		Impair	ed	No	t Impair	red	Unknc	own	Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI #1	BUI B	JI BUI 3 #4	BUI #5	BUI #6	BUI B	\$ <mark>UI</mark> Br #8 #	JI BU 9 #1(I BUI 0 #11	BUI #12	BUI B #13 #	UI Comments & 14 Misc. Info.
Pathogens	Urban Runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)		Maumee RAP, TMACOG, local Jurisdictions, US F&WS, ODNR	OEEF, local jurisdictions, US F&WS, ODNR, Maumee RAP, TMACOG	2003-2006	complete	Educate public on sources/pathways of nonpoint and point source pollution; pre- and post-campaign surveys show increased awareness of citizens	5.6.2; 5.7.1; Chapter 10.5									х	x			
Pathogens	Urban Runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	2) Release RFP/Hire contractors			9/3/04	complete											х	x			
Pathogens	Urban Runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	 Create and distribute TV, cinema and newspaper ads 			10/03-4/05	complete											х	x			
Pathogens	Urban Runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)				10/03-4/05	complete											х	x			
Pathogens	Urban Runoff		5) Create and Implement pre-/post- campaign phone survey			12/03 & 5/05	complete											х	x			
Pathogens	Urban Runoff	(Business Campaign) (Business Campaign)		Maumee RAP, TMACOG, local jurisdictions	Maumee RAP, TMACOG, local jurisdictions	2004-2006	in progress	Educate business owners, manager and employees on sources/pathways of nonpoint and point source pollution; show increased awareness of through the # of businesses voluntarily participating in campaign										×	x			
Pathogens	Urban Runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)	2) Create and distribute 4 Guidebooks for local businesses			8/05-12/06	in progress											х	x	\square		
Pathogens	Urban Runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)	3) Create and distribute print ads (newspaper, magazines, newsletters,			10/05-12/06	in progress											x	x			
Pathogens	Urban Runoff	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	bulletins) 1) Design watershed signs for 4 streams (Ottawa, Swan, Maumee & Lake Erie)	Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete											x	x			
Pathogens	Urban Runoff	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	2) Place bulk order for local jurisdictions and organizations			Jun-05	complete											х	Х			
Pathogens	Urban Runoff		 3) Distribute signs for local jurisdictions and organizations to use 			Jul-05	complete											х	x			
Pathogens	Urban Runoff	Give Water a Hand Campaign and educational materials	Distribute info at events, programs and presentations	Maumee RAP; Lucas, Ottawa and	Maumee RAP; Lucas, Ottawa and	year round	ongoing											x	X			
pathogens	urban runoff	Obtain and review current water quality data to id areas of high bacteria or nutrient loading	Contact City of Toledo and Oregon to obtain current data	and Wood SWCDs City of Toledo, City of Oregon, University of Toledo, TMACOG Health Depts	and Wood SWCDs	2004-2005	In progress												x			
Pathogens	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	1) Design new Drains are for Rain storm drain stencils and companion door hangers	Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete	# of supplies ordered; # of households given educational materials; # of purchasing	Chapter 10.5; 5.7.1			>			x				x			C
Pathogens	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	2) Place bulk order for local jurisdictions and organizations			Jun-05	complete)	,		х				х			<
Pathogens		Storm Drain Stenciling Program (Drains		D		Jul-05	complete					>	:		x				х			ĸ
Pathogens	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	 Design new Drains are for Rain storm drain stenciling Field Manuals 	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF; 319 grants; ODNR/CZM grants; foundations; local donations; cities	year round	ongoing	# of stenciling manuals sold	Chapter 10.5; 5.7.1			>			x				х			c
Pathogens	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	2) Fill orders for local jurisdictions and organizations as placed			year round	ongoing								х				Х		1	<
Pathogens	Urban Runoff	Storm Drain Stencilling Program (Drains are for Rain) (Phase 3)	Conduct public Storm Drain Stenciling events	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF, ODNR/CZM grants; foundations, Maumee RAP, TMACOG, local jurisdictions, organizations	April - Oct	ongoing	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating				>			х				x			c
Pathogens	Urban Runoff	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	August - November	ongoing											x	X			
Pathogens	Urban Runoff	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)				ongoing											х	X			
Pathogens	Urban Runoff	Student Watershed Watch	3) Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector)	5		Sept	ongoing											x	х			
Pathogens	Urban Runoff	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools			Sept	ongoing											x	X			
Pathogens	Urban Runoff	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)	k		mid-Oct	ongoing											х	х			

											BUIC	olor Co	de:	Im	paired		Not Imr	aired	Unk	known		Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI B	и ви	I BUI #4	ви в		BUI	BUI	BUI E		JI BUI	BUI	Comments & Misc. Info.
Pathogens	Urban Runoff	Student Watershed Watch	6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector)			late Oct- early Nov	ongoing											х	х			
Pathogens	Urban Runoff	Student Watershed Watch	7) Student share data and finding at Student Summit			mid-Nov	ongoing											Х	Х			
Pathogens	Urban Runoff	SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept											x	x			
Pathogens	Urban Runoff	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training				concept											x	x			
Pathogens	Urban Runoff	SWW Teacher Training/Creditable Data Certification					concept											x	x			
Pathogens	Wastewater treatment plant/ package plant	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards				concept											x	x			
Pathogens	Wastewater treatment	Establish/Utilize volunteer stream	2) Develop framewprk for publishing and				concept											x	x			
Pathogens	plant/ package plant Wastewater treatment plant/ package plant	monitoring networks Expand Student Watershed Watch Program into additional schools	updating data via online GIS	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	year round	ongoing											х	x			
Pathogens	Wastewater treatment plant/ package plant	Identify and assess package plant discharges	1) Locate package plants	Maumee RAP, TMACOG, Wood, Lucas, Ottawa Co., Health Depts., OEPA	Lake Erie Protection Fund, Ohio Sea Grant, USEPA, OEPA	2005-2006	concept			entire watershed								x	x			
Pathogens	Wastewater treatment plant/ package plant	Identify and assess package plant discharges	2) Review NPDES permits				concept											x	x			
Pathogens	Wastewater treatment plant/ package plant	Identify and assess package plant discharges	3) Identify plants operating without permit				concept											x	x			
Pathogens	Wastewater treatment plant/ package plant	· · · · · · · · · · · · · · · · · · ·	4) Sample adjecent streams				concept											x	x			
Pathogens	Wastewater treatment plant/ package plant	Identify and assess package plant discharges	5) Assess water quality impacts				concept											x	x			
Pathogens	Wastewater treatment plant/ package plant	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Ohio EPA, public and	private donations	August - November	ongoing											х	x			
Pathogens	Wastewater treatment plant/ package plant	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data	private schools			ongoing											х	x			
Pathogens	Wastewater treatment plant/ package plant	Student Watershed Watch	Certification) 3) Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data			Sept	ongoing											х	x			
Pathogens	Wastewater treatment plant/ package plant	Student Watershed Watch	Collector) 4) Supplies are distributed to participating teacher/schools			Sept	ongoing											Х	x			
Pathogens	Wastewater treatment plant/ package plant	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day			mid-Oct	ongoing											х	x			
Pathogens	Wastewater treatment plant/ package plant	Student Watershed Watch	(perferably) 6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified			late Oct- early Nov	ongoing											х	x			
Pathogens	Wastewater treatment	Student Watershed Watch	Data Collector) 7) Student share data and finding at			mid-Nov	ongoing											х	х			
Pathogens	plant/ package plant Wastewater treatment plant/ package plant	SWW Teacher Training/Creditable Data Certification	Student Summit 1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept											x	x			
Pathogens	Wastewater treatment	SWW Teacher Training/Creditable Data					concept											x	x			
Pathogens	plant/ package plant Wastewater treatment plant/ package plant	Certification SWW Teacher Training/Creditable Data Certification	Level 1 Qualified Data Collector (QDC)				concept												x			
Pesticides	Cropland	tillage and other BMPs used by farmers in watershed		Maumee RAP Rural Runoff Action Group, SWCD [Lucas, Wood, Ottawa Co], Area Universities		2005-2010	concept			entire watershed	x	×	×	,	<						×	
Pesticides	Cropland	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed	determine baseline WQ				concept				×	x	x	,	(x	
Pesticides	Cropland	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed	optimal impact				concept				x	x	x	,	(x	
Pesticides	Cropland	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed					concept				x	x	×)	(x	

																		—]		—	
	1			1		1	1		1	-	BUIC	Color C	ode:	Impaire	d [Not	Impaired	Unk	nown	Not A	Applicable
Causes of Impairment (Pollutant or Stressor		Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed							II BUI E #10 #				omments & Misc. Info.
Pesticides	Cropland	Plankton Survey and Bioassay	1) Establish Methodology	Maumee RAP, TMACOG, Wood, Lucas, Ottawa Co., Health Depts.,University of Toledo, OEPA	Lake Erie Protection Fund, Ohio Sea Grant, USEPA, OEPA	2005-2006	concept			entire watershed	x	,	x	x						x	
Pesticides	Cropland	Plankton Survey and Bioassay	2) Identify sample sites				concept			entire watershed			(X	Х						Х	
Pesticides	Cropland	Plankton Survey and Bioassay	3) Conduct sampling				concept			-	X			XX			4			X X	
Pesticides Pesticides	Cropland Cropland	Plankton Survey and Bioassay Plankton Survey and Bioassay	4) Analyze data5) Determine status				concept concept				X			 x						X	
Pesticides	Cropland	Survey of Wildlife Managers [tainting of fish and wildlife flavor]	,	Maumee RAP, Federal and State wildlife agencies	Lake Erie Protection Fund, Ohio Sea Grant	2005-2006	concept			Maumee AOC	x		x	x						x	
Pesticides	Cropland	Implementation of Agricultural BMPs	1) Identify potential Partners	Maumee RAP Rura Runoff Action Group SWCD [Lucas, Wood, Ottawa Co]	b, Fund, USEPA GLNPO, OEPA 319, Great Lkes Commission Great Lakes Basin Program for Soil Erosion and	2005-2010	concept			HUC 0410001001	0 X	>	x	×						x	
Destisides	Crapland	Implementation of Agricultural DMDs	2) Access pessible PMPs		Sediment Control		aanaant				~	_		 V			4			v	
Pesticides Pesticides	Cropland Cropland	Implementation of Agricultural BMPs Implementation of Agricultural BMPs	2) Assess possible BMPs3) Select demonstration sites				concept concept				X			X						X X	
Pesticides	Cropland	Implementation of Agricultural BMPs	4) conduct land owner contact	1	1		concept				X			X						× X	
Pesticides	Cropland	Implementation of Agricultural BMPs	5) conduct public education	1			concept				X	>		X						X	
Pesticides	Cropland	Implementation of Agricultural BMPs	6) complete project				concept														
pesticides	urban runoff	Implement baseline water quality sampling program	 Implement seasonal sampling for variety of parameter at fixed, repeated locations 	City of Oregon, City of Toledo	Cities	2004-	ongoing	# of samples taken, # of locations sampled	Chapter 11			>	<	х						Creel depth pH, c ORP turbic phos	jon: Otter ek parameters: h, temp, DO, conductivity, P, TSS, dity, ammonia, sphates, tes, e coli, ss
pesticides	urban runoff	Implement baseline water quality sampling program	2) Share data with other entities, such as UT LERC and Partnership	6	none needed		ongoing					>	(Х							
pesticides	urban runoff	Implement baseline water quality sampling program	3) Identify problems areas and/or trends				ongoing					>	(х							
Pesticides	Urban/Suburban	Organic Lawn Care Clinic	Less fertilizer in urban/suburban runoff	SWCD/Black Swam Conservancy	pSWCD	Annual	ongoing					>	(х							
Pesticides	urban/suburban areas	Give Water a Hand Campaign (Phase 1) (Residential Campaign)) 1) Develop project	Maumee RAP, TMACOG, local Jurisdictions, US F&WS, ODNR	OEEF, local jurisdictions, US F&WS, ODNR, Maumee RAP, TMACOG	2003-2006	complete	Educate public on sources/pathways of nonpoint and point source pollution; pre- and post-campaign surveys show increased awareness of citizens	5.6.2; 5.7.1; Chapter 10.5		x	>	××	x						x	
Pesticides	urban/suburban areas	Give Water a Hand Campaign (Phase 1) (Residential Campaign)				9/3/04	complete				х	>	х	х						x	
Pesticides	urban/suburban areas	(Residential Campaign)) 3) Create and distribute TV, cinema and newspaper ads			10/03-4/05	complete				х	>	х	х						x	
Pesticides	urban/suburban areas	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	bonus items			10/03-4/05	complete				x	>	x	х						x	
Pesticides	urban/suburban areas	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	campaign phone survey			12/03 & 5/05	complete				Х	>	(X	х						х	
Pesticides	urban/suburban areas	(Business Campaign) (Business Campaign)	1) Develop project	Maumee RAP, TMACOG, local jurisdictions	Maumee RAP, TMACOG, local jurisdictions	2004-2006	in progress	Educate business owners, manager and employees on sources/pathways of nonpoint and point source pollution; show increased awareness of through the # of businesses voluntarily participating in campaign			x	,	x	x						x	
Pesticides	urban/suburban areas	Give Water a Hand Campaign (Phase 2) (Business Campaign)) 2) Create and distribute 4 Guidebooks for local businesses			8/05-12/06					x	>	x	х						x	
Pesticides	urban/suburban areas	Give Water a Hand Campaign (Phase 2) (Business Campaign)				10/05-12/06					x	>	x	x						x	
Pesticides	urban/suburban areas	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	(Ottawa, Swan, Maumee & Lake Erie)	TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete				x	>	x	x						×	
Pesticides	urban/suburban areas	(Watershed Awareness Campaign)) 2) Place bulk order for local jurisdictions and organizations			Jun-05	complete				x	>	x	х						x	·
Pesticides	urban/suburban areas	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	and organizations to use			Jul-05	complete				х	>	x	х						х	
Pesticides	urban/suburban areas	Give Water a Hand Campaign and educational materials	Distribute info at events, programs and presentations	Lucas, Ottawa and	Maumee RAP; Lucas, Ottawa and and Wood SWCDs	year round	ongoing				х	>	X X	х						x	

											BUI Col	or Code	: [Impa	aired	1	Not Impaire	ed 📃 L	Jnknown		Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI BUI #1 #2	BUI #3	BUI BU	Л ВU 5 #6	1 BUI 5 #7	BUI (#8	BUI BUI #9 #10	BUI #11	BUI BI #12 #1		Comments & Misc. Info.
Pesticides	urban/suburban areas	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	 Design new Drains are for Rain storm drain stencils and companion door hangers 	jurisdictions,	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete	# of supplies ordered; # of households given educational materials; # of purchasing	Chapter 10.5; 5.7.1			x		x				x		×	
Pesticides	urban/suburban areas	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	2) Place bulk order for local jurisdictions and organizations			Jun-05	complete					х		x				х		х	1
Pesticides	urban/suburban areas	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)		o		Jul-05	complete					х		х				х		х	
Pesticides	urban/suburban areas	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	1) Design new Drains are for Rain storm drain stenciling Field Manuals	Creeks Partnership, Maumee RAP,	OEEF; 319 grants; ODNR/CZM grants; foundations; local donations; cities	year round	ongoing	# of stenciling manuals sold	Chapter 10.5; 5.7.1			х		x				х		x	
Pesticides	urban/suburban areas	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	2) Fill orders for local jurisdictions and organizations as placed			year round	ongoing					Х		X				х		х	
Pesticides	urban/suburban areas	Storm Drain Stenciling Program (Drains are for Rain) (Phase 3)	0	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF, ODNR/CZM grants; foundations, Maumee RAP, TMACOG, local jurisdictions, organizations	April - Oct	ongoing	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating				x		x				×		x	
Refuse, litter	litter	Continue/expand Sign our Streams program to increase community awareness of stream locations and increase stewardship of stream by the community (in turn, reduce dumping/aesthetic degradation)	1) Purchase signs/images from Clearwater	Duck and Otter Creeks Partnership,	ODNR Operating Support grant, in- kind from Cities	2003	complete	# of locations "signed"	Chapter 10.5					T				×			
Refuse, litter	litter	Continue/expand Sign our Streams program to increase community awareness of stream locations and increase stewardship of stream by the community (in turn, reduce dumping/aesthetic degradation)	 Identify sign locations at visible road crossings in community 			2004	complete											x			
Refuse, litter	litter	Continue/expand Sign our Streams program to increase community awareness of stream locations and increase stewardship of stream by the community (in turn, reduce dumping/aesthetic degradation)	3) Install signs			2005	In progress											x			
Refuse, litter, etc	litter	CYS Day	1) Establish planning team	Maumee RAP; Duck and Otter Creeks Partnership; ORKA; Cities of Oregon, Northwood, Toledo; TMACOG; Lake Erie Commission; various other community partners	Solicit private and public contributions, grants when available	April - Sept (annually)	ongoing	Relative to previous years: 1) tons of garbage and debris removed from area streams; 2) number of volunteers that participate; 3) # of sites/RM cleaned 4) amount of support received for planning and funding the event	Chapter 10.5			x						x		x	
Refuse, litter, etc	litter	CYS Day	2) Solicit contributions and site captain			April - Sept	ongoing					Х						х		х	
Refuse, litter, etc	litter	CYS Day	support 3) Distribute promotional materials			June - Sept	ongoing					Х						Х		Х	
Refuse, litter, etc	litter	CYS Day	 Select waterways and sites to be cleaned 			Aug	ongoing					Х						х		х	1
Refuse, litter, etc Refuse, litter, etc	litter litter	CYS Day CYS Day	5) Conduct site captain training6) Hold event and appreciation picnic			Sept Sept	ongoing ongoing					Х				\square		Х		Х	
Refuse, litter, etc	litter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	 Design new Drains are for Rain storm drain stencils and companion door hangers 	TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete	# of supplies ordered; # of households given educational materials; # of purchasing	Chapter 10.5; 5.7.1			x		x				x		x	
Refuse, litter, etc	litter	are for Rain) (Phase 1)	2) Place bulk order for local jurisdictions and organizations			Jun-05	complete					х		х				х		х	
Refuse, litter, etc	litter		 Distribute stencils and door hangers for local jurisdictions and organizations to use 	o		Jul-05	complete					x		x				х		х	
Refuse, litter, etc	litter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	drain stenciling Field Manuals	Creeks Partnership, Maumee RAP,	OEEF; 319 grants; ODNR/CZM grants; foundations; local donations; cities	year round	ongoing	# of stenciling manuals sold	Chapter 10.5; 5.7.1			x		x				x		x	
Refuse, litter, etc	litter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	 Fill orders for local jurisdictions and organizations as placed 			year round	ongoing			_		х		x				х		х	
Refuse, litter, etc	litter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 3)	Conduct public Storm Drain Stenciling events	Maumee RAP,	OEEF, ODNR/CZM grants; foundations, Maumee RAP, TMACOG, local jurisdictions, organizations	April - Oct	ongoing	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating				x		x				×		x	

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Causes of Impairment (Pollutant or Stressor		Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Coastal Indicator/Environmental Management Results (Loadings) Measure	HUC/Stream Segment Addressed			BUI BU #4 #5							
salinity	road deicing	Implement alternative deicing products (such as corn-based products) and other control measures	Begin using alternative deicing products	City of Oregon	City of Oregon	2003-	ongoing	% of salt use reduced; # of miles 5.8.4 of road where alternative applied			х		х						x
salinity	road deicing	Install computerized spreaders on all salt trucks to control application rate		City of Oregon	City of Oregon	2004-	In progress	# of trucks converted; % of salt 5.8.4 use reduced			х		х						x
Sediment/Siltation	Construction	Assessment of stream for storm water flows pre- and post- development					concept			x	Х	x	x			x :	x		x
Sediment/Siltation	Construction	Educate developers/contractors on need and use of BMPs		Maumee RAP Urban Runoff Action Group	OEEF, GLC	2005	planning		entire watershed	x	х	x	x			x	<		x
Sediment/Siltation	Construction	Evaluate land use		SWC, Urban Runoff Action Group**			concept			x	x	X	x			x :	x		x
Sediment/Siltation	Construction	Identify alternative development designs/layouts that protect water quality	,				concept			x	x	x	x			x :	<		x
Sediment/Siltation	Construction	Implement a watershed storm water management program		RAP Urban Runoff Action Group	Lake Erie Protection Fund Local jurisdictions		concept			x	x	x	x			x	ĸ		x
Sediment/Siltation	Construction	Land use/ land cover analysis and mapping of AOC	Use remote sensing and GIS to classify major land use/land cover types	Maumee RAP, TMACOG, Lucas, Wood, Ottawa Co., University of Toledo	Lake Érie Protection Fund, USEPA GLNPO, OEPA 319,	2005-2006	concept		Maumee AOC	x	x	x	x			x :	x		x
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 1)	1) Determine contents for manual	RAP Urban Runoff Action Group, MRRSWC	Lake Erie Protection Fund	2002	complete	Implement a regional/watershed management program: a) control increases in runoff rates, b) prevent losses in infiltration, c) prevent runoff pollution	all of AOC	x	x	x	x			x :	x		x
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 1)	2) Write manual				complete			x	х	x	х			x :	x		x
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 1)	 Identify alternative development designs/layouts that protect water quality 				complete			x	х	x	x			x :	×		x
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 1)	 4) Encourage local jurisdications to adop manual as their standards 	t			complete			x	х	x	х			x x	x		x
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 2)	1) Review existing manual	Maumee RAP Urban Runoff Action Group SWC	GLC	2005-2007	in progress	Completion and distribution of Chapter 10.5; 5.7.1 revised manual	all of watershed	x	x	x	x			x	×		x
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 2)	 Update chapters with new content and regulations 			2005-2006	in progress			x	х	x	х			x :	x		x
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 2)	3) Conduct workshops and site visits for consultants, developers, contractors on stormwater plan preparation and post- construction BMPs			2006-2007	in progress	50 percent of consultants, developers, contractors that work in the area participate		x	x	x	x			x :	<		x
Sediment/Siltation	Construction	Regional Storm Water Standards Manua (Phase 3)	Maintain and update manual as needed				ongoing			х	х	х	х			X X	<		х
Sediment/Siltation	Construction	Require BMPs on smaller developments					concept		entire watershed	X	X	x	х			x :	(x
sediment/siltation	construction	Review all site plan and require pre/post construction controls for water quality, even for sites < 1 acre		City of Oregon	City of Oregon	2004-	ongoing	5.3.1; 5.3.2; 5.3.3; 5.4.1; 5.4.2											X feature on site t reduce urban ru
sediment/siltation	construction	Revise storm water regulations and ordinances; may incorporate Maumee RAP manual, ODNR Rainwater manual, regional Storm Water Coalition recommendations and other references		City of Oregon	City of Oregon	2004-2005	complete	stricter BMPs, ordinances that are more protective of stream health											x
Sediment/Siltation	Cropland	Develop potential project list based on Cropland Inventory Project Results					concept		entire watershed	x	X	x	x			x	<		x
Sediment/Siltation	Cropland	Identify extent & benefit of conservation	1) Survey SWCDs to determine extent of BMP implementation	Maumee RAP Rural Runoff Action Group SWCD [Lucas, Wood, Ottawa Co], Area Universities		2005-2010	concept		entire watershed	x	×	x	x			× ;	x		x
Sediment/Siltation	Cropland	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed					concept			×	x	x	x			x :	×		x
Sediment/Siltation	Cropland	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed	3) Determine best location of BMPs for optimal impact				concept			×	x	x	x			x :	×		x
Sediment/Siltation	Cropland	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed	4) Conduct post implementation sampling to quantify impacts				concept			x	x	x	x			x :	×		x

(Pollutant or Stressor)																		_		
Sediment/Siltation	Sources of Pollutant	Projects	Major Tasks/ Milestones	Partners	5(-,	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI BU #1 #2									
	Cropland	Implementation of Agricultural BMPs	1) Identify potential Partners	Runoff Action Group, Fund, U SWCD [Lucas, GLNPO Wood, Ottawa Co] Great Li Commis Lakes B Program Erosion	, OEPA 319, kes ssion Great 2 Basin n for Soil	2005-2010	concept			HUC 04100010010	×	×	×	×			×>	<	3	C
	Cropland	Implementation of Agricultural BMPs	2) Assess possible BMPs	Sediner			concept				X	X	X	X			X >			K
	Cropland Cropland	Implementation of Agricultural BMPs Implementation of Agricultural BMPs	3) Select demonstration sites4) conduct land owner contact				concept concept				X	X	X X	X	_	_	X X X			K C
	Cropland	Implementation of Agricultural BMPs	5) conduct public education				concept				X	X	X	X			X X		-	K
	Cropland	Implementation of Agricultural BMPs	6) complete project				concept				Х	Х	Х	Х			X	(
Sediment/Siltation Ci	Cropland	Incentive programs for implementation o agricultural BMPs such as filter strips & conservation tillage, fertilizer/pesticide management	f Continue to promote and support the implementation of these programs		ke Erie ssion, USDA - SWCDs		concept			entire watershed	×	x	x	x			x	¢	3	C
Sediment/Siltation Ci	Cropland	Incentives and equipment rental for conservation tillage		Lucas and Wood SWCDs		ongoing	ongoing				х	Х	х	х			X >	(¢ l
Sediment/Siltation Ci	Cropland	Inventory watershed for amount of acreage in cropland	1) Develop inventory methodology utilizing existing AERIS system and other available resources	Maumee RAP Ag U.S. AC	E, Section atureWorks		planning			entire watershed	x	x	x	x			x >	<	;	(
Sediment/Siltation Ci	Cropland	Inventory watershed for amount of	2) Convert electronic data into GIS map				planning				x	x	x	x			x	(-	
Sediment/Siltation Ci	Cropland	acreage in cropland Inventory watershed for amount of	3) Intergrate with AERIS data				planning				x	Х	x	x			x	(<
Sediment/Siltation Ci	Cropland	acreage in cropland Inventory watershed for amount of	4) Determine impact on watershed and														\vdash			
		acreage in cropland	possible projects to reduce or eliminate				planning				X	Х	×	X			X	(,	
Sediment/Siltation C	Cropland	Reduce the impact of erosion of water quality	Educate watershed landowners of their impact on water quality and of the benefits of riparian habitat protection or restoration	Maumee RAP Ag Ohio EF Runoff Action Group, SWCDs, ODNR - SWC, Ohio EPA 319	PA 319		concept			entire watershed	x	×	x	x			×>	<	3	c
	Cropland or pasture where manure is spread	Plankton Survey and Bioassay	1) Esatblish methodology		ie Protection Phio Sea JSEPA, 2	2005-2006	concept			entire watershed	x	×	x	×			x	<	:	c
	Cropland or pasture vhere manure is spread	Plankton Survey and Bioassay	2) Identify sample sites				concept			entire watershed	x	x	x	x			x >	<	:	<
	Cropland or pasture where manure is spread	Plankton Survey and Bioassay	3) Conduct sampling				concept				x	x	x	x			x	(;	c
	Cropland or pasture where manure is spread	Plankton Survey and Bioassay	4) Analyze data				concept				x	x	x	x			×>	(;	c
wi	Cropland or pasture where manure is spread	Plankton Survey and Bioassay	5) Determine status				concept				x	x	x	x			x	(;	(
fo	or development	Incentives and equipment rental for conservation tillage		Lucas and Wood Soil and Water Conservation Districts		ongoing	ongoing				x	х	x	x			x >	< .		(
	and clearing and infilling or development	Land use/ land cover analysis and mapping of AOC	Use remote sensing and GIS to classify major land use/land cover types	TMACOG, Lucas, Fund, U	, OEPA 319, 2	2005-2006	concept			Maumee AOC	x	×	x	x			x	¢	:	c
fo	or development	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	wetlands using remote sensing	University of Toledo, OEPA 3 Maumee RAP, TMACOG, Lucas Co.		1999-2003	complete			portion of watershed in Lucas Co	³ X	x	x	x			x >	<	>	(
	and clearing and infilling or development	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	 2) create GIS map of wetlands and potential wetlands 				complete				х	х	х	х			x >	(>	(
	and clearing and infilling or development	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	 Identify restoration needs 				complete				х	х	х	х			x >	(:	(
Sediment/Siltation la	and clearing and infilling or development	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	1) Indentify and evaluate existing wetlands using remote sensing	TMACOG, Wood, Fund, U	, OEPA 319, 2	2005-2006	planning			portion of watershed in Wood Co	x	x	x	x			x	(;	c
	and clearing and infilling or development	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	e 2) create GIS map of wetlands and potential wetlands				planning				X	х	х	×			x 3	C	,	<
	and clearing and infilling or development	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	3) Identify restoration needs				planning				x	x	x	x			X	(

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI #1	BUI BI #2 #	JI BUI 3 #4	BUI #5	BUI E #6	BUI BU #7 #8	JI BUI 3 #9	BUI #10	BUI B #11 #	UI BUI 12 #13	BUI #14	Comments & Misc. Info.
Sediment/Siltation	land clearing and infillin for development	gWetlands Inventory and Mapping (Phase 3) (Ottawa Co.)	1) Indentify and evaluate existing wetlands using remote sensing	Maumee RAP, TMACOG, Wood, Ottawa Co., University of Toledo	Lake Erie Protection Fund, USEPA GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	concept			portion of watershed in Ottawa Co	x	×	×		x			x	x		x	
Sediment/Siltation	land clearing and infillin for development	Wetlands Inventory and Mapping (Phase 3) (Ottawa Co.)	e 2) create GIS map of wetlands and potential wetlands				concept				x	>	x		х			x	х		x	
Sediment/Siltation		gWetlands Inventory and Mapping (Phase 3) (Ottawa Co.)					concept				x	>	x		х			x	x		x	
Sediment/Siltation	Pasture	Cost share to install all-weather paddocks for horse owners	Install demonstration paddock in Lucas	ODNR-DSWC, SWCD, NRCS	NRCS, ODNR- SWCD		concept				x	>	:		х	X		х	x			
Sediment/Siltation	Pasture	Develop potential project list based on	County	SWCD, NRCS	SWCD		concept				x	>	x		х			х	x		x	
Sediment/Siltation	Pasture	Pasture Inventory Project Results Identify extent & benefit of BMPs used by farmers in watershed	У	Ohio Lake Erie Commission, USDA NRCS, SWCDs	Ohio Lake Erie - Commission, USDA · NRCS, SWCDs	-	concept				x	×	x		x			x	x		×	
Sediment/Siltation	Pasture	Implementation of Agricultural BMPs	1) Identify potential Partners	Maumee RAP Rural Runoff Action Group SWCD [Lucas, Wood, Ottawa Co]	LEPF, USEPA , GLNPO, OEPA 319, GLC Great Lakes Basin Program for Soil Erosion and Sediment Control	2005-2010	concept			HUC 04100010010	x	×	x		x			x	x		x	
	Desture	Inclusion of Aminutural DMDs	0) Assess asseible DMDs								V				×			V	~		X	
Sediment/Siltation Sediment/Siltation	Pasture Pasture	Implementation of Agricultural BMPs Implementation of Agricultural BMPs	2) Assess possible BMPs3) Select demonstration sites				concept concept				X X		X X		X X			XX	X		X X	
Sediment/Siltation	Pasture	Implementation of Agricultural BMPs	4) conduct land owner contact				concept				X		X		Х				Х		X	
Sediment/Siltation Sediment/Siltation	Pasture Pasture	Implementation of Agricultural BMPs Implementation of Agricultural BMPs	5) conduct public education6) complete project			<u>↓ </u>	concept concept		+		X				X				X		X	
Sediment/Siltation	Pasture	Incentive programs for implementation o agricultural BMPs such as filter strips, manure management, pesticide	f Continue to promote and support the implementation of these programs				concept				×				x			x	x		x	
Sediment/Siltation	Pasture	management Inventory watershed for amount of acreage in pasture	1) Develop inventory methodology utilizing existing AERIS system and other available resources	RAP Ag Runoff rAction Group, SWCDs (Fulton & Lucas in Ohio), ODNR - SWC	U.S. ACE, Section 319, NatureWorks (ODNR)		concept			entire watershed	x	×	×		x			x	x		x	
Sediment/Siltation	Pasture	Inventory watershed for amount of	2) Convert electronic data into GIS map	ODINK - SVIC			concept				x	>	x		х	+		x	х		x	
Sediment/Siltation	Pasture	acreage in pasture Inventory watershed for amount of acreage in pasture	3) Intergrate with AERIS data				concept				x	>	: х		х			x	x		x	
Sediment/Siltation	Pasture	Inventory watershed for amount of acreage in pasture	4) Determine impact on watershed and possible projects to reduce or eliminate				concept				x	>	x		x			x	x		x	
Sediment/Siltation	Pasture	Reduce the impact of erosion of water quality	Educate watershed landowners of their impact on water quality and of the benefits of riparian habitat protection or restoration				concept				x	×	x		x			x	x		x	
sediment/siltation	roads	Implement alternative deicing products (such as corn-based products) and other control measures	Begin using alternative deicing products	City of Oregon	City of Oregon	2004-	ongoing	% of salt use reduced; # of miles of road where alternative applied				×	(х						х	
sediment/siltation	roads	Install computerized spreaders on all sal trucks to control application rate	t	City of Oregon	City of Oregon	2004-	ongoing	# of trucks converted; % of salt use reduced	5.8.4						х							
sediment/siltation	roads	Review all site plan and require pre/post construction controls for water quality, even for sites < 1 acre		City of Oregon	City of Oregon	2004-	ongoing		5.3.1; 5.3.2; 5.3.3; 5.4.1; 5.4.2						х							Oregon requires a water quality feature on site to reduce urban runoff
sediment/siltation	roads	Revise storm water regulations and ordinances; may incorporate Maumee RAP manual, ODNR Rainwater manual, regional Storm Water Coalition recommendations and other references		City of Oregon	City of Oregon	2004-2005	complete	stricter BMPs, ordinances that are more protective of stream health	Chapter 5						x							Otter Creek within Oregon (RM 0.5- 6.5)
Sediment/Siltation	Streambanks	Collect additional data, as needed			1		concept			1	X		x		X			X			X	·
Sediment/Siltation	Streambanks	Define Stabilization Problem					concept				Х		X		X			Х	X		X	
Sediment/Siltation	Streambanks	Develop potential project list based on Streambank Inventory Project Results					concept			entire watershed	Х	×	x		X			X	x		X	
Sediment/Siltation	Streambanks	Identify additional data needed					concept				Х	>	X		Х			Х	Х		X	
sediment/siltation	streambanks	Identify areas of creek where stream bank stabilization is needed	Continue "walking" creek and general observations	City of Oregon; Duck and Otter Creeks Partnership staff and/or volunteers	< c	2004-?	ongoing		7.6.1; 8.3.3			×	(x	
Sediment/Siltation	Streambanks	Implemented project(s) from proposed		and/or volumeers			concept				x	×	x		x			x	х		x	
Sediment/Siltation	Streambanks	Inventory watershed for streambank conditions		Ohio EPA, ODNR, US F&WS, US ACE	US ACE [WRDA ?? 905(b)], Ohio EPA 319		planning			entire watershed	x	>	x		x			x	x		×	NOTE: ACE recognizes & recommends use of OEPA's QHEI

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI BU									II BUI 2 #13		Comments & Misc. Info.
Sediment/Siltation	Streambanks	Review previously collected data		Ohio EPA, ODNR, US F&WS, US ACE	US ACE [WRDA ?? 905(b)]		concept				x	x	x		x			x	x		x	
Sediment/Siltation	Streambanks	Streambank Tree Planting	 Identify nurseries willing to donate plants 	NRCS, SWCDs, Maumee RAP, TMACOG.	Ohio EPA 319	2006-?	concept			entire watershed	x	x	x		x			x	x		x	
Sediment/Siltation	Streambanks	Streambank Tree Planting	2) Locate areas in need of bank stabilization				concept				х	х	x		x			X	x		х	
Sediment/Siltation	Streambanks	Streambank Tree Planting Streambank Tree Planting	3) Find receptive landowners				concept				X	X			X				X		X	
Sediment/Siltation Sediment/Siltation	Streambanks Urban/Suburban	Pond Clinic	4) Assist in planting Educate landowners on proper application of herbicides and alternate approaches to pond management; proper construction techniques including storm water BMPs.	OSU Extension Sea Grant, Fulton OSU Extension, Progressive Fisherman's Club		Annual	ongoing				X		×	x	×				x x		x	
Thermal stress/sunlight	Removal of riparian vegetation	Plankton Survey and Bioassay	1) Establish Methodology	Maumee RAP, TMACOG, Wood, Lucas, Ottawa Co., Health Depts.,University of Toledo, OEPA	Lake Erie Protection Fund, Ohio Sea Grant, USEPA, OEPA	2005-2006	concept			entire watershed		x			×						×	
Thermal stress/sunlight	Removal of riparian vegetation	Plankton Survey and Bioassay	2) Identify sample sites				concept			entire watershed		×			x						x	
Thermal stress/sunlight	Removal of riparian vegetation	Plankton Survey and Bioassay	3) Conduct sampling				concept					x			x						x	
Thermal stress/sunlight	Removal of riparian vegetation	Plankton Survey and Bioassay	4) Analyze data				concept					x			x						x	
Thermal stress/sunlight	Removal of riparian vegetation	Plankton Survey and Bioassay	5) Determine status				concept					x			x						x	
thermal stress/sunlight	riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	wetlands using remote sensing	University of Toledo, Maumee RAP, TMACOG, Lucas Co.	OEPA 319	1999-2003	complete			portion of watershed in Luca Co	IS	x			x						x	
thermal stress/sunlight	riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	 create GIS map of wetlands and potential wetlands 				complete					х			х						х	
thermal stress/sunlight	riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	 Identify restoration needs 				complete					Х			х						х	
thermal stress/sunlight	riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	 Indentify and evaluate existing wetlands using remote sensing 	Maumee RAP, TMACOG, Wood, Ottawa Co., University of Toledo	Lake Erie Protection Fund, USEPA GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	planning			portion of watershed in Woo Co	d	x			x						x	
thermal stress/sunlight	riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	2) create GIS map of wetlands and potential wetlands				planning					х			x						х	
thermal stress/sunlight	riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	3) Identify restoration needs				planning					х			x						х	
thermal stress/sunlight	riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 3) (Ottawa Co.)	 Indentify and evaluate existing wetlands using remote sensing 	Maumee RAP, TMACOG, Wood, Ottawa Co., University of Toledo	Lake Erie Protection Fund, USEPA GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	concept			portion of watershed in Ottawa Co		×			x						x	
thermal stress/sunlight	riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 3) (Ottawa Co.)	2) create GIS map of wetlands and potential wetlands				concept					x			x						х	
thermal stress/sunlight	riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 3) (Ottawa Co.)	3) Identify restoration needs				concept					X			x						x	
Toxic substances	Industrial discharges (current or old)	Identify point sources		Ohio EPA	Ohio EPA		concept				x	x	X		x				x		x	
Toxic substances	Industrial discharges (current or old)	Maintain compliance with NPDES permits		Ohio EPA Permitees	Ohio EPA		concept				x	x	x		x				x		x	
Toxic substances	Industrial discharges (current or old)	NPDES permit GIS inventory (Phase 1)	1) Collect GIS coordinates for all current NPDES permits		Ohio EPA	2005-07	in progress	Coodinates for all permits collected			X	x	Х		x :	×		X	x x	x	х	
Toxic substances	Industrial discharges (current or old)	NPDES permit GIS inventory (Phase 1)	2) Convert electronic data into GIS map files				in progress				X	x	х		x >	×		X	x x	x	x	
Toxic substances	Industrial discharges (current or old)	NPDES permit GIS inventory (Phase 2)	Intergrate with AERIS data	TMACOG, Lucas County Auditor's Office	Maumee RAP		planning				x	x	x		x :	ĸ		X	x x	x	x	
Toxic substances Toxic substances	Urban Runoff Urban Runoff	Educate public on sources/pathways Evaluate capacity/condition of existing					concept				X	X	X		X				x		Х	
		systems; analysis of storm water flow, thermal impacts, runoff quality, erosion and sedimentation, and groundwater recharge.					concept				x	x	x		x				x		x	
Toxic substances	Urban Runoff	Evaluate impact of Phase II Stormwater regulations		Possibly Health Dept, permitted Phase 2 stormwater jurisdictions			concept				x	x	x		x				x		×	
Toxic substances	Urban Runoff	Evaluate upstream contributions					concept				X	X	X		X				x		X	

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI #1	BUI E #2	UI B 3 #	UI BL 4 #	JI BU 5 #6	II BUI 3 #7	BUI #8	BUI #9	BUI B #10 #	UI <mark>BU</mark> 11 #1	UI BUI 12 #13	BUI #14	Comments & Misc. Info.
Toxic substances	Urban Runoff	(Residential Campaign)		Maumee RAP, TMACOG, local Jurisdictions, US F&WS, ODNR	OEEF, local jurisdictions, US F&WS, ODNR, Maumee RAP, TMACOG	2003-2006	complete	Educate public on sources/pathways of nonpoint and point source pollution; pre- and post-campaign surveys show increased awareness of citizens	5.6.2; 5.7.1; Chapter 10.5		x		×>	×	x				:	×		x	
Toxic substances	Urban Runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)) 2) Release RFP/Hire contractors			9/3/04	complete				х		x >	x	x				;	x		х	
Toxic substances	Urban Runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)) 3) Create and distribute TV, cinema and newspaper ads			10/03-4/05	complete				х		x >	<	х				;	х		х	
Toxic substances	Urban Runoff	(10/03-4/05	complete				х		x >	< Notes	Х				7	х		х	
Toxic substances	Urban Runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)				12/03 & 5/05	complete				х		x >	x	х				7	x		x	
Toxic substances	Urban Runoff	(Bive Water a Hand Campaign (Phase 2 (Business Campaign)	1) Develop project	Maumee RAP, TMACOG, local jurisdictions	Maumee RAP, TMACOG, local jurisdictions	2004-2006	in progress	Educate business owners, manager and employees on sources/pathways of nonpoint and point source pollution; show increased awareness of through the # of businesses voluntarily participating in campaign			x		×>	x	x				;	x		x	
Toxic substances	Urban Runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)				8/05-12/06	in progress				x		x)	x	x		\square			x		x	
Toxic substances	Urban Runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)	for local businesses) 3) Create and distribute print ads (newspaper, magazines, newsletters, bulletins)			10/05-12/06	in progress				x		x >	<	x				;	x		x	
Toxic substances	Urban Runoff	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	 Ottevens) Design watershed signs for 4 streams (Ottawa, Swan, Maumee & Lake Erie) 	Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete				x		x >	×	x					x		x	
Toxic substances	Urban Runoff	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)) 2) Place bulk order for local jurisdictions and organizations			Jun-05	complete				х		x >	<	х					х		х	
Toxic substances	Urban Runoff	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	 3) Distribute signs for local jurisdictions and organizations to use 			Jul-05	complete				х		x >	x	х					х		х	
Toxic substances	Urban Runoff	Give Water a Hand Campaign and educational materials	Distribute info at events, programs and presentations	Maumee RAP; Lucas, Ottawa and	Maumee RAP; Lucas, Ottawa and	year round	ongoing				x		x >	x	x					x		x	
Toxic substances	Urban Runoff	Identify illicit connections		and Wood SWCDs	and Wood SWCDs		concept				X		x)		X					x		X	
Toxic substances	Urban Runoff	Identify sources not addressed by existing regulations (i.e. commercial)					concept				x		x	<	×				1	×		×	
Toxic substances Toxic substances	Urban Runoff Urban Runoff	Identify vulnerable areas Implement a regional/watershed management program:	1) control increases in runoff rates, 2) prevent losses in infiltration, 3) prevent runoff pollution	SWC & other local governments, RAP Urban Runoff Action	LEPF, local jurisdictions		concept				x		x) x)	x x	x					x x		x	
Toxic substances	Urban Runoff	Performance bond/tie compliance into		Group			concept				×		x)	×			\vdash		_	_			
Toxic substances	Urban Runoff	building permits. Provide venues for proper disposal of		Lucas County Solid							^ ×			~	_		\vdash	\square	Ť		+		
Toxic substances	Urban Runoff	wastes Provide/identify BMPs (may be based or a performance criteria) to	n	Waste Mgmt Distrct			concept				×		x >	×			$\left - \right $			×	+	×	
Toxic substances	Urban Runoff	prevent/remove pollutants Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	1) Design new Drains are for Rain storm drain stencils and companion door hangers	Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete	# of supplies ordered; # of households given educational materials; # of purchasing	Chapter 10.5; 5.7.1				x		x					x		x	
Toxic substances	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	2) Place bulk order for local jurisdictions and organizations	organizations	organizations	Jun-05	complete						x		x					x		х	
Toxic substances	Urban Runoff					Jul-05	complete						x		x					x		x	
Toxic substances	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	1) Design new Drains are for Rain storm drain stenciling Field Manuals	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF; 319 grants; ODNR/CZM grants; foundations; local donations; cities	year round	ongoing	# of stenciling manuals sold	Chapter 10.5; 5.7.1				×		x					x		x	
Toxic substances	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	2) Fill orders for local jurisdictions and organizations as placed			year round	ongoing						×		Х					х		Х	
Toxic substances	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 3)		Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF, ODNR/CZM grants; foundations, Maumee RAP, TMACOG, local jurisdictions, organizations	April - Oct	ongoing	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating					×		×					x		×	
Toxic substances	Wastewater treatment plant/ package plant	Identify and assess package plant discharges	1) Locate package plants	Maumee RAP, TMACOG, Wood, Lucas, Ottawa Co., Health Depts., OEPA	Lake Erie Protection Fund, Ohio Sea Grant, USEPA,	2005-2006	concept			entire watershed	×		x)	×	x				-	x		×	

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed							3UI BU #8 #9					
Toxic substances	Wastewater treatment plant/ package plant	Identify and assess package plant discharges	2) Review NPDES permits				concept				х)	< ×	<	x				х		x	
Toxic substances	Wastewater treatment plant/ package plant	Identify and assess package plant discharges	3) Identify plants operating without permit				concept				x)	< >	ĸ	x				х		x	
Toxic substances	Wastewater treatment plant/ package plant		4) Sample adjecent streams				concept				х)	< >	K	x				x		x	
Toxic substances	Wastewater treatment plant/ package plant	Identify and assess package plant discharges	5) Assess water quality impacts				concept				x)	× ×	ĸ	x				х		x	1

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	ви	BUI B	и ви	BUI B		ви в		BUI BUI	BUI BUI #13 #14	Comments &
All	All	Conduct a TMDL	 Design watershed survey, 2) Collect water quality data, 3) Assess waterbodies, 4) Identify target conditions Develop restoration projects,6) Select restoration scenerio, 7) Prepare implementation plan, 8) Submit TMDL report, 9) Implement TMDL (inside Ohio EPA), 10) Implement TMDL (outside OEPA), 11) Annual validation activities, and 12) Validate water quality status 		OEPA	2008-2010	concept			HUC 04100010010			ĸ		x	x		x		Source: OEPA
All	All	GIS Water Quality database (Phase 1)	 Create relational database from OEPA water resources inventory data for Maumee AOC 	Universitry of Toledo Maumee RAP	D, US EPA GLNPO	2004-2005	complete						ĸ		x				x	
All	All	GIS Water Quality database (Phase 1)	2) Export LE Tribs data to a GIS format				complete						×		х				x	
All	All	GIS Water Quality database (Phase 1)	3) Publish relational database and GIS online				complete						ĸ	1	х				x	I
All	All	GIS Water Quality database (Phase 2)	Expand GIS to entire AOC				in progress						<		Х				X	
Flow Alterations	Changing Land Uses	Lucas County Floodplain Map	 Determine waterways to study and map versus redelinate 	Lucas County Engineer and Audito Offices, FEMA	Lucas County, FEMA r	2005-2010	in progress	Study 60+ miles of stream to determine the current floodplain			x	x	ĸ		x			x	x	
Flow Alterations	Changing Land Uses	Lucas County Floodplain Map	2) Conduct new studies			2005-2008	in progress				Х	Х	Κ		x			Х	X	
Flow Alterations	Changing Land Uses	Lucas County Floodplain Map	3) Redelinate existing studies			2005-2008	in progress				Х	Х	Κ		X			X	X	
Flow Alterations	Changing Land Uses	Lucas County Floodplain Map	4) Request public comment on draft maps			2009	in progress				X	X	<		X			х	X	ļ
Flow Alterations	Changing Land Uses	Lucas County Floodplain Map	5) Finalize maps and release electronically			2010	in progress				x	x	ĸ	3	x			x	x	<u> </u>
Flow alterations	channelization	Stream restoration demonstration project	t 1) Identify potential partners	Maumee RAP Rural Runoff Action Group SWCD [Lucas, Wood, Ottawa Co]		2005-2010	concept			entire watershed			ĸ		x				x	
Flow alterations	channelization	Stream restoration demonstration project	t 2) assess possible stream restoration		Lightorio		concept						ĸ		x				x	
Flow alterations	channelization	Stream restoration demonstration project	t 3) Select demonstration sites				concept						<		x				×	
Flow alterations	channelization	Stream restoration demonstration project	t 4) conduct landowner contact				concept						<		x				×	
Flow alterations	channelization	Stream restoration demonstration project	5) conduct public education				concept						`	H	$\frac{1}{\sqrt{2}}$					
Flow alterations	channelization	Stream restoration demonstration project	t 5) complete project										` /	<u>├</u>	$\overline{}$		++	_		
Flow alterations	channelization	Stream restoration demonstration project	t 6) assess and monitor results				concept						`	<u> </u>	<u> </u>	\vdash				
							concept						K .		×				×	
Habitat modification	Changing land uses in the watershed	Land use/ land cover analysis and mapping of AOC	Use remote sensing and GIS to classify major land use/land cover types	Maumee RAP, TMACOG, Lucas, Wood, Ottawa Co., University of Toledo	Lake Erie Protection Fund, USEPA GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	concept			HUC 04100010010			ĸ	:	x				x	
	Changing land uses in the watershed	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	wetlands using remote sensing	University of Toledo, Maumee RAP, TMACOG, Lucas Co.	, OEPA 319	1999-2003	complete			portion of watershed in Lucas Co	5		ĸ		x				×	
Habitat modification	Changing land uses in the watershed	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	e 2) create GIS map of wetlands and potential wetlands				complete						ĸ	1	х				x	1
Habitat modification		Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)					complete						ĸ		x				x	
Habitat modification	Changing land uses in the watershed	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	21) Indentify and evaluate existing wetlands using remote sensing	Maumee RAP, TMACOG, Wood, Ottawa Co., University of Toledo	Lake Erie Protection Fund, USEPA GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	planning			portion of watershed in Wood Co			ĸ		x				x	
Habitat modification	Changing land uses in the watershed	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	e 2) create GIS map of wetlands and potential wetlands				planning			1			K		x				X	
Habitat modification	Changing land uses in the watershed	2) (Wood Co.) Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	e 3) Identify restoration needs		1		planning						<		x				x	
Habitat modification	Changing land uses in the watershed	2) (11000 001)	 Indentify and evaluate existing wetlands using remote sensing 	Maumee RAP, TMACOG, Wood, Ottawa Co., University of Toledo	Lake Erie Protection Fund, USEPA GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	concept			portion of watershed in Ottawa Co			ĸ		x				x	
Habitat modification	Changing land uses in the watershed	Wetlands Inventory and Mapping (Phase 3) (Ottawa Co.)			1		concept						< 🗌		x				X	
Habitat modification	Changing land uses in	Wetlands Inventory and Mapping (Phase	potential wetlands a 3) Identify restoration needs		1		concept						<						×	
Habitat modification	the watershed Removal of riparian vegetation	3) (Ottawa Co.) Land use/ land cover analysis and mapping of AOC	Use remote sensing and GIS to classify major land use/land cover types	Maumee RAP, TMACOG, Lucas, Wood, Ottawa Co., University of Toledo	Lake Erie Protection Fund, USEPA GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	concept			HUC 04100010010			<		x				x	

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI BU #1 #2									
Habitat modification	Removal of riparian vegetation	Watershed Wildlife Habitat Inventory and assessment	1) Determine wildlife habitat types	Maumee RAP, Lake Erie Protection TMACOG, Lucas, Fund, USEPA Wood, Ottawa Co., GLNPO, OEPA 319 Local municipalities	2005-2006	concept			Maumee AOC		x		x						x
Habitat modification	Removal of riparian vegetation	Watershed Wildlife Habitat Inventory and assessment	2) Identify and map habitat types			concept					х		х						x
Habitat modification	Removal of riparian vegetation	Watershed Wildlife Habitat Inventory and assessment	 Field assessment of habitat conditions and quality 			concept					x		X						x
Habitat modification	Removal of riparian vegetation	Watershed Wildlife Habitat Inventory and assessment				concept					x		х						x
Habitat modification	Streambank modification/ flow alterations	Stream restoration demonstration project	1) Identify potential partners	Maumee RAP Rural Lake Erie Protection Runoff Action Group, Fund, USEPA SWCD [Lucas, GLNPO, OEPA 319, Wood, Ottawa Co] Army Corps of Engineers	2005-2010	concept			entire watershed		x		×						x
Habitat modification	Streambank modification/ flow alterations	Stream restoration demonstration project	2) assess possible stream restoration projects			concept					x		x						x
Habitat modification	Streambank modification/ flow alterations	Stream restoration demonstration project	3) Select demonstration sites			concept					x		x						x
Habitat modification	Streambank modification/ flow alterations	Stream restoration demonstration project	4) conduct landowner contact			concept					x		x						x
Habitat modification	Streambank modification/ flow alterations	Stream restoration demonstration project	5) conduct public education			concept					x		x						x
Habitat modification	Streambank modification/ flow alterations	Stream restoration demonstration project	5) complete project			concept					x		x						x
Habitat modification	Streambank modification/ flow alterations	Stream restoration demonstration project	6) assess and monitor results			concept					x		x						x
nutrients	Cropland or pasture where manure is spread	Educate Horse owners on proper disposal of manure	Implement Equine Environmental Assurance and Liability Program for Fulton, Lucas and Wood Counties	LSWCD,WSWCD Ohio Livestock Ohio Livestock Coalition, Farm Coalition, Farm Bureau, ODRN- Bureau DSWC	2006	concept				×	x		x		x	x	x		
Nutrients	Cropland or pasture where manure is spread	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards			concept					x				x		×		x
Nutrients	Cropland or pasture where manure is spread	Establish/Utilize volunteer stream monitoring networks	 Develop framewprk for publishing and updating data via online GIS 			concept					x				x		x		x
Nutrients	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	1) Identify potential Partners	Maumee RAP Rural LEPF, USEPA Runoff Action Group, GLNPO, OEPA 319, SWCD [Lucas, GLC Great Lakes Wood, Ottawa Co] Basin Program for Soil Erosion and Sediment Control	2005-2010	concept			HUC 04100010010		x				x		x		x
Nutrients	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	2) Assess possible BMPs			concept					x				x		x		x
Nutrients	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	3) Select demonstration sites			concept					x				x		x		x
Nutrients	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	4) conduct land owner contact			concept					x				x		x		x
Nutrients	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	5) conduct public education			concept					x				x		x		x
Nutrients	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	6) complete project			concept					x				x		x		x
Nutrients	Erosion & runoff from fertilized fields	Encourage buffer strips to trap sediments		Lucas and Wood SWCDs		ongoing									х		х		x
Nutrients	Erosion & runoff from	Establish/Utilize volunteer stream	1) Train volunteers in as per EPA QA standards			concept					x				x		x		X
Nutrients	fertilized fields Erosion & runoff from	monitoring networks Establish/Utilize volunteer stream	2) Develop framewprk for publishing and			concept					х				x		x		x
Nutrients	fertilized fields Erosion & runoff from fertilized fields	monitoring networks Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed	updating data via online GIS 1) Survey SWCDs to determine extent of BMP implementation	Maumee RAP Rural LEPF, USEPA Runoff Action Group, GLNPO, OEPA 319, SWCD [Lucas, GLC Great Lakes Wood, Ottawa Co], Basin Program for Area Universities Soil Erosion and Sediment Control	2005-2010	concept			entire watershed		x				x		x		x
Nutrients	Erosion & runoff from fertilized fields	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed	2) Conduct initial water sampling to determine baseline WQ			concept					x				x		x		x

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Causes of Impairment (Pollutant or Stressor)		Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI B	и ви	BUI		JI <mark>BUI</mark> 6 #7	BUI E		BUI		и ви	Comments &
Nutrients	Erosion & runoff from fertilized fields	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed					concept					x				x		x		x	
Nutrients	Erosion & runoff from fertilized fields	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed					concept					x				x		x		x	
Nutrients	Erosion & runoff from fertilized fields	Implementation of Agricultural BMPs	1) Identify potential Partners	Maumee RAP Rural Runoff Action Group SWCD [Lucas, Wood, Ottawa Co]		2005-2010	concept			HUC 04100010010		×				x		x		×	
Nutrients	Erosion & runoff from fertilized fields	Implementation of Agricultural BMPs	2) Assess possible BMPs				concept					х				x		x		х	
Nutrients	Erosion & runoff from	Implementation of Agricultural BMPs	3) Select demonstration sites				concept					x				x		x		х	
Nutrients	fertilized fields Erosion & runoff from	Implementation of Agricultural BMPs	4) conduct land owner contact				concept					x				X		x		X	
Nutrients	fertilized fields Erosion & runoff from	Implementation of Agricultural BMPs	5) conduct public education				concept					×				×		×		×	
Nutrients	fertilized fields Erosion & runoff from	Implementation of Agricultural BMPs	6) complete project									×				×		×	_	~	
Nutrients	fertilized fields Erosion & runoff from	Incentive programs for implementation o		Ohio Lake Erie	Ohio Lake Erie		concept					X				^		^		*	
Runonia	fertilized fields	agricultural BMPs such as filter strips & conservation tillage, fertilizer/pesticide management	implementation of these programs	Commission, USDA	Commission, USDA - NRCS, Lucas SWCD		ongoing					х				x		х		х	
Nutrients	Erosion & runoff from fertilized fields	Reduce the impact of erosion of water quality	Educate watershed landowners of their impact on water quality and of the benefits of riparian habitat protection or restoration				concept					x				x		x		x	
Nutrients	Erosion & runoff from fertilized fields	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	August - November	ongoing					х				х		x		x	
Nutrients	Erosion & runoff from fertilized fields	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)				ongoing					x				x		х		х	
Nutrients	Erosion & runoff from fertilized fields	Student Watershed Watch	3) Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector)	5		Sept	ongoing					x				x		x		x	
Nutrients	Erosion & runoff from	Student Watershed Watch	4) Supplies are distributed to			Sept	ongoing					X				x		x		X	[
Nutrients	fertilized fields Erosion & runoff from fertilized fields	Student Watershed Watch	participating teacher/schools 5) Teachers conduct student training and sampling on designated sampling day	ł		mid-Oct	ongoing					X				x		х		х	
Nutrients	Erosion & runoff from fertilized fields	Student Watershed Watch	(perferably) 6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector)	3		late Oct- early Nov	ongoing					x				x		x		х	
Nutrients	Erosion & runoff from	Student Watershed Watch	7) Student share data and finding at			mid-Nov	ongoing					X				х		x		X	
Nutrients	fertilized fields Urban Runoff	Establish/Utilize volunteer stream	Student Summit 1) Train volunteers in as per EPA QA				concept					x				x		x		×	
Nutrients	Urban Runoff	monitoring networks Establish/Utilize volunteer stream	standards 2) Develop framewprk for publishing and									×				v		×			
Nutrients	Urban Runoff	monitoring networks Expand Student Watershed Watch Program into additional schools	updating data via online GIS	Maumee RAP, TMACOG, Ohio EPA, public and	private donations	year round	concept ongoing					×				x		×		×	
Nutrients	Urban Runoff	Give Water a Hand Campaign and educational materials	Distribute info at events, programs and presentations	Lucas, Ottawa and	OEEF; local jurisdictions	year round	ongoing					x				x		х		х	
Nutrients	Urban Runoff	Student Watershed Watch	1) Enlist teacher/schools to participate	and Wood SWCDs Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	August - November	ongoing					x				x		x		x	
Nutrients	Urban Runoff	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data	Private SCHOOIS			ongoing					X				x		х		х	
Nutrients	Urban Runoff	Student Watershed Watch	Certification) 3) Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data	\$		Sept	ongoing					x				x		x		x	
Nutrients	Urban Runoff	Student Watershed Watch	Collector) 4) Supplies are distributed to			Sept	ongoing					X				X		x		X	
Nutrients	Urban Runoff	Student Watershed Watch	participating teacher/schools 5) Teachers conduct student training and sampling on designated sampling day (confersible)	1		mid-Oct	ongoing					x				x		x		x	
Nutrients	Urban Runoff	Student Watershed Watch	(perferably) 6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector)	1		late Oct- early Nov	ongoing					x				x		х		x	

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI BU #1 #2					I BUI E #10 #				Comments & Misc. Info.
Nutrients	Urban Runoff	Student Watershed Watch	7) Student share data and finding at Student Summit		mid-Nov	ongoing					х		3	(х		х	
Nutrients	Urban Runoff	SWW Teacher Training/Creditable Data Certification		Maumee RAP, Ohio EPA, Lucas SWCD	2006	concept					x		;	<		x		x	
Nutrients	Urban Runoff	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for			concept					x		;	<		x		x	
Nutrients	Urban Runoff	SWW Teacher Training/Creditable Data Certification	3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC) certification			concept					x		;	<		x		x	
Organic enrichment	Human & animal excreta	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards			concept					X	x	;	<		x		x	
Organic enrichment	Human & animal excreta	Establish/Utilize volunteer stream monitoring networks	2) Develop framewprk for publishing and updating data via online GIS			concept					x	x	;	<		x		x	
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 1)	 Scan paper copies to create electronic files of existing septic systems 	TMACOG, Lake Erie Protection Toledo/Lucas County Fund, TMACOG, Health Dept, Lucas County Auditor's Health Dept, Lucas Office County Auditor's Office	2002-2005	complete		5.6.2;			x	x	>	<		x		x	
Organic enrichment	Human & animal	GIS Septic System Inventory (Phase 1)	2) Convert electronic data into GIS map			complete					х	х	×	<		х		х	
Organic enrichment	excreta Human & animal excreta	GIS Septic System Inventory (Phase 1)	3) Intergrate with AERIS data			complete					х	х	×	<		x		х	
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 1)	4) Train Health Dept personnel to input data and use GIS system			complete					х	х	;	<		х		х	
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 2)		TMACOG, Wood County Health Dept, Lucas County Auditor's Office, Northwest Regional Sewer District Dept	2005-2007	in progress		5.6.2;			x	x	,	<		x		x	
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 2)	2) Convert electronic data into GIS map files			in progress					х	х	2	(х		x	
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 2)	3) Intergrate with AERIS data			in progress					х	х	2	(х		x	
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 2)	4) Train Health Dept personnel to input data and use GIS system			in progress					x	х	5	(х		x	
Organic enrichment	Human & animal excreta	Identify and assess package plant discharges	1) Locate package plants	Maumee RAP, TMACOG, Wood, Lucas, Ottawa Co., Health Depts., OEPA	2005-2006	concept			entire watershed		x	x	>	<		x		x	
Organic enrichment	Human & animal excreta	Identify and assess package plant discharges	2) Review NPDES permits			concept					х	х	3	<		x		x	
Organic enrichment	Human & animal excreta	Identify and assess package plant discharges	3) Identify plants operating without permi			concept					x	x	2	<		x		x	
Organic enrichment	Human & animal excreta	Identify and assess package plant discharges	4) Sample adjecent streams			concept					x	x	2	<		x		x	
Organic enrichment	Human & animal excreta	Identify and assess package plant discharges	5) Assess water quality impacts			concept					x	x	2	<		x		x	
Organic enrichment	Human & animal excreta	Plankton Survey and Bioassay	1) Establish Methodology	Maumee RAP, TMACOG, Wood, Lucas, Ottawa Co., Health Depts., University of Toledo, OEPA	2005-2006	concept			entire watershed		×	x	>	<		x		x	
Organic enrichment	Human & animal excreta	Plankton Survey and Bioassay	2) Identify sample sites			concept			entire watershed		х	х	>	<		x		x	
Organic enrichment	Human & animal excreta	Plankton Survey and Bioassay	3) Conduct sampling			concept					x	x	2	<		x		x	
Organic enrichment	Human & animal excreta	Plankton Survey and Bioassay	4) Analyze data			concept					x	x)	<		x		x	
Organic enrichment	Human & animal excreta	Plankton Survey and Bioassay	5) Determine status			concept					х	x	>	<		x		x	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	1) Identify stream sampling locations	TMACOG, US ACE [WRDA Toledo/Lucas County sec. 401] Health Dept, Lucas County Auditor's Office, Wood County Health Dept	2004	complete	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage				x	x	>	<		x		x	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	2) Identify septic system dye testing locations			complete					х	х	×	<		х		х	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	3) Conduct stream sampling and dye testing			complete					х	х	;	<		х		х	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	 4) Prioritize areas for enforcement based on testing results 			complete					х	х	;	<		х		х	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	5) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems			complete					x	x	;	<		x		x	

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed							UI BUI 9 #10				Comments & Misc. Info.
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 2)	 Conduct additional stream sampling and dye testing 	TMACOG, WRDA 401, Ohio Toledo/Lucas County EPA 319 Health Dept, Lucas County Auditor's Office, Wood County Health Dept	2005	concept	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage				x		×		x		x		x	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 2)	2) Modify priority areas (if necessary)			concept					х		x		x		x		x	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 2)	3) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available)			concept					x		x		x		x		x	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 3)	1) Continue to sample and dye test to identify problem areas	TMACOG, WRDA 401, Ohio Toledo/Lucas County EPA 319 Health Dept, Lucas County Auditor's Office, Wood County Health Dept	2006 - ?	concept	Sample stream sites and dye test septic systems as needed per county to reduced discharges of unmeasurable amounts of inadequately treated sewage				x		x		x		x		x	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 3)	2) Continue to pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) until priority areas are addressed			concept					x		x		x		x		x	
Organic enrichment	Human & animal excreta	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, private donations TMACOG, Ohio EPA, public and private schools	August - November	ongoing					х		х		x		х		х	
Organic enrichment	Human & animal excreta	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)			ongoing					х		х		x		х		х	
Organic enrichment	Human & animal excreta	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 	3	Sept	ongoing					х		x		x		x		x	
Organic enrichment	Human & animal	Student Watershed Watch	4) Supplies are distributed to		Sept	ongoing					Х		Х		x		х		х	
Organic enrichment	excreta Human & animal excreta	Student Watershed Watch	participating teacher/schools 5) Teachers conduct student training and sampling on designated sampling day (perferably)		mid-Oct	ongoing					x		x		x		x		х	
Organic enrichment	Human & animal excreta	Student Watershed Watch	 6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector) 	1	late Oct- early Nov	ongoing					х		x		x		х		х	
Organic enrichment	Human & animal excreta	Student Watershed Watch	 Student share data and finding at Student Summit 		mid-Nov	ongoing					Х		Х		x		х		Х	
Pathogens	Cropland or pasture where manure is spread	Encourage Bufferstrips to trap sediments	5	Lucas and Wood Soil and Water Conservation Districts	Ongoing	ongoing											х			
Pathogens	Cropland or pasture where manure is spread	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards			concept											x			
Pathogens	Cropland or pasture where manure is spread	Establish/Utilize volunteer stream monitoring networks	 Develop framewprk for publishing and updating data via online GIS 			concept											x			
Pathogens		Expand Student Watershed Watch Program into additional schools		Maumee RAP, private donations TMACOG, Ohio EPA, public and private schools	year round	ongoing											х			
Pathogens		Expand Student Watershed Watch Program into additional schools		Maumee RAP, private donations TMACOG, Ohio EPA, public and private schools	year round	ongoing											×			
Pathogens	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	1) Identify potential Partners	Maumee RAP Rural LEPF, USEPA Runoff Action Group, GLNPO, OEPA 319, SWCD [Lucas, GLC Great Lakes Wood, Ottawa Co] Basin Program for Soil Erosion and Sediment Control	2005-2010	concept			HUC 04100010010								x			
Pathogens	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	2) Assess possible BMPs			concept											x			
Pathogens	Cropland or pasture where manure is spread		3) Select demonstration sites			concept											x			
Pathogens	Cropland or pasture where manure is spread		4) conduct land owner contact			concept											x			
Pathogens	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	5) conduct public education			concept											x			

										BUI	Color C	ode:	Ir	mpaired		Not Imr	aired	Unkr	nown	1	Not Applicable
Causes of Impairment (Pollutant or Stressor)		Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI E #1	UI BU	JI BUI 3 #4	BUI E #5	BUI BI #6 #	JI BUI 7 #8	BUI #9	BUI B #10 #1	UI <mark>BU</mark> 11 #1:	II BUI 2 #13	BUI #14	Comments & Misc. Info.
Pathogens	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	6) complete project			concept)	<			
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, private donations TMACOG, Ohio EPA, public and private schools	August - November	ongoing)	<			
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)			ongoing)	ĸ			
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 		Sept	ongoing)	×			
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools		Sept	ongoing)	ĸ			
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)		mid-Oct	ongoing)	x			
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	(penerably) 6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector)		late Oct- early Nov	ongoing											>	ĸ			
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	7) Student share data and finding at Student Summit		mid-Nov	ongoing											>	ĸ			
Pathogens	Cropland or pasture where manure is spread	SWW Teacher Training/Creditable Data d Certification	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD	2006	concept)	ĸ			
Pathogens	Cropland or pasture where manure is spread	SWW Teacher Training/Creditable Data	2) Award a certificate completion for training			concept)	x			
Pathogens	Cropland or pasture where manure is spread	SWW Teacher Training/Creditable Data d Certification	Level 1 Qualified Data Collector (QDC)			concept)	<			
Pathogens	Cropland or pasture where manure is spread	SWW Teacher Training/Creditable Data	certification 1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD	2006	concept)	x			
Pathogens	Cropland or pasture where manure is spread	SWW Teacher Training/Creditable Data	2) Award a certificate completion for training			concept)	ĸ			
Pathogens	Cropland or pasture where manure is spread	SWW Teacher Training/Creditable Data	Level 1 Qualified Data Collector (QDC)			concept)	x			
Pathogens	Human & animal excreta	Educate Horse owners on proper disposal of manure	certification Implement Equine Environmental Assurance and Liability Program for Fulton, Lucas and Wood Counties	LSWCD,WSWCD Ohio Livestock Ohio Livestock Coalition, Farm Coalition, Farm Bureau, ODRN- Bureau DSWC	2006	concept				×	×			x	x		x >	x			
Pathogens	Human & animal excreta	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards	Durodu		concept)	<			
Pathogens	Human & animal excreta	Establish/Utilize volunteer stream monitoring networks	2) Develop framewprk for publishing and updating data via online GIS			concept)	<			
Pathogens	Human & animal excreta	Expand Student Watershed Watch Program into additional schools		Maumee RAP, private donations TMACOG, Ohio EPA, public and private schools	year round	ongoing											>	×			
Pathogens	Human & animal excreta	GIS Septic System Inventory (Phase 1)	 Scan paper copies to create electronic files of existing septic systems 	TMACOG, Toledo/Lucas County Health Dept, Lucas Office County Auditor's Office Lake Erie Protection Fund, TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office	y 2002-2005	complete		5.6.2;									,	<			
Pathogens	Human & animal excreta	GIS Septic System Inventory (Phase 1)	2) Convert electronic data into GIS map files			complete)	x			
Pathogens	Human & animal excreta	GIS Septic System Inventory (Phase 1)	3) Intergrate with AERIS data			complete)	<			
Pathogens	Human & animal excreta	GIS Septic System Inventory (Phase 1)	4) Train Health Dept personnel to input data and use GIS system		1	in progress)	<			
Pathogens	Human & animal excreta	GIS Septic System Inventory (Phase 2)		TMACOG, Wood Lake Erie Protection County Health Dept, Fund, TMACOG, Lucas County Lucas County Auditor's Office, Auditor's Office, Northwest Regional Wood County Health Sewer District Dept	2005-2007	in progress		5.6.2;									>	x			
Pathogens	Human & animal excreta		2) Convert electronic data into GIS map files			in progress)	×			
Pathogens	Human & animal excreta	GIS Septic System Inventory (Phase 2)				in progress)	(
Pathogens	Human & animal excreta	GIS Septic System Inventory (Phase 2)	4) Train Health Dept personnel to input data and use GIS system			in progress)	<			

											BUI	Color C	ode:	lr	mpaired	- [Not In	paired	Un	known	۱ 🗌	Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI #1	BUI B #2 #	JI BUI 3 #4	BUI #5	BUI B #6 #	UI BU \$7 #8	II BUI 3 #9	BUI E #10 #	BUI BI #11 #1	JI BUI 2 #13	BUI #14	Comments & Misc. Info.
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	1) Identify stream sampling locations	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept		2004	complete	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage	-										x			
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	2) Identify septic system dye testing locations				complete												х			-
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	3) Conduct stream sampling and dye testing				complete												х			
Pathogens		Stream and Septic System Sampling Project (Phase 1)	 4) Prioritize areas for enforcement based on testing results 	ł			complete												х			
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	5) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems				complete												х			
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 2)	1) Conduct additional stream sampling and dye testing	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept	WRDA 401, Ohio /EPA 319	2005	concept	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage											x			
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 2)	2) Modify priority areas (if necessary)				concept							\square					x			
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 2)	3) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available)				concept												x			
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 3)	1) Continue to sample and dye test to identify problem areas	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept	WRDA 401, Ohio IEPA 319	2006 - ?	concept	Sample stream sites and dye test septic systems as needed per county to reduced discharges of unmeasurable amounts of inadequately treated sewage											x			
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 3)	2) Continue to pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) until priority areas are addressed				concept												x			
Pathogens	Human & animal excreta	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	August - November	ongoing												х			
Pathogens	Human & animal excreta	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)				ongoing							\square					х			
Pathogens	Human & animal excreta	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 	6		Sept	ongoing												x			
Pathogens	Human & animal excreta	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools			Sept	ongoing												х			
Pathogens	Human & animal excreta	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)	d		mid-Oct	ongoing												х			
Pathogens	Human & animal excreta	Student Watershed Watch	6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector)	а		late Oct- early Nov	ongoing												х			
Pathogens	Human & animal excreta	Student Watershed Watch	7) Student share data and finding at Student Summit			mid-Nov	ongoing												х			
Pathogens	Human & animal excreta	SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept												х			
Pathogens	Human & animal excreta	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training				concept												Х			
Pathogens	Human & animal excreta	SWW Teacher Training/Creditable Data Certification					concept												х			
Pathogens	Septic systems	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards				concept												x			
Pathogens	Septic systems	Establish/Utilize volunteer stream monitoring networks	2) Develop framewprk for publishing and updating data via online GIS	1			concept							\square					x			
Pathogens	Septic systems	Expand Student Watershed Watch Program into additional schools		Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	year round	ongoing												х			

										BUI	Color C	ode:	n 🗌	npaired		Not Im	npaired	Un	known		Not Applicable
Causes of Impairment (Pollutant or Stressor)		Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI E #1	3UI BI #2 #3	JI BUI 3 #4	BUI E #5	3UI BI #6 #	JI BUI 7 #8	BUI #9	BUI B #10 #	3UI BI #11 #1	UI BUI 2 #13	BUI #14	Comments & Misc. Info.
Pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	 Scan paper copies to create electronic files of existing septic systems 	TMACOG, Toledo/Lucas County Fund, TMACOG, Health Dept, Lucas County Auditor's Office County Auditor's Office County Auditor's Office	2002-2005	complete		5.6.2;										x			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	2) Convert electronic data into GIS map			complete												х			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	3) Intergrate with AERIS data			complete												x			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	4) Train Health Dept personnel to input data and use GIS system			in progress												x			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 2)		TMACOG, Wood Lake Erie Protection County Health Dept, Lucas County Lucas County Auditor's Office, Northwest Regional Sewer District Dept	2005-2007	in progress		5.6.2;										x			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	2) Convert electronic data into GIS map files			in progress												x			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	3) Intergrate with AERIS data			in progress												х			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	4) Train Health Dept personnel to input data and use GIS system			in progress												x			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	1) Identify stream sampling locations	TMACOG, US ACE [WRDA Toledo/Lucas County sec. 401] Health Dept, Lucas County Auditor's Office, Wood County Health Dept	2004	complete	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage	5.6.2; Chapter 11										x			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	2) Identify septic system dye testing locations			complete												х			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	3) Conduct stream sampling and dye testing			complete												х			
Pathogens	Septic systems	Stream and Septic System Sampling	4) Prioritize areas for enforcement based	1		complete												х			
Pathogens	Septic systems	Project (Phase 1) Stream and Septic System Sampling Project (Phase 1)	on testing results 5) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems			complete												x			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	1) Conduct additional stream sampling and dye testing	TMACOG, WRDA 401, Ohio Toledo/Lucas County EPA 319 Health Dept, Lucas County Auditor's Office, Wood County Health Dept	2005	concept	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage											x			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	2) Modify priority areas (if necessary)			concept												x			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	 Pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) 			concept												x			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 3)	1) Continue to sample and dye test to identify problem areas	TMACOG, WRDA 401, Ohio Toledo/Lucas County EPA 319 Health Dept, Lucas County Auditor's Office, Wood County Health Dept	2006 - ?	concept	Sample stream sites and dye test septic systems as needed per county to reduced discharges of unmeasurable amounts of inadequately treated sewage											x			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 3)	2) Continue to pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) until priority areas are addressed			concept												x			
Pathogens	Septic systems	Student Watershed Watch	 Enlist teacher/schools to participate 	Maumee RAP, private donations TMACOG, Ohio EPA, public and private schools	August - November	ongoing												х			
Pathogens	Septic systems	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)			ongoing												х			
Pathogens	Septic systems	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 		Sept	ongoing												x			
Pathogens	Septic systems	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools		Sept	ongoing												х			
Pathogens	Septic systems	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)	3	mid-Oct	ongoing												х			

										BUI	Color C	ode:	lr	mpaired		Not Im	paired	Unk	known	1	Not Applicable
Causes of Impairment (Pollutant or Stressor)		Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI E #1	BUI BU #2 #3	JI BUI 3 #4	BUI I #5	BUI B #6 #	JI BUI 7 #8	BUI #9	BUI E #10 #	BUI BU #11 #12	JI BUI 2 #13	BUI #14	Comments 8 Misc. Info.
Pathogens	Septic systems	Student Watershed Watch	6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector)	1	late Oct- early Nov	ongoing												х			
Pathogens	Septic systems	Student Watershed Watch	7) Student share data and finding at Student Summit		mid-Nov	ongoing												х			
Pathogens	Septic systems	SWW Teacher Training/Creditable Data Certification		Maumee RAP, Ohio EPA, Lucas SWCD	2006	concept												x			
Pathogens	Septic systems	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training			concept												x			
Pathogens	Septic systems	SWW Teacher Training/Creditable Data Certification	3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC)			concept												×			
Pathogens	Urban Runoff	Establish/Utilize volunteer stream	certification 1) Train volunteers in as per EPA QA			concept											\neg	x			
Pathogens	Urban Runoff	monitoring networks Establish/Utilize volunteer stream	standards 2) Develop framewprk for publishing and			concept												×	+		
Pathogens	Urban Runoff	monitoring networks Expand Student Watershed Watch Program into additional schools	updating data via online GIS	Maumee RAP, private donations TMACOG, Ohio EPA, public and private schools	year round	ongoing												x			
Pathogens	Urban Runoff	Give Water a Hand Campaign and educational materials	Distribute info at events, programs and presentations		year round	ongoing												x			
Pathogens	Urban Runoff	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, private donations TMACOG, Ohio EPA, public and private schools	August - November	ongoing												x			
Pathogens	Urban Runoff	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data			ongoing												x			
Pathogens	Urban Runoff	Student Watershed Watch	Certification) 3) Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector)		Sept	ongoing												x			
Pathogens	Urban Runoff	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools		Sept	ongoing											\neg	x		H	
Pathogens	Urban Runoff	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)	1	mid-Oct	ongoing												x			
Pathogens	Urban Runoff	Student Watershed Watch	6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified	1	late Oct- early Nov	ongoing												x			
Pathogens	Urban Runoff	Student Watershed Watch	Data Collector) 7) Student share data and finding at Student Summit		mid-Nov	ongoing											+	х	+		
Pathogens	Urban Runoff	SWW Teacher Training/Creditable Data Certification		Maumee RAP, Ohio EPA, Lucas SWCD	2006	concept												x			
Pathogens	Urban Runoff	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training			concept												x		\square	
Pathogens	Urban Runoff	SWW Teacher Training/Creditable Data Certification				concept												x			
Pathogens	Wastewater treatment plant/ package plant	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards			concept												x			
Pathogens	Wastewater treatment plant/ package plant	Establish/Utilize volunteer stream monitoring networks	 Develop framewprk for publishing and updating data via online GIS 			concept												x			
Pathogens	Wastewater treatment plant/ package plant	Expand Student Watershed Watch Program into additional schools		Maumee RAP, private donations TMACOG, Ohio EPA, public and private schools	year round	ongoing												x			
Pathogens	Wastewater treatment plant/ package plant	Identify and assess package plant discharges	1) Locate package plants	Maumee RAP, Lake Erie Protection TMACOG, Wood, Fund, Ohio Sea Lucas, Ottawa Co., Grant, USEPA, Health Depts., OEPA	2005-2006	concept			entire watershed									x			
Pathogens	Wastewater treatment plant/ package plant	Identify and assess package plant discharges	2) Review NPDES permits			concept												х			
Pathogens	Wastewater treatment plant/ package plant	Identify and assess package plant discharges	3) Identify plants operating without permi			concept												x			
Pathogens	Wastewater treatment plant/ package plant	Identify and assess package plant discharges	4) Sample adjecent streams			concept												x			
Pathogens	Wastewater treatment plant/ package plant	Identify and assess package plant discharges	5) Assess water quality impacts			concept												x			
Pathogens	Wastewater treatment plant/ package plant	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, private donations TMACOG, Ohio EPA, public and private schools	August - November	ongoing												x			
Pathogens	Wastewater treatment plant/ package plant	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)			ongoing												х			

											BUI Co	olor Coc	le:	Imp	aired	No	t Impaire	d 🗌 Ur	nknown	N	ot Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI BU #1 #2				JI BUI	BUI B		BUI B			Comments & Misc. Info.
Pathogens	Wastewater treatment plant/ package plant	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 			Sept	ongoing											x			
Pathogens	Wastewater treatment plant/ package plant	Student Watershed Watch	 Supplies are distributed to participating teacher/schools 			Sept	ongoing											х			
Pathogens	Wastewater treatment plant/ package plant	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)			mid-Oct	ongoing											х			
Pathogens	Wastewater treatment plant/ package plant	Student Watershed Watch	6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector)			late Oct- early Nov	ongoing											х			
Pathogens	Wastewater treatment plant/ package plant	Student Watershed Watch	7) Student share data and finding at Student Summit			mid-Nov	ongoing											х			
Pathogens	Wastewater treatment plant/ package plant	SWW Teacher Training/Creditable Data Certification		Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept											x			
Pathogens	Wastewater treatment	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training				concept											x			
Pathogens	plant/ package plant Wastewater treatment plant/ package plant	SWW Teacher Training/Creditable Data Certification	3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC)				concept											x			
Pesticides	Cropland	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed			LEPF, USEPA GLNPO, OEPA 319, GLC Great Lakes Basin Program for Soil Erosion and Sediment Control	2005-2010	concept			entire watershed		x	x	x						x	
Pesticides	Cropland	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed					concept					x	x	x						x	
Pesticides	Cropland	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed					concept					x	×	x						x	
Pesticides	Cropland	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed					concept					x	x	x						x	
Pesticides	Cropland	Incentive programs for implementation o agricultural BMPs such as filter strips & conservation tillage, fertilizer/pesticide management	Continue to promote and support the implementation of these programs	Ohio Lake Erie Commission, USDA NRCS, SWCDs	Ohio Lake Erie - Commission, USDA - NRCS, SWCDs		concept			entire watershed		x	x	x						x	
Pesticides	Cropland	Plankton Survey and Bioassay	1) Establish Methodology	Maumee RAP, TMACOG, Wood, Lucas, Ottawa Co., Health Depts., University of Toledo, OEPA	Lake Erie Protection Fund, Ohio Sea Grant, USEPA, OEPA	2005-2006	concept			entire watershed		x	x	x						×	
Pesticides	Cropland	Plankton Survey and Bioassay	2) Identify sample sites				concept			entire watershed		X	X	X						X	
Pesticides Pesticides	Cropland Cropland	Plankton Survey and Bioassay Plankton Survey and Bioassay	3) Conduct sampling4) Analyze data				concept concept					X	X	X						X	
Pesticides	Cropland	Plankton Survey and Bioassay	5) Determine status				concept						X	X						X	
Pesticides	Cropland	Survey of Wildlife Managers [tainting of fish and wildlife flavor]	Design and conduct survey for regional wildlife managers in order to determine and tainting of fish anf wildlife flavor	Maumee RAP, Federal and State wildlife agencies	Lake Erie Protection Fund, Ohio Sea Grant	2005-2006	concept			Maumee AOC		x	x	x						x	
Pesticides	Cropland	Implementation of Agricultural BMPs	1) Identify potential Partners	Maumee RAP Rural Runoff Action Group SWCD [Lucas, Wood, Ottawa Co]	LEPF, USEPA GLNPO, OEPA 319, GLC Great Lakes Basin Program for Soil Erosion and Sediment Control	2005-2010	concept			HUC 04100010010	D	x	x	×						x	
Pesticides	Cropland	Implementation of Agricultural BMPs	2) Assess possible BMPs				concept						X	X						X	
Pesticides Pesticides	Cropland Cropland	Implementation of Agricultural BMPs Implementation of Agricultural BMPs	3) Select demonstration sites4) conduct land owner contact				concept concept						X	X						X	
Pesticides	Cropland	Implementation of Agricultural BMPs	5) conduct land owner contact				concept		<u> </u>				X	X						X	
Pesticides	Cropland	Implementation of Agricultural BMPs	6) complete project				concept					Х		X						Х	
Pesticides	urban/suburban areas	Give Water a Hand Campaign and educational materials	Distribute info at events, programs and presentations	Maumee RAP; Lucas, Ottawa and and Wood SWCDs	OEEF; local jurisdictions	year round	ongoing					х	х	х						х	
Refuse, litter, etc	litter	CYS Day	1) Establish planning team	Maumee RAP; Duck and Otter Creeks Partnership; ORKA; Cities of Oregon, Northwood, Toledo; TMACOG; Lake Erie Commission; various other community partners	Solicit private and public contributions, grants when available	April - Sept (annually)	ongoing	Relative to previous years: 1) tons of garbage and debris removed from area streams; 2) number of volunteers that participate; 3) # of sites/RM cleaned 4) amount of support received for planning and funding the event	Chapter 10.5			x						x		×	
Refuse, litter, etc	litter	CYS Day	2) Solicit contributions and site captain			April - Sept	ongoing					×						X		X	
Defuee litter et	littor		support									^ 								~	
Refuse, litter, etc	litter	CYS Day	3) Distribute promotional materials		1	June - Sept	ongoing			1		Х						Х		Х	

										BUI Co	olor Cod	e:	Imp	aired	N/	ot Impaired	Un	iknown	Not Applicable
Causes of Impairment (Pollutant or Stressor)	t) Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed							BUI BUI #9 #10			
Refuse, litter, etc	litter	CYS Day	4) Select waterways and sites to be cleaned		Aug	ongoing					Х						х		x
Refuse, litter, etc	litter	CYS Day	5) Conduct site captain training		Sept	ongoing					Х						Х		x
Refuse, litter, etc Sedimentation/Siltation	litter Construction	CYS Day Assessment of stream for storm water	6) Hold event and appreciation picnic		Sept	ongoing					X						Х		X
		flows pre- and post- development				concept					X	X	>	(×		X		×
Sedimentation/Siltation	Construction	Educate developers/contractors on need and use of BMPs		Maumee RAP Urban Ohio Environmental Runoff Action Group, Education Fund, SWC GLC		concept			entire watershed		x	×	>	c	×		×		×
Sedimentation/Siltation		Evaluate land use		City of Toledo, Maumee RAP Urban Runoff Action Group		concept					x	x	>	(×		x		x
Sedimentation/Siltation	Construction	Identify alternative development designs/layouts that protect water quality	,			concept					x	x	>	c	x		x		×
Sedimentation/Siltation	Construction	Implement a watershed storm water management program		RAP Urban Runoff LEPF, Local Action Group jurisdictions		concept					x	x	>	(x		x		x
Sedimentation/Siltation	Construction	Land use/ land cover analysis and mapping of AOC	Use remote sensing and GIS to classify major land use/land cover types	Maumee RAP, TMACOG, Lucas, Wood, Ottawa Co., University of Toledo	2005-2006	concept			Maumee AOC		x	x	,	:	x		x		x
Sedimentation/Siltation	Construction	Regional Storm Water Standards Manua (Phase 1)	1) Determine contents for manual	RAP Urban Runoff Lake Erie Protection Action Group, Fund MRRSWC	2002	complete	Implement a regional/watershed management program: a) control increases in runoff rates, b) prevent losses in infiltration, c) prevent runoff pollution		all of AOC		x	x	,	(x		x		x
Sedimentation/Siltation	Construction	Regional Storm Water Standards Manual	I2) Write manual			complete					х	x)	(X		х		x
Sedimentation/Siltation	Construction	(Phase 1) Regional Storm Water Standards Manual (Phase 1)	 Identify alternative development designs/layouts that protect water quality 	/		complete					x				x		x		x
Sedimentation/Siltation	Construction	Regional Storm Water Standards Manual (Phase 1)	 4) Encourage local jurisdications to adop manual as their standards 	nt line line line line line line line line		complete					x	x	>	(x		х		x
Sedimentation/Siltation	Construction	Regional Storm Water Standards Manua (Phase 2)	1) Review existing manual	Maumee RAP Urban GLC Runoff Action Group,	2005-2007	in progress	Completion and distribution of revised manual	Chapter 10.5; 5.7.1	all of watershed		х	x	>	(x		x		x
Sedimentation/Siltation		Regional Storm Water Standards Manua (Phase 2)	 Update chapters with new content and regulations 	3	2005-2006	in progress					х	x)	(x		x		x
Sedimentation/Siltation	Construction	Regional Storm Water Standards Manua (Phase 2)	3) Conduct workshops and site visits for consultants, developers, contractors on stormwater plan preparation and post- construction BMPs		2006-2007	in progress	50 percent of consultants, developers, contractors that work in the area participate				x	x	>	C	x		x		x
Sedimentation/Siltation	Construction	Regional Storm Water Standards Manual (Phase 3)	Maintain and update manual as needed			ongoing					Х	х	>	(x		х		×
Sedimentation/Siltation	Construction	Require BMPs on smaller developments				concept			entire watershed		x	x	>	C	x		x		x
Sedimentation/Siltation	Cropland	Develop potential project list based on				concept			entire watershed		x	x)	(x		x		x
Sedimentation/Siltation	Cropland	Cropland Inventory Project Results Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed	1) Survey SWCDs to determine extent of BMP implementation	f Maumee RAP Rural LEPF, USEPA Runoff Action Group, GLNPO, OEPA 319, SWCD [Lucas, GLC Great Lakes Wood, Ottawa Co], Basin Program for Area Universities Soil Erosion and Sediment Control	2005-2010	concept			entire watershed		x	x	>	(x		x		×
Sedimentation/Siltation	Cropland	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed				concept					x	x	>	(x		x		×
Sedimentation/Siltation	Cropland	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed				concept					x	x	>	(×		x		x
Sedimentation/Siltation	Cropland	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed				concept					x	x	>	(x		x		x
Sedimentation/Siltation	Cropland	Implementation of Agricultural BMPs	1) Identify potential Partners	Maumee RAP Rural LEPF, USEPA Runoff Action Group, SWCD [Lucas, Wood, Ottawa Co] Basin Program for Soil Erosion and Sediment Control	2005-2010	concept			HUC 04100010010	D	x	x	>	(x		x		x
Sedimentation/Siltation		Implementation of Agricultural BMPs	2) Assess possible BMPs			concept					x	x	>	(x		x		x
Sedimentation/Siltation	Cropland	Implementation of Agricultural BMPs	3) Select demonstration sites			concept					х	x	>	()	x		X		×
Sedimentation/Siltation	Cropland	Implementation of Agricultural BMPs	4) conduct land owner contact			concept					X	X		(x		X		x

										BUI Co	or Cod): [Impa	ired	Not	Impaired	Unk	nown	Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI BU #1 #2						I BUI B #10 #			
Sedimentation/Siltation	Cropland	Implementation of Agricultural BMPs	5) conduct public education			concept					x	x	Х		x		x		x
Sedimentation/Siltation	Cropland	Implementation of Agricultural BMPs	6) complete project			concept					x	x	х		x		x		x
Sedimentation/Siltation	Cropland	Incentive programs for implementation o agricultural BMPs such as filter strips & conservation tillage, fertilizer/pesticide management	f Continue to promote and support the implementation of these programs	Ohio Lake Erie Commission, USDA - NRCS, Lucas SWCD NRCS, Lucas SWCD		concept			entire watershed		x	x	x		x		x		x
Sedimentation/Siltation	Cropland	Incentives and equipment rental for conservation tillage		Lucas and Wood SWCDs	ongoing	ongoing					х	х	Х		x		х		×
Sedimentation/Siltation	Cropland	Inventory watershed for amount of acreage in cropland	 Develop inventory methodology utilizing existing AERIS system and othe available resources 	Maumee RAP Ag U.S. ACE, Section		planning			entire watershed		×	x	x		x		x		x
Sedimentation/Siltation	Cropland	Inventory watershed for amount of acreage in cropland	2) Convert electronic data into GIS map			planning					х	х	х		x		x		x
Sedimentation/Siltation	Cropland	Inventory watershed for amount of acreage in cropland	3) Intergrate with AERIS data			planning					x	х	x		x		x		x
Sedimentation/Siltation	Cropland	Inventory watershed for amount of acreage in cropland	4) Determine impact on watershed and possible projects to reduce or eliminate			planning					x	x	x		x		x		x
Sedimentation/Siltation	Cropland	Reduce the impact of erosion of water quality	Educate watershed landowners of their impact on water quality and of the benefits of riparian habitat protection or restoration	Maumee RAP Ag Ohio EPA 319 Runoff Action Group, SWCDs, ODNR - SWC, Ohio EPA 319		concept			entire watershed		x	x	x		x		x		x
Sedimentation/Siltation	Cropland or pasture where manure is spread	Plankton Survey and Bioassay	1) Esatblish methodology	Maumee RAP, TMACOG, Wood, Lucas, Ottawa Co., Health Depts., University of Toledo, OEPA	2005-2006	concept			entire watershed		x	x	x		x		x		x
Sedimentation/Siltation	Cropland or pasture where manure is spread	Plankton Survey and Bioassay	2) Identify sample sites			concept			entire watershed		x	x	x		x		×		x
Sedimentation/Siltation	Cropland or pasture where manure is spread	Plankton Survey and Bioassay	3) Conduct sampling			concept					x	x	x		x		x		x
Sedimentation/Siltation	Cropland or pasture where manure is spread	Plankton Survey and Bioassay	4) Analyze data			concept					x	x	x		x		x		x
Sedimentation/Siltation	Cropland or pasture where manure is spread	Plankton Survey and Bioassay	5) Determine status			concept					x	x	x		x		x		x
Sedimentation/Siltation	land clearing and infilling	Incentives and equipment rental for conservation tillage		Lucas and Wood SWCDs	ongoing	ongoing					Х	х	х		x		х		x
Sedimentation/Siltation		Land use/ land cover analysis and mapping of AOC	Use remote sensing and GIS to classify major land use/land cover types	Maumee RAP, TMACOG, Lucas, Wood, Ottawa Co., University of Toledo	2005-2006	concept			Maumee AOC		x	x	x		x		x		x
	for development	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	wetlands using remote sensing	University of Toledo, OEPA 319 Maumee RAP, TMACOG, Lucas Co.	1999-2003	complete			portion of watershed in Luca Co	s	x	x	x		x		x		x
	for development	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	potential wetlands			complete					х	х	х		x		х		x
Sedimentation/Siltation	land clearing and infilling for development	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)				complete					х	х	х		х		х		x
Sedimentation/Siltation	land clearing and infilling for development	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	 Indentify and evaluate existing wetlands using remote sensing 	Maumee RAP, TMACOG, Wood, Lake Erie Protection Ottawa Co., University of Toledo GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	planning			portion of watershed in Wood Co	t l	x	x	x		x		x		x
Sedimentation/Siltation	land clearing and infilling for development	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	 2) Create GIS map of wetlands and potential wetlands 			planning					x	х	x		x		х		x
Sedimentation/Siltation	land clearing and infilling	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	3) Identify restoration needs			planning					х	х	x		x		x		x
Sedimentation/Siltation		Wetlands Inventory and Mapping (Phase 3) (Ottawa Co.)	I) Indentify and evaluate existing wetlands using remote sensing	Maumee RAP, TMACOG, Wood, Lake Erie Protection Ottawa Co., University of Toledo GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	concept			portion of watershed in Ottawa Co		x	x	x		x		x		x
	for development	Wetlands Inventory and Mapping (Phase 3) (Ottawa Co.)	potential wetlands			concept					x	x	x		x		x		×
Sedimentation/Siltation	for development	Wetlands Inventory and Mapping (Phase 3) (Ottawa Co.)	3) Identify restoration needs			concept					x	x	X		X		x		×
Sedimentation/Siltation	Pasture	Develop potential project list based on Pasture Inventory Project Results				concept					x	x	Х		x		X		×

										BUI C	olor Co	de:	Im	paired		Not Impa	aired	Unkno	own	Not Applicable
Causes of Impairment (Pollutant or Stressor) Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI B		I BUI			JI BUI	BUI B		ви	BUI BI #13 #1	JI Comments &
Sedimentation/Siltation Pasture	Identify extent & benefit of BMPs used b farmers in watershed	y	Ohio Lake Erie Commission, USDA - NRCS, SWCDs	Ohio Lake Erie -Commission, USDA - NRCS, SWCDs		concept					x	×		x	×		x		>	(
Sedimentation/Siltation Pasture	Implementation of Agricultural BMPs	1) Identify potential Partners	Maumee RAP Rural Runoff Action Group, SWCD [Lucas, Wood, Ottawa Co]	LEPF, USEPA GLNPO, OEPA 319, GLC Great Lakes Basin Program for Soil Erosion and Sediment Control	2005-2010	concept			HUC 04100010010		×	x		x	x		x		>	
Sedimentation/Siltation Pasture	Implementation of Agricultural BMPs	2) Assess possible BMPs				concept					X	x		x	x		x)	(
Sedimentation/Siltation Pasture	Implementation of Agricultural BMPs	3) Select demonstration sites				concept					x	x		x	x		x)	(
Sedimentation/Siltation Pasture	Implementation of Agricultural BMPs	4) conduct land owner contact				concept					x	x		x	x		x		×	(
Sedimentation/Siltation Pasture	Implementation of Agricultural BMPs	5) conduct public education				concept					x	×		x	x		x)	
Sedimentation/Siltation Pasture	Implementation of Agricultural BMPs	6) complete project				concept					x	×		x	×		×			·
Sedimentation/Siltation Pasture	Incentive programs for implementation o agricultural BMPs such as filter strips, manure management, pesticide management	f Continue to promote and support the implementation of these programs				concept					x	x		x	x		x		×	· · · · · · · · · · · · · · · · · · ·
Sedimentation/Siltation Pasture	Inventory watershed for amount of acreage in pasture	1) Develop inventory methodology utilizing existing AERIS system and othe available resources	RAP Ag Runoff Fr Action Group, SWCDs, ODNR - SWC	U.S. ACE, Section 319, NatureWorks (ODNR)		concept			entire watershed		x	x		x	×		x		,	(
Sedimentation/Siltation Pasture	Inventory watershed for amount of acreage in pasture	2) Convert electronic data into GIS map files				concept					х	x		x	x		x		>	(
Sedimentation/Siltation Pasture	Inventory watershed for amount of acreage in pasture	3) Intergrate with AERIS data				concept					x	x		x	x		x		>	(
Sedimentation/Siltation Pasture	Inventory watershed for amount of acreage in pasture	4) Determine impact on watershed and possible projects to reduce or eliminate				concept					x	x		×	×		x		>	(
Sedimentation/Siltation Pasture	Reduce the impact of erosion of water quality	Educate watershed landowners of their impact on water quality and of the benefits of riparian habitat protection or restoration				concept					x	x		x	×		x		>	(
Sedimentation/Siltation Streambanks	Collect additional data, as needed					concept					х	x		x	x		x		>	(
Sedimentation/Siltation Streambanks	Define Stabilization Problem					concept					x	x		x	x		x		>	()
Sedimentation/Siltation Streambanks	Develop potential project list based on Streambank Inventory Project Results					concept			entire watershed		X	x		x	x		x		×	(
Sedimentation/Siltation Streambanks	Identify additional data needed					concept					x	x		x	x		x))	(
Sedimentation/Siltation Streambanks	Implemented project(s) from proposed					concept					x	x		x	x		x		×	(
Sedimentation/Siltation Streambanks	list Inventory watershed for streambank conditions		Ohio EPA, ODNR, US F&WS, US ACE	US ACE [WRDA ?? 905(b)], Ohio EPA 319		concept			entire watershed		x	x		x	×		x		, ,	NOTE: ACE recognizes & recommends use o OEPA's QHEI
Sedimentation/Siltation Streambanks	Review previously collected data		Ohio EPA, ODNR, US F&WS, US ACE	US ACE [WRDA ?? 905(b)]		concept					x	x		x	x		x		×	
Sedimentation/Siltation Streambanks	Streambank Tree Planting	1) Identify nurseries willing to donate plants	NRCS, SWCDs, Maumee RAP, TMACOG,	Ohio EPA 319	2006-?	concept			entire watershed		×	x		×	x		x		>	(
Sedimentation/Siltation Streambanks	Streambank Tree Planting	2) Locate areas in need of bank stabilization				concept					x	x		x	x		x		>	(
Sedimentation/Siltation Streambanks	Streambank Tree Planting	3) Find receptive landowners				concept					x	x		x	x		Х		×	(
Sedimentation/Siltation Streambanks	Streambank Tree Planting	4) Assist in planting				concept					x	x		x	x		x		×	(
Thermal stress/sunlight Removal of riparian vegetation	Plankton Survey and Bioassay	1) Establish Methodology	Maumee RAP, TMACOG, Wood, Lucas, Ottawa Co., Health Depts.,University of Toledo, OEPA	Lake Erie Protection Fund, Ohio Sea Grant, USEPA, OEPA	2005-2006	concept			entire watershed		x			x	x				>	
Thermal stress/sunlight Removal of riparian vegetation	Plankton Survey and Bioassay	2) Identify sample sites				concept			entire watershed		x			x	x				>	(
Thermal stress/sunlight Removal of riparian vegetation	Plankton Survey and Bioassay	3) Conduct sampling	1			concept					x			x	x				>	(
Thermal stress/sunlight Removal of riparian vegetation	Plankton Survey and Bioassay	4) Analyze data	1			concept					x			x	x				>	(
Thermal stress/sunlight Removal of riparian	Plankton Survey and Bioassay	5) Determine status				concept			1						×					

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects Majo	or Tasks/ Milestones	Potential Project Partners Fund	ding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI BUI #1 #2	BUI BUI #3 #4			JI BUI BI 7 #8 #			BUI E #13 #	
	riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 1) Indentify a 1) (Lucas Co.) wetlands usi	ng remote sensing	University of Toledo, OEPA Maumee RAP, TMACOG, Lucas Co.		1999-2003	complete			portion of watershed in Lucas Co		x		x	x				x
•	riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 2) create GIS 1) (Lucas Co.) potential wet					complete					х		х	x				x
thermal stress/sunlight		Wetlands Inventory and Mapping (Phase 3) Identify re 1) (Lucas Co.)	storation needs				complete					х		х	x				x
thermal stress/sunlight	riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 1) Indentify a	and evaluate existing ng remote sensing	TMACOG, Wood, Fund,		2005-2006	planning			portion of watershed in Wood Co		x		x	x				x
thermal stress/sunlight	riparian cooridor	Wetlands Inventory and Mapping (Phase 2) create GIS 2) (Wood Co.) potential wet	S map of wetlands and tlands				planning					х		x	x				x
thermal stress/sunlight	riparian cooridor destruction	=/ (storation needs				planning					х		x	X				x
thermal stress/sunlight	riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 1) Indentify a	and evaluate existing ng remote sensing	TMACOG, Wood, Fund,		2005-2006	concept			portion of watershed in Ottawa Co		x		x	×				x
thermal stress/sunlight	riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 2) create GIS 3) (Ottawa Co.) potential wet					concept					x		x	x				x
thermal stress/sunlight	riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 3) Identify re 3) (Ottawa Co.)					concept					x		x	x				x
Toxic substances	Industrial discharges (current or old)	Identify point sources		Ohio EPA Ohio I	EPA		concept					x x		x			x		x
Toxic substances	Industrial discharges (current or old)	Maintain compliance with NPDES		Ohio EPA Ohio I Permitees	EPA		concept					x x		x			x		x
Toxic substances	Industrial discharges	NPDES permit GIS inventory (Phase 1) 1) Collect GI	S coordinates for all current	Ohio EPA DSW Ohio I	EPA	2005-07	in progress	Coodinates for all permits collected			x	x x		x x		X	x x	x	x
Toxic substances	(current or old) Industrial discharges	NPDES permit GIS inventory (Phase 1) 2) Convert e	nits lectronic data into GIS map				in progress	collected			x	x x		x x		x	x x	x	x
Toxic substances	(current or old) Industrial discharges (current or old)	Ites NPDES permit GIS inventory (Phase 2) Intergrate with the second seco	th AERIS data	TMACOG, Lucas Maum County Auditor's Office	nee RAP		planning				x	x x		x x		×	x x	x	x
Toxic substances Toxic substances	Urban Runoff Urban Runoff	Educate public on sources/pathways Evaluate capacity/condition of existing systems; analysis of storm water flow, thermal impacts, runoff quality, erosion and sedimentation, and groundwater recharge.					concept					x x x x		x			x		×
Toxic substances	Urban Runoff	Evaluate impact of Phase II Stormwater regulations		Possibly Health Dept, permitted Phase 2 stormwater jurisdictions			concept					x x		x			x		×
Toxic substances Toxic substances	Urban Runoff Urban Runoff	Evaluate upstream contributions Give Water a Hand Campaign and Distribute inf	to at events, programs and	Maumee RAP; OEEF	F: local		concept					X X		Х			Х		X
		educational materials presentation		Lucas, Ottawa and jurisdi and Wood SWCDs		year round	ongoing					X X		X	\square		X		x
	Urban Runoff Urban Runoff	Identify illicit connections Identify sources not addressed by					concept concept					x x x x		x x			X X		x x
Toxic substances	Urban Runoff	existing regulations (i.e. commercial) Identify vulnerable areas					concept					X X		X			X		X
Toxic substances	Urban Runoff		creases in runoff rates, 2) es in infiltration, 3) prevent on		, local ictions		concept					x x		x			x		x
Toxic substances	Urban Runoff	Performance bond/tie compliance into building permits.					concept					x x		x			x		×
Toxic substances	Urban Runoff	Provide venues for proper disposal of wastes		Lucas County Solid Waste Mgmt Distrct			concept					x x		x			x		x
Toxic substances	Urban Runoff	Provide/identify BMPs (may be based on a performance criteria) to prevent/remove pollutants					concept					x x		x			x		×
Toxic substances	Wastewater treatment plant/ package plant		ickage plants			2005-2006	concept			entire watershed		x x		x			x		x
Toxic substances	Wastewater treatment plant/ package plant	Identify and assess package plant 2) Review N discharges	PDES permits				concept					x x		x			x		x
Toxic substances	Wastewater treatment plant/ package plant		ants operating without permi				concept					x x		x			x		x
Toxic substances	Wastewater treatment plant/ package plant		djecent streams				concept					x x		x			x		x
Toxic substances	Wastewater treatment		ater quality impacts	ł ł					l				-						-

Substitution Proof of the set of the												BUI	Color	Code:	II	mpaired	1	Not Impaire	ed 📃 U	Jnknown	· 🔲 !	Not Applicable
Normal participants Normal partiparticipants Normal particip		Sources of Pollutant	Projects	Major Tasks/ Milestones	-	Funding Source(s)	Timeline	planning, concept,	Indicator/Environmental	Management	Segment										BUI	Comments & Misc. Info.
Image: control or protect or prote	A	11	Conduct a TMDL	water quality data, 3) Assess waterbodies, 4) Identify target conditions 5) Develop restoration projects,6) Select restoration scenerio, 7) Prepare implementation plan, 8) Submit TMDL report, 9) Implement TMDL (inside Ohio EPA), 10) Implement TMDL (outside OEPA), 11) Annual validation activities,	5,	OEPA	2008-2010	concept			HUC 04100010010	x		x		x	×		×		S	Source: OEPA
Image: Problem in the state of the stat	AI	II	GIS Water Quality database (Phase 1)	water resources inventory data for		, US EPA GLNPO	2004-2005	complete				х		x		x					x	
Image Image <t< td=""><td>AI</td><td>11</td><td>GIS Water Quality database (Phase 1)</td><td>2) Export LE Tribs data to a GIS format</td><td></td><td></td><td></td><td>complete</td><td></td><td></td><td></td><td>х</td><td></td><td>х</td><td></td><td>х</td><td></td><td></td><td></td><td></td><td>х</td><td></td></t<>	AI	11	GIS Water Quality database (Phase 1)	2) Export LE Tribs data to a GIS format				complete				х		х		х					х	
Char Alexance Char Que fuel fuel Same Graf Particle Mark Part and M	AI	11	GIS Water Quality database (Phase 1)	,				complete				х		х		х					х	
And A	AI			Expand GIS to entire AOC	Lucas County	Lucas County EEMA		in progress	Study 60+ miles of stream to			Х		X		X	\blacksquare				Х	
Solver production Cale Control Solver production Cale Control Solver production Cont		nanging Land Oses			Engineer and Audito	Lucas County, FEIMA	2005-2010	in progress				x	x	x		x			x		×	
Normal													X	X X			F				XX	
LNU L												X	X	x		x			X		X	
The absolute Journal absolute Journal absolute Monte Apple App	terations Cł	hanging Land Uses	Lucas County Floodplain Map				2010	in progress				x	х	X		x			x		x	
First effection distribution Stream relation Str	terations ch	nannelization	Stream restoration demonstration project		Runoff Action Group SWCD [Lucas,	Fund, USEPA GLNPO, OEPA 319, Army Corps of	2005-2010	concept			entire watershed			x		x					x	
Pice attention Status expansion S	terations ch	nannelization	Stream restoration demonstration project			Lingineers		concept						x		x					x	
Ener allestion Prioritization Stream restantion connorstation prioritization House interfaction Stream restantion Automatication Stream restantion Stream restant	terations ch	nannelization	Stream restoration demonstration project					concept						x		x					x	
International Seam relation operation operatin operatina operatina operation operation operate operation opera	terations ch	nannelization	Stream restoration demonstration project	t 4) conduct landowner contact										x		x	\vdash				×	
Diversities diversities Stream retarget Stream retarget <thstream retarget<="" th=""> Stream retarget</thstream>	terations ch	nannelization	Stream restoration demonstration project	t 5) conduct public education										x		x	\vdash				×	
Diversities Open elements Stream restantion demonstration propers Discass and monitor results Discass and moni	terations ch	nannelization	Stream restoration demonstration project	t 5) complete project										x		x	H				×	
Photo alterations Channelization Multic participants Channelization Multic participants Multic partiparticipants Multic partipart	terations ch	nannelization	Stream restoration demonstration project	t 6) assess and monitor results										x		x					×	
Abilitati modification Changing land uses in mapping of ACC Changing land uses in mapping of ACC Involution (enging land use) and account of the value	terations Cl	hannelization									HUC 04100010010			x		x	┢─┤				×	
Interview			Land use/ land cover analysis and	Use remote sensing and GIS to classify	Maumee RAP, TMACOG, Lucas, Wood, Ottawa Co.,	Fund, USEPA GLNPO, OEPA 319,	2005-2006				HUC 04100010010	, 		x		x					×	
$\frac{1}{10000} = \frac{1}{10000} = \frac{1}{100000} = \frac{1}{100000} = \frac{1}{10000000} = \frac{1}{10000000000000000000000000000000000$	th	e watershed	1) (Lucas Co.)	wetlands using remote sensing	Maumee RAP, TMACOG, Lucas	OEPA 319	1999-2003	complete			watershed in Lucas	5		x		x					x	
$\frac{1}{1} + \frac{1}{1} + \frac{1}$	th	e watershed	1) (Lucas Co.)	potential wetlands				complete						х		x	1 I				х	
Habitat modification the watershedChanging land uses in the watershedWetlands Inventory and Mapping (Phase 2) (Wood Co.)1) Indentify and evaluate existing wetlands using remote sensingMaumee RAP, TMACOG, Wood, University of ToledoLake Erie Protection Fund, USEPA (Divo Sea Grantpanningportion of watershedportion of watershedxxx </td <td></td> <td></td> <td></td> <td> Identify restoration needs </td> <td></td> <td></td> <td></td> <td>complete</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>х</td> <td></td> <td>х</td> <td></td> <td></td> <td></td> <td></td> <td>х</td> <td></td>				 Identify restoration needs 				complete						х		х					х	
$\frac{1}{1} + w \text{ watershed} = 2) (Wood Co.)$ $\frac{1}{1} + w \text{ watershed} = 2) (Wood Co.)$ $\frac{1}{1} + w \text{ watershed} = 2) (Wood Co.)$ $\frac{1}{1} + w \text{ watershed} = 3) (dentify restoration needs = 3) (dentify restoration needs = 2) (Wood Co.)$ $\frac{1}{1} + w \text{ watershed} = 3) (dentify restoration needs = 2) (Wood Co.)$ $\frac{1}{1} + w \text{ watershed} = 3) (dentify restoration needs = 2) (Wood Co.)$ $\frac{1}{1} + w \text{ watershed} = 3) (dentify restoration needs = 2) (Wood Co.)$ $\frac{1}{1} + w \text{ watershed} = 3) (dentify restoration needs = 2) (Wood Co.)$ $\frac{1}{1} + w \text{ watershed} = 3) (dentify restoration needs = 2) (Wood Co.)$ $\frac{1}{1} + w \text{ watershed} = 3) (dentify restoration needs = 2) (Wood Co.)$ $\frac{1}{1} + w \text{ watershed} = 3) (dentify restoration needs = 2) (Wood Co.)$ $\frac{1}{1} + w \text{ watershed} = 3) (dentify restoration needs = 2) (Wood Co.)$ $\frac{1}{1} + w \text{ watershed} = 3) (dentify restoration needs = 2) (Wood Co.)$ $\frac{1}{1} + w \text{ watershed} = 3) (dentify restoration needs = 2) (Wood Co.)$ $\frac{1}{1} + w \text{ watershed} = 3) (dentify restoration needs = 2) (Wood Co.)$ $\frac{1}{1} + w \text{ watershed} = 3) (dentify restoration needs = 3) (Wetands Inventory and Mapping (Phase = 2) (Wood Co.)$ $\frac{1}{1} + w \text{ watershed} = 3) (dentify restoration needs = 2) (Wood Co.)$ $\frac{1}{1} + w \text{ watershed} = 3) (dentify restoration needs = 2) (Wood Co.)$ $\frac{1}{1} + w \text{ watershed} = 3) (dentify restoration needs = 2) (Wood Co.)$ $\frac{1}{1} + w \text{ watershed} = 3) (dentify restoration needs = 2) (Wood Co.)$ $\frac{1}{1} + w \text{ watershed} = 3) (dentify restoration needs = 2) (Wood Co.)$ $\frac{1}{1} + w \text{ watershed} = 3) (dentify restoration needs = 2) (Wood Co.)$ $\frac{1}{1} + w \text{ watershed} = 3) (dentify restoration needs = 2) (Wood Co.)$ $\frac{1}{1} + w \text{ watershed} = 3) (dentify restoration needs = 2) (Wood Co.)$ $\frac{1}{1} + w \text{ watershed} = 3) (dentify restoration needs = 2) (Wood Co.)$ $\frac{1}{1} + w \text{ watershed} = 3) (dentify restoration needs = 2) (denti$		hanging land uses in	Wetlands Inventory and Mapping (Phase		TMACOG, Wood, Ottawa Co.,	Fund, USEPA GLNPO, OEPA 319,	2005-2006	planning						x		x					x	
Habitat modification Changing land uses in the watershed Wetlands Inventory and Mapping (Phase 2) (Wood Co.) 3) Identify restoration needs medland planning Habitat modification Changing land uses in the watershed Wetlands Inventory and Mapping (Phase 3) (Ottawa Co.) 1) Indentify and evaluate existing wetlands using remote sensing Maumee RAP, TMACOG, Wood, Ottawa Co., Lake Erie Protection TMACOG, Wood, Ottawa Co., Portion of watershed in Ottawa Co., Image: Concept Image: Concent Image: Concent <t< td=""><td>modification Cl</td><td></td><td></td><td></td><td></td><td></td><td></td><td>planning</td><td></td><td></td><td></td><td></td><td></td><td>х</td><td></td><td>x</td><td></td><td></td><td></td><td></td><td>х</td><td></td></t<>	modification Cl							planning						х		x					х	
Habitat modification Changing land uses in the watershed Wetlands Inventory and Mapping (Phase 3) (Ottawa Co.) 1) Indentify and evaluate existing wetlands using remote sensing Maumee RAP, TMACOG, Wood, Ottawa Co., Lake Erie Protection Fund, USEPA GLNPO, OEPA 319, Ohio Sea Grant portion of watershed in Ottawa Co x <th< td=""><td>modification Cl</td><td>hanging land uses in</td><td>Wetlands Inventory and Mapping (Phase</td><td></td><td></td><td></td><td></td><td>planning</td><td></td><td></td><td></td><td></td><td></td><td>х</td><td></td><td>x</td><td></td><td></td><td></td><td></td><td>×</td><td></td></th<>	modification Cl	hanging land uses in	Wetlands Inventory and Mapping (Phase					planning						х		x					×	
Habitat modification Changing land uses in Wetlands Inventory and Mapping (Phase 2) create GIS map of wetlands and		hanging land uses in	Wetlands Inventory and Mapping (Phase	wetlands using remote sensing	TMACOG, Wood, Ottawa Co.,	Fund, USEPA GLNPO, OEPA 319,	2005-2006	concept			watershed in			x		x					x	
the watershed 3) (Ottawa Co.) potential wetlands					1			concept			1			x		x					x	
Habitat modification the watershed 3) (Ottawa Co.) potential wetarings (Phase 3) Identify restoration needs 3) Identify restoration needs 4 and a set in the watershed 3) (Ottawa Co.) and the set in the set in the watershed 3) (Ottawa Co.) and the set in the set i	modification Cl	hanging land uses in	Wetlands Inventory and Mapping (Phase					concent						x							x	

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI BU #1 #2	I BUI #3	BUI B #4 #	UI BU 5 #6	BUI \$ #7	BUI B #8 #	1 <mark>UI</mark> BUI #9 #10	I BUI E) #11 #	BUI BU #12 #1	BUI 3 #14	Comments & Misc. Info.
Habitat modification	Removal of riparian vegetation	Land use/ land cover analysis and mapping of AOC	Use remote sensing and GIS to classify major land use/land cover types	Maumee RAP, TMACOG, Lucas, Wood, Ottawa Co., University of Toledo	Lake Erie Protection Fund, USEPA GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	concept			HUC 04100010010		×		×						x	
Habitat modification	Removal of riparian vegetation	Survey of Wildlife Managers [tainting of fish and wildlife flavor]	Design and conduct survey for regional wildlife managers in order to determine and tainting of fish anf wildlife flavor	Maumee RAP, Federal and State wildlife agencies	Lake Erie Protection Fund, Ohio Sea Grant	2005-2006	concept			Maumee AOC	x	x		x						×	
Habitat modification	Removal of riparian vegetation	Watershed Wildlife Habitat Inventory and assessment		Maumee RAP, TMACOG, Lucas, Wood, Ottawa Co., Local municipalities	Lake Erie Protection Fund, USEPA GLNPO, OEPA 319	2005-2006	concept			Maumee AOC		x		x						×	
Habitat modification	Removal of riparian vegetation	Watershed Wildlife Habitat Inventory and assessment	2) Identify and map habitat types				concept					x		x						x	
Habitat modification	Removal of riparian	Watershed Wildlife Habitat Inventory and	3) Field assessment of habitat conditions	S			concept					X		×						X	
Habitat modification	vegetation Removal of riparian	assessment Watershed Wildlife Habitat Inventory and	and quality 4) Identify range of habitats				concept					×		×						×	
Habitat modification	vegetation Streambank modification/ flow alterations	assessment Stream restoration demonstration project	t 1) Identify potential partners	Maumee RAP Rural Runoff Action Group SWCD [Lucas, Wood, Ottawa Co]	Lake Erie Protection Fund, USEPA GLNPO, OEPA 319, Army Corps of Engineers	2005-2010	concept			entire watershed		x		x						x	
Habitat modification	Streambank modification/ flow	Stream restoration demonstration project	t 2) assess possible stream restoration projects		Lighters		concept					x		x						×	
Habitat modification	alterations Streambank modification/ flow alterations	Stream restoration demonstration project	t 3) Select demonstration sites				concept					x		x						×	
Habitat modification	Streambank modification/ flow alterations	Stream restoration demonstration project	t 4) conduct landowner contact				concept					x		x						×	
Habitat modification	Streambank modification/ flow	Stream restoration demonstration project	t 5) conduct public education				concept					x		x						×	
Habitat modification	alterations Streambank modification/ flow	Stream restoration demonstration project	t5) complete project				concept					x		x						×	
Habitat modification	alterations Streambank modification/ flow	Stream restoration demonstration project	t 6) assess and monitor results																		
nutrients	alterations Cropland or pasture	Educate Horse owners on proper	Implement Equine Environmental	LSWCD,WSWCD	Ohio Livestock		concept								4						
	where manure is spread		Assurance and Liability Program for Fulton, Lucas and Wood Counties	Ohio Livestock Coalition, Farm Bureau	Coalition, Farm Bureau, ODRN- DSWC	2006	concept				x	x		x		x	x	×			
Nutrients	Cropland or pasture where manure is spread	Establish/Utilize volunteer stream I monitoring networks	1) Train volunteers in as per EPA QA standards				concept					x				x	x	x		×	
Nutrients	Cropland or pasture where manure is spread	Establish/Utilize volunteer stream monitoring networks	2) Develop framewprk for publishing and updating data via online GIS	1			concept					x				×	x	x		×	
Nutrients	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	1) Identify potential Partners	Maumee RAP Rural Runoff Action Group SWCD [Lucas, Wood, Ottawa Co]	LEPF, USEPA , GLNPO, OEPA 319, GLC Great Lakes Basin Program for Soil Erosion and Sediment Control	2005-2010	concept			HUC 04100010010		x				x	x	x		×	
Nutrients	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	2) Assess possible BMPs				concept					x				x	x	x		×	
Nutrients	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	3) Select demonstration sites				concept					x				x	x	x		×	
Nutrients	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	4) conduct land owner contact				concept					x				x	x	x		x	
Nutrients	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	5) conduct public education				concept					x				x	x	x		x	
Nutrients	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	6) complete project				concept					x		T		x	x	×		×	
Nutrients	Erosion & runoff from fertilized fields	Encourage buffer strips to trap sediments		Lucas and Wood SWCD			ongoing									X	Х	х		×	
Nutrients	Erosion & runoff from fertilized fields	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards	3000			concept					х				x	x	x		X	
Nutrients	Erosion & runoff from	Establish/Utilize volunteer stream	2) Develop framewprk for publishing and	1			concept					X				x	x	x		x	
Nutrients	fertilized fields Erosion & runoff from fertilized fields	monitoring networks Expand Student Watershed Watch Program into additional schools	updating data via online GIS	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	year round	ongoing							T		x	x	x		×	

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Causes of Impairment (Pollutant or Stressor)	t) Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed										BUI #13	
Nutrients	Erosion & runoff from fertilized fields	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed	1) Survey SWCDs to determine extent o BMP implementation	Maumee RAP Rural Runoff Action Group SWCD [Lucas, Wood, Ottawa Co], Area Universities	LEPF, USEPA , GLNPO, OEPA 319, GLC Great Lakes Basin Program for Soil Erosion and Sediment Control	2005-2010	concept			entire watershed		×				x		x x	(×
Nutrients	Erosion & runoff from fertilized fields	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed	2) Conduct initial water sampling to determine baseline WQ				concept					x				x		x x	(x
Nutrients	Erosion & runoff from fertilized fields		3) Determine best location of BMPs for optimal impact				concept					x				x		x x	(x
Nutrients	Erosion & runoff from fertilized fields	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed	4) Conduct post implementation sampling to quantify impacts				concept					x				x		x x	(x
Nutrients	Erosion & runoff from fertilized fields	In watersned Implementation of Agricultural BMPs	1) Identify potential Partners	Maumee RAP Rural Runoff Action Group SWCD [Lucas, Wood, Ottawa Co]		2005-2010	concept			HUC 04100010010		×				x		x x	(x
Nutrients	Erosion & runoff from fertilized fields	Implementation of Agricultural BMPs	2) Assess possible BMPs				concept					×				X		x x	(x
Nutrients	Erosion & runoff from fertilized fields	Implementation of Agricultural BMPs	3) Select demonstration sites				concept					×				x		x x	(x
Nutrients	Erosion & runoff from fertilized fields	Implementation of Agricultural BMPs	4) conduct land owner contact				concept					x				x		x x	(x
Nutrients	Erosion & runoff from fertilized fields	Implementation of Agricultural BMPs	5) conduct public education				concept					X				X		x x	(x
Nutrients Nutrients	Erosion & runoff from fertilized fields Erosion & runoff from	Implementation of Agricultural BMPs Incentive programs for implementation of	6) complete project Continue to promote and support the	Ohio Lake Erie	Ohio Lake Erie		concept					X				X		x x	(×
Nutrients	fertilized fields	agricultural BMPs such as filter strips & conservation tillage, fertilizer/pesticide management	implementation of these programs	Commission, USDA NRCS, SWCDs	- Commission, USDA - NRCS, SWCDs	-	ongoing					x				x		x x	c		×
Nutrients	Erosion & runoff from fertilized fields	Reduce the impact of erosion of water quality	Educate watershed landowners of their impact on water quality and of the benefits of riparian habitat protection or restoration				concept					x				x		x x	(x
Nutrients	Erosion & runoff from fertilized fields	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	August - November	ongoing					x				x		x x	(x
Nutrients	Erosion & runoff from fertilized fields	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)				ongoing					x				×		x x	(x
Nutrients	Erosion & runoff from fertilized fields	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 			Sept	ongoing					x				×		x x	(x
Nutrients	Erosion & runoff from fertilized fields	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools			Sept	ongoing					X				х		x x	(x
Nutrients	Erosion & runoff from fertilized fields	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)	3		mid-Oct	ongoing					x				x		x x	(x
Nutrients	Erosion & runoff from fertilized fields	Student Watershed Watch	6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector)	3		late Oct- early Nov	ongoing					x				x		x x	(x
Nutrients	Erosion & runoff from fertilized fields	Student Watershed Watch	7) Student share data and finding at Student Summit			mid-Nov	ongoing					х				x		x x	(x
Nutrients	Erosion & runoff from fertilized fields	SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept									x		x x	(x
Nutrients	Erosion & runoff from fertilized fields	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training				concept									x		x x	(x
Nutrients	Erosion & runoff from fertilized fields	SWW Teacher Training/Creditable Data Certification	3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC) certification				concept									x		x x	(x
Nutrients	Erosion & runoff from fertilized fields	Volunteer monitoring of wildlife populations	Volunteers report sightings of rare birds and wildlife	Ottawa National Wildlife refuge			ongoing			HUC 04100010010		x						x x	(x
Nutrients	Urban Runoff	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards				concept					x				x		x x	(x
Nutrients	Urban Runoff	Establish/Utilize volunteer stream monitoring networks	2) Develop framewprk for publishing and updating data via online GIS				concept					x				x		x x	(x
Nutrients	Urban Runoff	Expand Student Watershed Watch Program into additional schools		Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	year round	ongoing					х				x		x x	(x

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed			BUI BL #4 #5								Comments & Misc. Info.
Nutrients	Urban Runoff	Give Water a Hand Campaign (Phase 1)		Maumee RAP, TMACOG, local Jurisdictions, US F&WS, ODNR	OEEF, local jurisdictions, US F&WS, ODNR, Maumee RAP, TMACOG	2003-2006	complete	Educate public on sources/pathways of nonpoint and point source pollution; pre- and post-campaign surveys show increased awareness of citizens	5.6.2; 5.7.1; Chapter 10.5	all of Otter Creek watershed		x				x	×	x		x	
Nutrients	Urban Runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	2) Release RFP/Hire contractors			9/3/04	complete					х				х	х	х		х	
Nutrients	Urban Runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	3) Create and distribute TV, cinema and newspaper ads			10/03-4/05	complete					х				х	х	х		х	
Nutrients	Urban Runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	4) Create and distribute 6 tip cards & bonus items			10/03-4/05	complete					х				х	х	х		х	
Nutrients	Urban Runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)				12/03 & 5/05	complete					х				х	х	х		х	
Nutrients	Urban Runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)	1) Develop project	Maumee RAP, TMACOG, local jurisdictions	Maumee RAP, TMACOG, local jurisdictions	2004-2006	in progress	Educate business owners, manager and employees on sources/pathways of nonpoint and point source pollution; show increased awareness of through the # of businesses voluntarily participating in campaign				x				x	x	x		x	
Nutrients	Urban Runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)	2) Create and distribute 4 Guidebooks for local businesses			8/05-12/06	in progress					х				x	х	х		x	
Nutrients	Urban Runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)	3) Create and distribute print ads (newspaper, magazines, newsletters, bulletins)			10/05-12/06	in progress					x				x	x	x		x	
Nutrients	Urban Runoff	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	1) Design watershed signs for 4 streams (Ottawa, Swan, Maumee & Lake Erie)	Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete					x				x	x	x		x	
Nutrients	Urban Runoff	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	2) Place bulk order for local jurisdictions and organizations			Jun-05	complete					х				х	х	х		х	
Nutrients	Urban Runoff	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)				Jul-05	complete					х				х	х	х		х	
Nutrients	Urban Runoff	Give Water a Hand Campaign and educational materials	Distribute info at events, programs and presentations	Maumee RAP; Lucas, Ottawa and and Wood SWCDs	Maumee RAP; Lucas, Ottawa and and Wood SWCDs	year round	ongoing					х				x	x	x		x	
Nutrients	Urban Runoff	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	August - November	ongoing					х				x	x	x		×	
Nutrients	Urban Runoff	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)				ongoing					х				x	х	х		х	
Nutrients	Urban Runoff	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 	6		Sept	ongoing					х				x	x	x		x	
Nutrients	Urban Runoff	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools			Sept	ongoing					Х				x	х	Х		х	
Nutrients	Urban Runoff	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)	E		mid-Oct	ongoing					х				x	x	х		x	
Nutrients	Urban Runoff	Student Watershed Watch	6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector)	Ł		late Oct- early Nov	ongoing					х				x	х	х		x	
Nutrients	Urban Runoff	Student Watershed Watch	7) Student share data and finding at Student Summit			mid-Nov	ongoing					Х				х	х	х		х	
Nutrients	Urban Runoff	SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept					х				x	x	x		x	
Nutrients	Urban Runoff	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training				concept					Х				x	х	х		х	
Nutrients	Urban Runoff	SWW Teacher Training/Creditable Data Certification					concept					х				x	х	x		х	
Organic enrichment	Human & animal excreta	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards				concept					X	\square	X		x	x	x		X	
Organic enrichment	Human & animal	Establish/Utilize volunteer stream	2) Develop framewprk for publishing and				concept					X		x		x		x		x	
Organic enrichment	excreta Human & animal excreta	monitoring networks Expand Student Watershed Watch Program into additional schools	updating data via online GIS	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	year round	ongoing					x		x		x		x		x	
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 1)	 Scan paper copies to create electronic files of existing septic systems 	TMACOG, Toledo/Lucas Count Health Dept, Lucas County Auditor's Office	Lake Erie Protection y Fund, TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office	2002-2005	complete		5.6.2;			x		x		x		x		x	

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed								BUI B #10 #				Comments & Misc. Info.
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 1)	2) Convert electronic data into GIS map files				complete					X			x	х		;	x		х	
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 1)	3) Intergrate with AERIS data				complete					x			x	х		;	x		х	
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 1)	4) Train Health Dept personnel to input data and use GIS system				in progress					х			x	x		3	х		х	
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 2)		TMACOG, Wood County Health Dept, Lucas County Auditor's Office, Northwest Regional Sewer District	Lake Erie Protection Fund, TMACOG, Lucas County Auditor's Office, Wood County Health Dept	2005-2007	in progress		5.6.2;			x			x	x		;	x		x	
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 2)	2) Convert electronic data into GIS map files				in progress					х			х	x		;	х		х	
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 2)	3) Intergrate with AERIS data				in progress					х			x	X		;	x		х	
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 2)	4) Train Health Dept personnel to input data and use GIS system				in progress					х			x	X)	x		х	
Organic enrichment	Human & animal excreta	Identify and assess package plant discharges	1) Locate package plants	Maumee RAP, TMACOG, Wood, Lucas, Ottawa Co., Health Depts., OEPA	Lake Erie Protection Fund, Ohio Sea Grant, USEPA, OEPA	2005-2006	concept			entire watershed		×			x	x		;	x		x	
Organic enrichment	Human & animal excreta	Identify and assess package plant discharges	2) Review NPDES permits				concept					X			x	x		;	x		x	
Organic enrichment	Human & animal excreta	Identify and assess package plant discharges	3) Identify plants operating without permi	1			concept					x			x	x)	x	x	x	
Organic enrichment	Human & animal excreta	Identify and assess package plant discharges	4) Sample adjecent streams				concept					x			x	x		;	x		x	
Organic enrichment	Human & animal excreta	Identify and assess package plant discharges	5) Assess water quality impacts				concept					x			x	x		;	x		x	
Organic enrichment	Human & animal excreta	Plankton Survey and Bioassay	1) Establish Methodology	Maumee RAP, TMACOG, Wood, Lucas, Ottawa Co., Health Depts., University of Toledo, OEPA	Lake Erie Protection Fund, Ohio Sea Grant, USEPA, OEPA	2005-2006	concept			entire watershed		x			x	×		;	x		x	
Organic enrichment	Human & animal excreta	Plankton Survey and Bioassay	2) Identify sample sites				concept			entire watershed		х			x	x)	x		х	
Organic enrichment	Human & animal excreta	Plankton Survey and Bioassay	3) Conduct sampling				concept					x			x	x		3	x		x	
Organic enrichment	Human & animal excreta	Plankton Survey and Bioassay	4) Analyze data				concept					х			x	х		;	x		х	
Organic enrichment	Human & animal excreta	Plankton Survey and Bioassay	5) Determine status				concept					x			x	x		3	x		х	
Organic enrichment	Human & animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	 Design new Drains are for Rain storm drain stencils and companion door hangers 	Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete	# of supplies ordered; # of households given educational materials; # of purchasing	Chapter 10.5; 5.7.1			x			x			;	x		x	
Organic enrichment	Human & animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	 Place bulk order for local jurisdictions and organizations 			Jun-05	complete					х			х			2	х		х	
Organic enrichment	Human & animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	 Distribute stencils and door hangers for local jurisdictions and organizations to 			Jul-05	complete					x			х			;	x		x	
Organic enrichment	Human & animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	drain stenciling Field Manuals	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF; 319 grants; ODNR/CZM grants; foundations; local donations; cities		ongoing	# of stenciling manuals sold	Chapter 10.5; 5.7.1									2	x		х	
Organic enrichment	Human & animal excreta	are for Rain) (Phase 2)	2) Fill orders for local jurisdictions and organizations as placed				ongoing											2	Х		Х	
Organic enrichment	Human & animal excreta	are for Rain) (Phase 3)	Conduct public Storm Drain Stenciling events	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF, ODNR/CZM grants; foundations, Maumee RAP, TMACOG, local jurisdictions, organizations	April - Oct	ongoing	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating										2	х		х	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)		TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept	_	2004	complete	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage				x			x	x		;	x		х	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	2) Identify septic system dye testing locations				complete					х			х	х		2	х		х	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	3) Conduct stream sampling and dye testing				complete					х			х	х		2	х		х	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	 Prioritize areas for enforcement based on testing results 				complete					х			х	Х		2	х		х	

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Causes of Impairment (Pollutant or Stressor)		Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI BU #1 #2										Comments & Misc. Info.
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	5) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems			complete					x		x		x		x		x	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 2)	1) Conduct additional stream sampling and dye testing	TMACOG, WRDA 401, Ohio Toledo/Lucas County EPA 319 Health Dept, Lucas County Auditor's Office, Wood County Health Dept	2005	concept	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage				x		x		x		x		x	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 2)	2) Modify priority areas (if necessary)			concept					x		x		x		х		x	·
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 2)	3) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available)			concept					x		x		x		x		x	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 3)	1) Continue to sample and dye test to identify problem areas	TMACOG, WRDA 401, Ohio Toledo/Lucas County EPA 319 Health Dept, Lucas County Auditor's Office, Wood County Health Dept	2006 - ?	concept	Sample stream sites and dye test septic systems as needed per county to reduced discharges of unmeasurable amounts of inadequately treated sewage				x		x		x		x		×	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 3)	2) Continue to pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) until priority areas are addressed			concept					x		×		x		x		x	
Organic enrichment	Human & animal excreta	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, private donations TMACOG, Ohio EPA, public and private schools	August - November	ongoing					x		x		x		x		x	
Organic enrichment	Human & animal excreta	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)			ongoing					х		x		x		х		×	
Organic enrichment	Human & animal excreta	Student Watershed Watch	3) Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector)	S	Sept	ongoing					x		x		x		х		x	
Organic enrichment	Human & animal excreta	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools		Sept	ongoing					х		Х		x		Х		х	
Organic enrichment	Human & animal excreta	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)	d	mid-Oct	ongoing					х		x		x		х		×	
Organic enrichment	Human & animal excreta	Student Watershed Watch	 b) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector) 	d	late Oct- early Nov	ongoing					х		х		x		х		x	
Organic enrichment	Human & animal excreta	Student Watershed Watch	7) Student share data and finding at Student Summit		mid-Nov	ongoing					х		Х	1	x		Х		х	
Organic enrichment	Human & animal excreta	SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD	2006	concept					х		x		x		х		х	
Organic enrichment	Human & animal excreta	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training			concept					х		×		x		х		х	
Organic enrichment	Human & animal excreta	SWW Teacher Training/Creditable Data Certification				concept					х		х		×		х		x	
Organic enrichment	Human & animal excreta	Volunteer monitoring of wildlife populations	Volunteers report sightings of rare birds and wildlife	Ottawa National Wildlife refuge		ongoing			HUC 0410001001	D	Х		X		x		х		х	
Pathogens	Cropland or pasture where manure is spread	Encourage Bufferstrips to trap sediments		Lucas and Wood Soil and Water Conservation Districts	Ongoing	ongoing										x	x			
Pathogens	Cropland or pasture where manure is spread	Establish/Utilize volunteer stream I monitoring networks	1) Train volunteers in as per EPA QA standards			concept										x	x			
Pathogens	Cropland or pasture where manure is spread	Establish/Utilize volunteer stream monitoring networks	2) Develop framewprk for publishing and updating data via online GIS	3		concept										×	x			
Pathogens	Cropland or pasture where manure is spread	Expand Student Watershed Watch Program into additional schools		Maumee RAP, private donations TMACOG, Ohio EPA, public and private schools	year round	ongoing										x	x			
Pathogens	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	1) Identify potential Partners	Maumee RAP Rural LEPF, USEPA Runoff Action Group, GLNPO, OEPA 319, SWCD [Lucas, GLC Great Lakes Wood, Ottawa Co] Basin Program for Soil Erosion and Sediment Control	2005-2010	concept			HUC 0410001001							x	x			
Pathogens	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	2) Assess possible BMPs			concept										×	x			

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Causes of Impairmer (Pollutant or Stresso	t) Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source	(s) Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI BU #1 #2	BUI #3	BUI #4	BUI B #5 #	JI <mark>BUI</mark> 6 #7	BUI #8	BUI B #9 #	UI BL 10 #1	UI <mark>BU</mark> 11 #1:	I BUI 2 #13	BUI #14	Comments & Misc. Info.
Pathogens	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	3) Select demonstration sites			concept										:	x x	<			
Pathogens	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	4) conduct land owner contact			concept										:	x x	<			
Pathogens	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	5) conduct public education			concept										:	x x	ĸ			
Pathogens	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	6) complete project			concept										;	x x	ĸ			
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Ohio EPA, public and private schools	August - November	ongoing										;	x x	×			
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)			ongoing										;	x x	ĸ			
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	3) Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector)		Sept	ongoing										;	x x	ĸ			
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools		Sept	ongoing										;	x x	<			
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day ((perferably)		mid-Oct	ongoing										:	x x	<			
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified		late Oct- early Nov	ongoing										:	x x	x			
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	Data Collector) 7) Student share data and finding at Student Summit		mid-Nov	ongoing										:	x x	x			
Pathogens	Cropland or pasture where manure is spread	SWW Teacher Training/Creditable Data	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD	2006	concept										:	x x	ĸ			
Pathogens	Cropland or pasture where manure is spread	SWW Teacher Training/Creditable Data	2) Award a certificate completion for training			concept											x x	×			
Pathogens	Cropland or pasture where manure is spread	SWW Teacher Training/Creditable Data	Level 1 Qualified Data Collector (QDC)			concept											x x	ĸ		H	
Pathogens	Human & animal excreta	Educate Horse owners on proper disposal of manure	certification Implement Equine Environmental Assurance and Liability Program for Fulton, Lucas and Wood Counties	LSWCD,WSWCD Ohio Livestock Ohio Livestock Coalition, Farm Coalition, Farm Bureau, ODRN- Bureau DSWC	2006	concept				x	x		;	(x	:	x x	<			
Pathogens	Human & animal excreta	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards	buicad bowe		concept										:	к У	<			
Pathogens	Human & animal excreta	Establish/Utilize volunteer stream monitoring networks	 Develop framewprk for publishing and updating data via online GIS 			concept										;	x x	<			
Pathogens	Human & animal excreta	Expand Student Watershed Watch Program into additional schools		Maumee RAP, private donations TMACOG, Ohio EPA, public and private schools	year round	ongoing										;	x x	<			
Pathogens	Human & animal excreta	GIS Septic System Inventory (Phase 1)	 Scan paper copies to create electronic files of existing septic systems 	TMACOG, Lake Erie Protecti Toledo/Lucas County Fund, TMACOG, Health Dept, Lucas County Auditor's Office County Auditor's Office Office	unty	complete		5.6.2;								;	x x	<			
Pathogens	Human & animal excreta	GIS Septic System Inventory (Phase 1)	2) Convert electronic data into GIS map files			complete										;	x x	<			
Pathogens	Human & animal excreta	GIS Septic System Inventory (Phase 1)	3) Intergrate with AERIS data			complete										;	x x	<			
Pathogens	Human & animal excreta	GIS Septic System Inventory (Phase 1)	4) Train Health Dept personnel to input data and use GIS system			in progress										:	x x	(
Pathogens	Human & animal excreta		 Scan paper copies to create electronic files of existing septic systems 	TMACOG, Wood County Health Dept, Lucas County Auditor's Office, Northwest Regional Sewer District Lucas County Mood County Health Dept	2005-2007	in progress		5.6.2;								;	x x	<			
Pathogens	Human & animal excreta		2) Convert electronic data into GIS map files			in progress										;	x x	(
Pathogens	Human & animal excreta	GIS Septic System Inventory (Phase 2)				in progress)	x x	(
Pathogens	Human & animal excreta	GIS Septic System Inventory (Phase 2)	4) Train Health Dept personnel to input data and use GIS system			in progress										;	x x	(

											BUI Co	or Code	: [Impa	aired	N/	lot Impair	red	Unkr	nown	N	Not Applicable
Causes of Impairmen (Pollutant or Stressor		Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI BU #1 #2	BUI #3	BUI B #4 #	JI BU 5 #6	I BUI #7	BUI E #8	3 <mark>UI</mark> BL #9 #1	JI BUI 0 #11	BUI #12	BUI #13	BUI #14	Comments & Misc. Info.
Pathogens	Human & animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	 Design new Drains are for Rain storm drain stencils and companion door hangers 	Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete	# of supplies ordered; # of households given educational materials; # of purchasing	Chapter 10.5; 5.7.1			x		x				x			x	
Pathogens	Human & animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	2) Place bulk order for local jurisdictions and organizations			Jun-05	complete					х		х				х			х	
Pathogens	Human & animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	 Distribute stencils and door hangers for local jurisdictions and organizations to use 			Jul-05	complete					х		x				х			x	
Pathogens	Human & animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	 Design new Drains are for Rain storm drain stenciling Field Manuals 	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF; 319 grants; ODNR/CZM grants; foundations; local donations; cities		ongoing	# of stenciling manuals sold	Chapter 10.5; 5.7.1									x			×	
Pathogens	Human & animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	 Fill orders for local jurisdictions and organizations as placed 				ongoing											х			х	
Pathogens	Human & animal excreta		Conduct public Storm Drain Stenciling events	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF, ODNR/CZM grants; foundations, Maumee RAP, TMACOG, local jurisdictions, organizations	April - Oct	ongoing	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating										x			x	
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	1) Identify stream sampling locations	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept	US ACE [WRDA	2004	complete	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage									x	x x				
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	2) Identify septic system dye testing locations				complete										х	x x				
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	3) Conduct stream sampling and dye testing				complete										X	< x				
Pathogens	Human & animal	Stream and Septic System Sampling	4) Prioritize areas for enforcement based				complete										×	< x				
Pathogens	excreta Human & animal excreta	Project (Phase 1) Stream and Septic System Sampling Project (Phase 1)	on testing results 5) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems				complete										x	< x				
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 2)	1) Conduct additional stream sampling and dye testing	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept	WRDA 401, Ohio /EPA 319	2005	concept	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage									×	< x				
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 2)	2) Modify priority areas (if necessary)				concept										×	x x				
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 2)	3) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available)				concept										×	< x				
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 3)	1) Continue to sample and dye test to identify problem areas	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept	WRDA 401, Ohio /EPA 319	2006 - ?	concept	Sample stream sites and dye test septic systems as needed per county to reduced discharges of unmeasurable amounts of inadequately treated sewage									×	< x				
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 3)	2) Continue to pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) until priority areas are addressed				concept										×	< x				
Pathogens	Human & animal excreta	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	August - November	ongoing										×	××				
Pathogens	Human & animal excreta	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)				ongoing										х	< X				
Pathogens	Human & animal excreta	Student Watershed Watch	3) Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector)			Sept	ongoing										x	< x				
Pathogens	Human & animal excreta	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools			Sept	ongoing										Х	< X				
Pathogens	Human & animal excreta	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)			mid-Oct	ongoing										x	x x				
Pathogens	Human & animal excreta	Student Watershed Watch	 6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector) 			late Oct- early Nov	ongoing							T			х	x				

											BUI (Color Co	ode:	In	mpaired		Not In	npaired	U	nknown		Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Indicator/Environmental	Coastal Management Measure	HUC/Stream Segment Addressed	BUI E #1	UI BL #2 #3	JI <mark>BUI</mark> 3 #4	BUI E	3UI BI #6 #	JI BU 7 #8	BUI #9	BUI #10	BUI B #11 #	BUI BU	I BUI 3 #14	Comments & Misc. Info.
Pathogens	Human & animal excreta	Student Watershed Watch	 Student share data and finding at Student Summit 			mid-Nov	ongoing											Х	Х			
Pathogens	Human & animal excreta	SWW Teacher Training/Creditable Data Certification		Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept											x	x			
Pathogens	Human & animal excreta	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training				concept											x	х			
Pathogens	Human & animal excreta	SWW Teacher Training/Creditable Data Certification	3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC) certification				concept											x	x			
Pathogens	Septic systems	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards				concept											x	х			
Pathogens	Septic systems	Establish/Utilize volunteer stream monitoring networks	2) Develop framewprk for publishing and updating data via online GIS				concept											х	х			
Pathogens	Septic systems	Expand Student Watershed Watch Program into additional schools		Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	year round	ongoing											х	х			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	 Scan paper copies to create electronic files of existing septic systems 	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office	Lake Erie Protection Fund, TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office	2002-2005	complete		5.6.2;									x	x			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	2) Convert electronic data into GIS map				complete											х	х			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	3) Intergrate with AERIS data				complete											х	х			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	4) Train Health Dept personnel to input data and use GIS system				in progress											х	х			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	1) Scan paper copies to create electronic files of existing septic systems	TMACOG, Wood County Health Dept, Lucas County Auditor's Office, Northwest Regional Sewer District	Lake Erie Protection Fund, TMACOG, Lucas County Auditor's Office, Wood County Health Dept	2005-2007	in progress		5.6.2;									x	x			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	2) Convert electronic data into GIS map files				in progress											х	х			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	3) Intergrate with AERIS data				in progress											х	х			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	4) Train Health Dept personnel to input data and use GIS system				in progress											х	х			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	1) Identify stream sampling locations	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept		2004	complete	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage										x	x			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	2) Identify septic system dye testing locations				complete											х	х			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	3) Conduct stream sampling and dye testing				complete		1									х	х			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	 4) Prioritize areas for enforcement based on testing results 				complete											х	х			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	5) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems				complete											х	х			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	1) Conduct additional stream sampling and dye testing	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept	WRDA 401, Ohio /EPA 319	2005	concept	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage										x	x			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	2) Modify priority areas (if necessary)				concept		1									x	х			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	 Pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share 				concept											x	x			
Pathogens	Septic systems	Stream and Septic System Sampling	incentives (if available) 1) Continue to sample and dye test to	TMACOG,	WRDA 401, Ohio			Sample stream sites and dye								4						
		Project (Phase 3)	identify problem areas	Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept	/EPA 319	2006 - ?	concept	test septic systems as needed per county to reduced discharges of unmeasurable amounts of inadequately treated sewage										x	x			

											BU	Color C	ode:	Impair	ed	No	Impair	red	Unkn	own	N	lot Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed			UI BUI 3 #4									Comments & Misc. Info.
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 3)	2) Continue to pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) until priority areas are addressed				concept										x	x				
Pathogens	Septic systems	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	August - November	ongoing										x	X				
Pathogens	Septic systems	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)				ongoing										х	х				
Pathogens	Septic systems	Student Watershed Watch	3) Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector)	5		Sept	ongoing										x	x				
Pathogens	Septic systems	Student Watershed Watch	 Supplies are distributed to participating teacher/schools 			Sept	ongoing										Х	Х				
Pathogens	Septic systems	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)	E		mid-Oct	ongoing										х	х				
Pathogens	Septic systems	Student Watershed Watch	6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualifier Data Collector)	Ł		late Oct- early Nov	ongoing										х	х				
Pathogens	Septic systems	Student Watershed Watch	7) Student share data and finding at Student Summit			mid-Nov	ongoing										X	Х				
Pathogens	Septic systems	SWW Teacher Training/Creditable Data Certification		Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept										x	x				
Pathogens	Septic systems	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training				concept										x	x				
Pathogens	Septic systems	SWW Teacher Training/Creditable Data Certification	3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC) certification				concept										x	x				
Pathogens	Urban Runoff	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards				concept										x	X				
Pathogens	Urban Runoff	Establish/Utilize volunteer stream monitoring networks	 Develop framewprk for publishing and updating data via online GIS 				concept										х	X				
Pathogens	Urban Runoff	Expand Student Watershed Watch Program into additional schools		Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	year round	ongoing										x	X				
Pathogens	Urban Runoff	Give Water a Hand Campaign (Phase 1)	1) Develop project	Maumee RAP, TMACOG, local Jurisdictions, US F&WS, ODNR	OEEF, local jurisdictions, US F&WS, ODNR, Maumee RAP, TMACOG	2003-2006	complete	Educate public on sources/pathways of nonpoint and point source pollution; pre- and post-campaign surveys show increased awareness of citizens	5.6.2; 5.7.1; Chapter 10.5	all of Otter Creek watershed							x	x				
Pathogens	Urban Runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	2) Release RFP/Hire contractors			9/3/04	complete	onizono									х	х				
Pathogens	Urban Runoff		 Create and distribute TV, cinema and newspaper ads 			10/03-4/05	complete										х	x				
Pathogens	Urban Runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)				10/03-4/05	complete										х	x				
Pathogens	Urban Runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)				12/03 & 5/05	complete										х	Х				
Pathogens	Urban Runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)		Maumee RAP, TMACOG, local jurisdictions	Maumee RAP, TMACOG, local jurisdictions	2004-2006	in progress	Educate business owners, manager and employees on sources/pathways of nonpoint and point source pollution; show increased awareness of through the # of businesses voluntarily participating in campaign									x	x				
Pathogens	Urban Runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)	2) Create and distribute 4 Guidebooks for local businesses			8/05-12/06	in progress										x	X				
Pathogens	Urban Runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)	3) Create and distribute print ads (newspaper, magazines, newsletters, bulletins)			10/05-12/06	in progress										x	x				
Pathogens		(Watershed Awareness Campaign)	1) Design watershed signs for 4 streams (Ottawa, Swan, Maumee & Lake Erie)	Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete										x	x				
Pathogens	Urban Runoff	(Watershed Awareness Campaign)	2) Place bulk order for local jurisdictions and organizations			Jun-05	complete										х	x				
Pathogens	Urban Runoff	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	and organizations to use			Jul-05	complete										х	Х				
Pathogens	Urban Runoff	Give Water a Hand Campaign and educational materials	Distribute info at events, programs and presentations	Lucas, Ottawa and	Maumee RAP; Lucas, Ottawa and and Wood SWCDs	year round	ongoing										x	х				

											BUI	Color Co	de:	Im Im	paired		Not Imp	aired	Un	known		Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed					UI <mark>BUI</mark> 6 #7							Comments & Misc. Info.
Pathogens	Urban Runoff	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	August - November	ongoing											x	x			
Pathogens	Urban Runoff	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)				ongoing											х	x		Π	
Pathogens	Urban Runoff	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 			Sept	ongoing											x	x			
Pathogens	Urban Runoff	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools			Sept	ongoing											х	x			
Pathogens	Urban Runoff	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)			mid-Oct	ongoing											x	x			
Pathogens	Urban Runoff	Student Watershed Watch	 6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector) 			late Oct- early Nov	ongoing											x	x			
Pathogens	Urban Runoff	Student Watershed Watch	7) Student share data and finding at Student Summit			mid-Nov	ongoing											х	x			
Pathogens	Urban Runoff	SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept									Π		x :	×			
Pathogens	Urban Runoff	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for				concept									H		x :	×			
Pathogens	Urban Runoff	SWW Teacher Training/Creditable Data Certification	training 3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC) certification				concept									Π		x :	x			
Pathogens	Wastewater treatment	Establish/Utilize volunteer stream	1) Train volunteers in as per EPA QA				concept											x :	x			
Pathogens	plant Wastewater treatment	monitoring networks Establish/Utilize volunteer stream	standards 2) Develop framewprk for publishing and				concept									\square	$ \rightarrow $	x	x		╉─┤	
Pathogens	plant Wastewater treatment plant	monitoring networks Expand Student Watershed Watch Program into additional schools	updating data via online GIS	Maumee RAP, TMACOG, Ohio EPA, public and	private donations	year round	ongoing											x	x			
Pathogens	Wastewater treatment plant	Identify and assess package plant discharges	1) Locate package plants	private schools Maumee RAP, TMACOG, Wood, Lucas, Ottawa Co., Health Depts., OEPA	Lake Erie Protection Fund, Ohio Sea Grant, USEPA, OEPA	2005-2006	concept			entire watershed								x :	x			
Pathogens	Wastewater treatment	Identify and assess package plant	2) Review NPDES permits				concept											x x	x			
Pathogens	plant Wastewater treatment	discharges Identify and assess package plant	3) Identify plants operating without permi				concept									\square		x)	x		╉─┤	
Pathogens	plant Wastewater treatment	discharges Identify and assess package plant	4) Sample adjecent streams				concept									\vdash		x :	×		+	
Pathogens		discharges Identify and assess package plant	5) Assess water quality impacts				concept									\square		x	x		╉─┤	
Pathogens	plant Wastewater treatment plant	discharges Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	August - November	ongoing											x	x			
Pathogens	Wastewater treatment plant	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)				ongoing											x	x			
Pathogens	Wastewater treatment plant	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 			Sept	ongoing											x	x			
Pathogens	Wastewater treatment	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools			Sept	ongoing											X	x			
Pathogens	plant	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)			mid-Oct	ongoing											x	x			
Pathogens	Wastewater treatment plant	Student Watershed Watch	(perferably) 6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector)			late Oct- early Nov	ongoing											x	x			
Pathogens	Wastewater treatment	Student Watershed Watch	7) Student share data and finding at			mid-Nov	ongoing											X X	x			
Pathogens	plant Wastewater treatment plant	SWW Teacher Training/Creditable Data Certification	Student Summit 1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept												x			
Pathogens	Wastewater treatment	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training				concept											x)	x			
Pathogens	Wastewater treatment plant	SWW Teacher Training/Creditable Data Certification					concept											x	x			

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Causes of Impairment (Pollutant or Stressor)) Sources of Pollutant	Projects	Major Tasks/ Milestones	Partners	unding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	Addressed		и ви			BUI E		BUI BL #10 #1	л ви		JI Comments &
Pesticides	Cropland	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed	1) Survey SWCDs to determine extent o BMP implementation	Runoff Action Group, SWCD [Lucas,GWood, Ottawa Co], Area UniversitiesBa	EPF, USEPA LNPO, OEPA 319, LC Great Lakes asin Program for bil Erosion and ediment Control	2005-2010	concept			entire watershed	×	x		x					×	
Pesticides	Cropland	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed	2) Conduct initial water sampling to determine baseline WQ				concept				x	x		x					x	
Pesticides	Cropland	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed					concept				×	x		x					×	
Pesticides	Cropland	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed					concept				x	x		x					×	
Pesticides	Cropland	Incentive programs for implementation of agricultural BMPs such as filter strips & conservation tillage, fertilizer/pesticide management	Continue to promote and support the implementation of these programs	Commission, USDA - Co	hio Lake Erie ommission, USDA - RCS, SWCDs		concept			entire watershed	x	x		x					x	
Pesticides	Cropland	Plankton Survey and Bioassay	1) Establish Methodology	TMACOG, Wood, Fu Lucas, Ottawa Co., G	ake Erie Protection und, Ohio Sea rant, USEPA, EPA	2005-2006	concept			entire watershed	x	x		x					×	
Pesticides	Cropland	Plankton Survey and Bioassay	2) Identify sample sites				concept			entire watershed	X	X		X					X	
Pesticides Pesticides	Cropland Cropland	Plankton Survey and Bioassay Plankton Survey and Bioassay	3) Conduct sampling4) Analyze data				concept concept				X	X		X					X	
Pesticides	Cropland	Plankton Survey and Bioassay	5) Determine status				concept				X	X		X					X	
Pesticides	Cropland	Survey of Wildlife Managers [tainting of fish and wildlife flavor]	Design and conduct survey for regional wildlife managers in order to determine and tainting of fish anf wildlife flavor	Federal and State Fu wildlife agencies G	ake Erie Protection und, Ohio Sea rant	2005-2006	concept			Maumee AOC	x	x		x					×	
Pesticides	Cropland	Volunteer monitoring of wildlife	Volunteers report sightings of rare birds and wildlife	Ottawa National Wildlife refuge			ongoing			HUC 04100010010	x	Х		Х					×	
Pesticides	Cropland	Implementation of Agricultural BMPs	1) Identify potential Partners	Runoff Action Group, G SWCD [Lucas, G Wood, Ottawa Co] Ba	EPF, USEPA LNPO, OEPA 319, LC Great Lakes asin Program for pil Erosion and ediment Control	2005-2010	concept			HUC 04100010010	×	x		x					×	
Pesticides Pesticides	Cropland Cropland	Implementation of Agricultural BMPs	2) Assess possible BMPs 3) Select demonstration sites				concept concept				X X	X		X					X	
Pesticides	Cropland	Implementation of Agricultural BMPs	4) conduct land owner contact				concept				X	X		X					X	
Pesticides	Cropland	Implementation of Agricultural BMPs	5) conduct public education				concept				Х	Х		Х					X	
Pesticides Pesticides	Cropland urban/suburban areas	Implementation of Agricultural BMPs Give Water a Hand Campaign (Phase 1)		TMACOG, local ju Jurisdictions, US F& F&WS, ODNR M	EEF, local risdictions, US &WS, ODNR, aumee RAP, MACOG	2003-2006	concept	Educate public on sources/pathways of nonpoint and point source pollution; pre- and post-campaign surveys show increased awareness of citizens	5.6.2; 5.7.1; Chapter 10.5	all of Otter Creek watershed	x	x		x					x	
Pesticides	urban/suburban areas	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	2) Release RFP/Hire contractors			9/3/04	complete				x	х		х					×	
Pesticides	urban/suburban areas	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	newspaper ads			10/03-4/05	complete				х	х		x					×	
Pesticides	urban/suburban areas	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	bonus items			10/03-4/05	complete				x	х		х					×	
Pesticides	urban/suburban areas	Give Water a Hand Campaign (Phase 1) (Residential Campaign)				12/03 & 5/05	complete				x	х		х					x	
Pesticides	urban/suburban areas	Give Water a Hand Campaign (Phase 2) (Business Campaign)	campaign phone survey 1) Develop project	TMACOG, local TI	aumee RAP, MACOG, local risdictions	2004-2006	in progress	Educate business owners, manager and employees on sources/pathways of nonpoint and point source pollution; show increased awareness of through the # of businesses voluntarily participating in campaign			×	x		x					×	
Pesticides	urban/suburban areas	Give Water a Hand Campaign (Phase 2) (Business Campaign)	2) Create and distribute 4 Guidebooks for local businesses			8/05-12/06	in progress				X	х		X					×	
Pesticides	urban/suburban areas		3) Create and distribute print ads (newspaper, magazines, newsletters, bulletins)			10/05-12/06	in progress				x	x		x					x	
Pesticides	urban/suburban areas	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	1) Design watershed signs for 4 streams (Ottawa, Swan, Maumee & Lake Erie)	TMACOG, local TI jurisdictions, ju	aumee RAP, MACOG, local risdictions, ganizations	Spring 2005	complete				x	x		x					x	
Pesticides	urban/suburban areas	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	 Place bulk order for local jurisdictions and organizations 			Jun-05	complete				х	х		х					X	
Pesticides	urban/suburban areas	Give Water a Hand Campaign (Phase 3)	3) Distribute signs for local jurisdictions			Jul-05	complete			1	x	x		v						1
			and organizations to use			JUI-UD	compiete				^	^		~						

										BUI C	olor Co	de:	Imp	aired	No	ot Impaire	d 📃 l	Jnknown		Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed			I BUI #4								
Pesticides	urban/suburban areas	Give Water a Hand Campaign and educational materials	Distribute info at events, programs and presentations	Maumee RAP; Maumee RAP; Lucas, Ottawa and and Wood SWCDs and Wood SWCDs	year round	ongoing				х	x		х						х	
Refuse, litter, etc	litter	CYS Day	1) Establish planning team	Maumee RAP; Duck and Otter Creeks Partnership; ORKA; Cities of Oregon, Northwood, Toledo; TMACOG; Lake Erie Commission; various other community partners	April - Sept (annually)	ongoing	Relative to previous years: 1) tons of garbage and debris removed from area streams; 2) number of volunteers that participate; 3) # of sites/RM cleaned 4) amount of support received for planning and funding the event	Chapter 10.5			x						×		x	
Refuse, litter, etc	litter	CYS Day	2) Solicit contributions and site captain support		April - Sept	ongoing					Х						х		х	
Refuse, litter, etc	litter	CYS Day	3) Distribute promotional materials		June - Sept	ongoing					Х						Х		Х	
Refuse, litter, etc	litter	CYS Day	 Select waterways and sites to be cleaned 		Aug	ongoing					х						х		х	
Refuse, litter, etc	litter	CYS Day	5) Conduct site captain training		Sept	ongoing					X						Х		Х	
Refuse, litter, etc Refuse, litter, etc	litter litter	CYS Day Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	 6) Hold event and appreciation picnic 1) Design new Drains are for Rain storm drain stencils and companion door hangers 	Maumee RAP, Maumee RAP, TMACOG, local TMACOG, local jurisdictions, jurisdictions, organizations organizations	Sept Spring 2005	complete	# of supplies ordered; # of households given educational materials; # of purchasing	Chapter 10.5; 5.7.1			x		×				x		x	
Refuse, litter, etc	litter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	2) Place bulk order for local jurisdictions and organizations		Jun-05	complete					х		x				х		х	
Refuse, litter, etc	litter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)			Jul-05	complete					х		х				х		х	
Refuse, litter, etc	litter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	 Design new Drains are for Rain storm drain stenciling Field Manuals 	Duck and Otter OEEF; 319 grants; Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations		ongoing	# of stenciling manuals sold	Chapter 10.5; 5.7.1									×		x	
Refuse, litter, etc	litter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	2) Fill orders for local jurisdictions and organizations as placed			ongoing											Х		х	
Refuse, litter, etc	litter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 3)	Conduct public Storm Drain Stenciling events	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations organizations	April - Oct	ongoing	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating										x		×	
Sedimentation/Siltation	Construction	Assessment of stream for storm water flows pre- and post- development				concept				х	x		x		x	x	х		х	
Sedimentation/Siltation	Construction	Educate developers/contractors on need and use of BMPs	1	Maumee RAP Urban Ohio Environmental Runoff Action Group, Education Fund, SWC GLC	2005	concept			entire watershed	x	x		x		x	x	x		x	
Sedimentation/Siltation	Construction	Evaluate land use		City of Toledo, RAP Urban Runoff Action Group		concept				x	x		x		x	х	x		x	
Sedimentation/Siltation	Construction	Identify alternative development designs/layouts that protect water quality	/			concept				x	x		x		x	x	x		x	
Sedimentation/Siltation	Construction	Implement a watershed storm water management program		RAP Urban Runoff LEPF, Local Action Group jurisdictions		concept				x	x		x		x	x	х		x	
Sedimentation/Siltation	Construction	Land use/ land cover analysis and mapping of AOC	Use remote sensing and GIS to classify major land use/land cover types	Maumee RAP, TMACOG, Lucas, Wood, Ottawa Co., University of Toledo	2005-2006	concept			Maumee AOC	x	×		×		x	x	x		x	
Sedimentation/Siltation	Construction	Regional Storm Water Standards Manua (Phase 1)		RAP Urban Runoff Lake Erie Protection Action Group, Fund MRRSWC	2002	complete	Implement a regional/watershed management program: a) control increases in runoff rates, b) prevent losses in infiltration, c) prevent runoff pollution		all of AOC	x	x		x		x	x	x		x	
Sedimentation/Siltation	Construction	Regional Storm Water Standards Manua (Phase 1)	al 2) Write manual			complete				x	X		x		х	х	x		x	
Sedimentation/Siltation	Construction	Regional Storm Water Standards Manua (Phase 1)	al 3) Identify alternative development designs/layouts that protect water quality			complete				x	х		х		х	х	х		х	
Sedimentation/Siltation	Construction	Regional Storm Water Standards Manua (Phase 1)	 4) Encourage local jurisdications to adop manual as their standards 			complete				х	х		x		х	х	х		х	
Sedimentation/Siltation	Construction	Regional Storm Water Standards Manua (Phase 2)		Maumee RAP Urban GLC Runoff Action Group, SWC	2005-2007	in progress	Completion and distribution of revised manual	Chapter 10.5; 5.7.1	all of watershed	x	×		x		x	х	x		x	
Sedimentation/Siltation	Construction	Regional Storm Water Standards Manua	al 2) Update chapters with new content and	1	2005-2006	in progress	1		İ						X	×	x			

									BUI	Color C	ode:	Imp	aired	Not	Impaired	Ur	ıknown	N	ot Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal HUC/Stream Management Segment Measure Addressed	BUIE	BUI BI	JI BUI B 3 #4 #	UI BU	JI <mark>BUI</mark> 6 #7	BUI BU #8 #9	I BUI #10	BUI B #11 #	UI BUI 12 #13	BUI	Comments & Misc. Info.
Sedimentation/Siltation	Construction	Regional Storm Water Standards Manua (Phase 2)	al 3) Conduct workshops and site visits for consultants, developers, contractors on stormwater plan preparation and post- construction BMPs		2006-2007	in progress	50 percent of consultants, developers, contractors that work in the area participate		x	>	<	x		x	x	x		x	
Sedimentation/Siltation	Construction	Regional Storm Water Standards Manua (Phase 3)	al Maintain and update manual as needed			ongoing			Х	>	(Х	:	х	х	Х		х	
Sedimentation/Siltation	Construction	Require BMPs on smaller developments	3			concept		entire watershee	x)	(X		x	x	х		x	
Sedimentation/Siltation	Cropland	Develop potential project list based on				concept		entire watershee	X)	(X	:	х	x	х		x	
Sedimentation/Siltation	Cropland	Cropland Inventory Project Results Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed		f Maumee RAP Rural Runoff Action Group, SWCD [Lucas, Wood, Ottawa Co], Area Universities Runoff Action Group, GLNPO, OEPA 319, GLC Great Lakes Basin Program for Soil Erosion and Sediment Control	2005-2010	concept		entire watershe	x	,	(×		x	x	x		x	
Sedimentation/Siltation	Cropland	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed				concept			x	,	(x	:	x	x	x		x	
Sedimentation/Siltation	Cropland	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed				concept			x	>	(x		x	x	x		x	
Sedimentation/Siltation	Cropland	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed				concept			x	>	(×		x	x	x		x	
Sedimentation/Siltation	Cropland	Implementation of Agricultural BMPs	1) Identify potential Partners	Maumee RAP Rural Lake Erie Protection Runoff Action Group, Fund, USEPA SWCD [Lucas, GLNPO, OEPA 319, Wood, Ottawa Co] Great Lkes Commission Great Lakes Basin Program for Soil Erosion and Sediment Control	2005-2010	concept		HUC 04100010	x	,	(×		x	x	x		x	
Sedimentation/Siltation	Cropland	Implementation of Agricultural BMPs	2) Assess possible BMPs			concept			х)	(X	:	х	x	х		x	
Sedimentation/Siltation	Cropland	Implementation of Agricultural BMPs	3) Select demonstration sites			concept			х)	(X	:	x	x	х		x	
Sedimentation/Siltation	Cropland	Implementation of Agricultural BMPs	4) conduct land owner contact			concept			x)	(X		x	x	х		x	
Sedimentation/Siltation	Cropland	Implementation of Agricultural BMPs	5) conduct public education			concept			x)	(X		x	x	х		x	
Sedimentation/Siltation	Cropland	Implementation of Agricultural BMPs	6) complete project			concept			x		(X		X	x	x		x	
Sedimentation/Siltation	Cropland	Incentive programs for implementation or agricultural BMPs such as filter strips & conservation tillage, fertilizer/pesticide management	f Continue to promote and support the implementation of these programs	Ohio Lake Erie Commission, USDA - Commission, USDA - NRCS, SWCDs NRCS, SWCDs		concept		entire watershe	x	>	(×		×	x	x		x	
Sedimentation/Siltation	Cropland	Incentives and equipment rental for conservation tillage		Lucas and Wood SWCDs	ongoing	ongoing			х	>	(Х		х	х	Х		х	
Sedimentation/Siltation	Cropland	Inventory watershed for amount of acreage in cropland	1) Develop inventory methodology utilizing existing AERIS system and othe available resources	Maumee RAP Ag U.S. ACE, Section		concept		entire watershee	x	>	(x		x	x	x		x	
Sedimentation/Siltation	Cropland	Inventory watershed for amount of acreage in cropland	2) Convert electronic data into GIS map files			concept			x)	(х		х	x	х		x	
Sedimentation/Siltation	Cropland	Inventory watershed for amount of acreage in cropland	3) Intergrate with AERIS data			concept			X)	(x		x	x	х		x	
Sedimentation/Siltation	Cropland	Inventory watershed for amount of acreage in cropland	4) Determine impact on watershed and possible projects to reduce or eliminate			concept			x)	(x		x	x	x		x	
Sedimentation/Siltation	Cropland	Reduce the impact of erosion of water quality	Educate watershed landowners of their impact on water quality and of the benefits of riparian habitat protection or restoration	Maumee RAP Ag Ohio EPA 319 Runoff Action Group, SWCDs, ODNR - SWC, Ohio EPA 319		concept		entire watershe	x	>	(×		x	x	x		x	
Sedimentation/Siltation	Cropland	Volunteer monitoring of wildlife	Volunteers report sightings of rare birds and wildlife	Ottawa National Wildlife refuge		ongoing		HUC 04100010	10 X	>	(X		х	х	х		х	
	Cropland or pasture where manure is spread	Plankton Survey and Bioassay	1) Esatblish methodology	Wildine reruge Maumee RAP, Lake Erie Protection TMACOG, Wood, Fund, Ohio Sea Lucas, Ottawa Co., Grant, USEPA, University of Toledo, OEPA	2005-2006	concept		entire watershe	x	>	(×		x	×	x		x	
	Cropland or pasture where manure is spread	Plankton Survey and Bioassay	2) Identify sample sites			concept		entire watershee	x	>	(x		x	x	x		x	
Sedimentation/Siltation	Cropland or pasture where manure is spread	Plankton Survey and Bioassay	3) Conduct sampling			concept			x	>		x		x	x	x		x	

sector												BUI Co	olor Co	de:	Imp	aired	N	lot Impai	red	Unkn	nown	N	Not Applicable
NormalControl baseControl base <t< th=""><th></th><th>t) Sources of Pollutan</th><th>t Projects</th><th>Major Tasks/ Milestones</th><th></th><th>Funding Source(s)</th><th>Timeline</th><th>planning, concept,</th><th>Indicator/Environmental</th><th>Management</th><th>Segment</th><th></th><th></th><th></th><th></th><th></th><th>BUI</th><th></th><th>л ви</th><th>BUI</th><th>BUI</th><th></th><th>Comments & Misc. Info.</th></t<>		t) Sources of Pollutan	t Projects	Major Tasks/ Milestones		Funding Source(s)	Timeline	planning, concept,	Indicator/Environmental	Management	Segment						BUI		л ви	BUI	BUI		Comments & Misc. Info.
Maximum MarkanMarkan MarkanMarkan Markan Markan Markan Markan 	Sedimentation/Siltation			4) Analyze data				concept				x	x		x	(x	×	×			x	
Andrein	Sedimentation/Siltation			5) Determine status				concept				x	x		x	(x	×	x			x	
Bindepart of the part o	Sedimentation/Siltation							ongoing				х	Х		Х	(х	X	X			Х	
Image:	Sedimentation/Siltation	land clearing and infilli	ng Land use/ land cover analysis and		Maumee RAP, TMACOG, Lucas, Wood, Ottawa Co.,	Fund, USEPA GLNPO, OEPA 319,	2005-2006	concept			Maumee AOC	×	x		×	(x	×	×			x	
Act Action Description Descripion <thdescription< th=""> <thdescription< th=""></thdescription<></thdescription<>	Sedimentation/Siltation			wetlands using remote sensing	Maumee RAP, TMACOG, Lucas	OEPA 319	1999-2003	complete				⁵ X	х		x	(x	×	x			x	
Indication Indication <td>Sedimentation/Siltation</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>complete</td> <td></td> <td></td> <td></td> <td>х</td> <td>х</td> <td></td> <td>х</td> <td>(</td> <td>х</td> <td>x</td> <td>x</td> <td></td> <td></td> <td>х</td> <td></td>	Sedimentation/Siltation							complete				х	х		х	(х	x	x			х	
Schwarzscher Schwarzscher <th< td=""><td>Sedimentation/Siltation</td><td></td><td></td><td>3) Identify restoration needs</td><td></td><td></td><td></td><td>complete</td><td></td><td></td><td></td><td>х</td><td>Х</td><td></td><td>X</td><td>(</td><td>х</td><td>x</td><td>x</td><td></td><td></td><td>х</td><td></td></th<>	Sedimentation/Siltation			3) Identify restoration needs				complete				х	Х		X	(х	x	x			х	
And additional And A	Sedimentation/Siltation	land clearing and infilli	ng Wetlands Inventory and Mapping (Phase		TMACOG, Wood, Ottawa Co.,	Fund, USEPA GLNPO, OEPA 319,	2005-2006	planning				×	×		×	(x	×	x			x	
Construction Construction <th< td=""><td>Sedimentation/Siltation</td><td>land clearing and infilli</td><td></td><td></td><td></td><td></td><td></td><td>planning</td><td></td><td></td><td></td><td>х</td><td>Х</td><td></td><td>x</td><td>(</td><td>х</td><td>x</td><td>x</td><td></td><td></td><td>х</td><td></td></th<>	Sedimentation/Siltation	land clearing and infilli						planning				х	Х		x	(х	x	x			х	
Scale water	Sedimentation/Siltation	land clearing and infilli	ng Wetlands Inventory and Mapping (Phase					planning				x	x		x	(х	X	x			X	
Indextormaine Indextor	Sedimentation/Siltation		ng Wetlands Inventory and Mapping (Phase		TMACOG, Wood, Ottawa Co.,	Fund, USEPA GLNPO, OEPA 319,	2005-2006				watershed in	x	×		×	:	x	×	×			x	
Scientification	Sedimentation/Siltation							concept				x	x		x	(x	X	x			x	
Schwarzenistication Name Description property inpact in hands Nome Nome No	Sedimentation/Siltation	land clearing and infilli	ng Wetlands Inventory and Mapping (Phase					concept				X	X		X	(x	×	x			х	
Description Description <thdescription< th=""> <thdescription< th=""></thdescription<></thdescription<>	Sedimentation/Siltation		Develop potential project list based on					concept				X	x		x	(x	×	x			x	
Scienteration Paster Inderectation of Agroational BMPs Number APA Press	Sedimentation/Siltation	Pasture	Identify extent & benefit of BMPs used by		Commission, USDA	- ErieCommission, USDA - NRCS,						x	x		×	(x	×	x			x	
And the propertition of Agricultural BMPs S) Select demonstration size C C C C	Sedimentation/Siltation	Pasture	Implementation of Agricultural BMPs	1) Identify potential Partners	Runoff Action Group, SWCD [Lucas,	LEPF, USEPA , GLNPO, OEPA 319, GLC Great Lakes Basin Program for Soil Erosion and	2005-2010	concept			HUC 04100010010	x	x		x	(x	x	×			x	
Schementation/Shite Pasture Implementation of Agricultural BMP 3 Sale demonstation also Implementation also	Sedimentation/Siltation	Pasture	Implementation of Agricultural BMPs	2) Assess possible BMPs				concept				X	X		X	(х	X	x			х	
And the state of a stat	Sedimentation/Siltation	Pasture	Implementation of Agricultural BMPs	3) Select demonstration sites					<u> </u>			x	×		×		X	×	x			X	
Sedimentation Silicity Party Implementation Agricultural BMPs So concept	Sedimentation/Siltation	Pasture	Implementation of Agricultural BMPs	4) conduct land owner contact								X	×				×	-	· ^			×	
Sedmentation Sittation Pasture Implementation of Agricultural BMPs such as filter strates and the project Concept Concept <thc< td=""><td>Sedimentation/Siltation</td><td>Pasture</td><td>Implementation of Agricultural BMPs</td><td>5) conduct public education</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>×</td><td>^ </td><td></td><td></td><td></td><td>×</td><td></td><td>. ^</td><td></td><td></td><td>×</td><td></td></thc<>	Sedimentation/Siltation	Pasture	Implementation of Agricultural BMPs	5) conduct public education								×	^ 				×		. ^			×	
Image: concept Image: conccept Image: concept Ima	Sedimentation/Siltation	Pasture	Implementation of Agricultural BMPs	6) complete project													×		· ^			×	
Sedimentation/Siltation Pasture Inventory watershed for amount of acreage in pasture In Decision of ACRIS system and other system and acreage in pasture Inventory watershed for amount of acreage in pasture INDEX (DEC) Sedimentation (Siltation and the system and other system and acreage in pasture Section 20 Concept Concept	Sedimentation/Siltation	Pasture	Incentive programs for implementation of agricultural BMPs such as filter strips, manure management, pesticide									x	×		×		×					×	
Important <td>Sedimentation/Siltation</td> <td>Pasture</td> <td>Inventory watershed for amount of</td> <td>utilizing existing AERIS system and other</td> <td>Action Group, SWCDs, ODNR -</td> <td>319, NatureWorks</td> <td></td> <td>concept</td> <td></td> <td></td> <td>entire watershed</td> <td>x</td> <td>x</td> <td></td> <td>×</td> <td>:</td> <td>x</td> <td>×</td> <td>x</td> <td></td> <td></td> <td>x</td> <td></td>	Sedimentation/Siltation	Pasture	Inventory watershed for amount of	utilizing existing AERIS system and other	Action Group, SWCDs, ODNR -	319, NatureWorks		concept			entire watershed	x	x		×	:	x	×	x			x	
Sedimentation/Siltation Pasture Inventory watershed for amount of acceage in pasture 3) Integrate with AERIS data concept concept concept x <td>Sedimentation/Siltation</td> <td>Pasture</td> <td></td> <td>2) Convert electronic data into GIS map</td> <td></td> <td></td> <td></td> <td>concept</td> <td></td> <td></td> <td></td> <td>x</td> <td>x</td> <td></td> <td>x</td> <td>(</td> <td>x</td> <td>X</td> <td>x</td> <td></td> <td></td> <td>x</td> <td></td>	Sedimentation/Siltation	Pasture		2) Convert electronic data into GIS map				concept				x	x		x	(x	X	x			x	
Sedimentation/SiltationPastureConcept<	Sedimentation/Siltation	Pasture	Inventory watershed for amount of	3) Intergrate with AERIS data				concept				x	x		x	(x	×	x			x	
guality impact on water quality and of the benefits of riparian habitat protection or restoration concept n	Sedimentation/Siltation	Pasture	Inventory watershed for amount of									x	x		x	(x	×	×			x	
Sedimentation/Siltation Streambanks Collect additional data as needed	Sedimentation/Siltation	Pasture		impact on water quality and of the benefits of riparian habitat protection or				concept	<u> </u>			x	x		×	(x	×	x			x	
	Sedimentation/Siltation	Streambanks	Collect additional data, as needed	ารระบาสแบบ				concept				X	×		×		X	×	x			X	

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Causes of Impairment (Pollutant or Stressor) Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s) Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI BU #1 #2	I BUI #3	BUI BU	JI BUI 5 #6	BUI #7	BUI E #8 #	UI BUI #9 #10	BUI #11	BUI B #12 #	BUI BU #13 #14	II Comments & 4 Misc. Info.
Sedimentation/Siltation Streambanks	Define Stabilization Problem			concept				х	х		х		x	x	Х		x	
Sedimentation/Siltation Streambanks	Develop potential project list based on Streambank Inventory Project Results			concept			entire watershed	х	х		х		x	x	х		x	
Sedimentation/Siltation Streambanks	Identify additional data needed			concept				x	х		x		x	x	х		x	
Sedimentation/Siltation Streambanks	Implemented project(s) from proposed			concept				x	х		x		x	x	х		x	
Sedimentation/Siltation Streambanks	Inventory watershed for streambank conditions		Ohio EPA, ODNR, US ACE [WRDA ?? US F&WS, US ACE 905(b)], Ohio EPA 319	planning			entire watershed	×	x		x		x	x	x		×	NOTE: ACE recognizes & recommends use o
Sedimentation/Siltation Streambanks	Review previously collected data		Ohio EPA, ODNR, US ACE [WRDA ?? US F&WS, US ACE 905(b)]	concept				×	x		x		x	x	x		x	OEPA's QHEI
Sedimentation/Siltation Streambanks	Streambank Tree Planting	 Identify nurseries willing to donate plants 	NRCS, SWCDs, Ohio EPA 319 Maumee RAP, 2006-? TMACOG,	concept			entire watershed	x	x		x		x	x	x		x	
Sedimentation/Siltation Streambanks	Streambank Tree Planting	2) Locate areas in need of bank stabilization		concept				х	х		X		x	x	х		x	
Sedimentation/Siltation Streambanks	Streambank Tree Planting	3) Find receptive landowners		concept				x	x		x		x	x	x		x	
Sedimentation/Siltation Streambanks	Streambank Tree Planting	4) Assist in planting		concept				x	x		x		x	x	x		x	
Thermal stress/sunlight Removal of riparian vegetation	Plankton Survey and Bioassay	1) Establish Methodology	Maumee RAP, TMACOG, Wood, Lake Erie Protection TMACOG, Wood, Fund, Ohio Sea Lucas, Ottawa Co., Grant, USEPA, Health Depts., OEPA University of Toledo, OEPA	concept			entire watershed		x		x		x				×	
Thermal stress/sunlight Removal of riparian vegetation	Plankton Survey and Bioassay	2) Identify sample sites		concept			entire watershed		х		x		x				Х	
Thermal stress/sunlight Removal of riparian vegetation	Plankton Survey and Bioassay	3) Conduct sampling		concept					х		x		x				x	
Thermal stress/sunlight Removal of riparian vegetation	Plankton Survey and Bioassay	4) Analyze data		concept					х		x		x				x	
Thermal stress/sunlight Removal of riparian vegetation	Plankton Survey and Bioassay	5) Determine status		concept					х		х		x				x	
Thermal stress/sunlight Removal of riparian vegetation	Volunteer monitoring of wildlife populations	Volunteers report sightings of rare birds and wildlife	Ottawa National Wildlife Refuge	ongoing			HUC 04100010010)	Х		Х		х				x	
thermal stress/sunlight riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)		University of Toledo, OEPA 319 Maumee RAP, TMACOG, Lucas Co.	complete			portion of watershed in Lucas Co	5	x		x		x				x	
thermal stress/sunlight riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	2) create GIS map of wetlands and potential wetlands		complete					х		х		х				x	
thermal stress/sunlight riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)			complete					х		х		х				x	
thermal stress/sunlight riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	 Indentify and evaluate existing wetlands using remote sensing 	Maumee RAP, Lake Erie Protection TMACOG, Wood, Fund, USEPA Ottawa Co., GLNPO, OEPA 319, University of Toledo Ohio Sea Grant	planning			portion of watershed in Wood Co	9	x		x		x				x	
thermal stress/sunlight riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	2) create GIS map of wetlands and potential wetlands		planning					х		х		x				x	
thermal stress/sunlight riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)			planning					х		x		x				Х	
thermal stress/sunlight riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 3) (Ottawa Co.)	 Indentify and evaluate existing wetlands using remote sensing 	Maumee RAP, Lake Erie Protection TMACOG, Wood, Fund, USEPA Ottawa Co., GLNPO, OEPA 319, University of Toledo Ohio Sea Grant	concept			portion of watershed in Ottawa Co		x		x		x				x	
thermal stress/sunlight riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 3) (Ottawa Co.)	2) create GIS map of wetlands and potential wetlands		concept					х		x		x				X	
thermal stress/sunlight riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 3) (Ottawa Co.)			concept					х		x		x				X	
Toxic substances Industrial discharges (current or old)	Identify point sources		Ohio EPA Ohio EPA	concept				x	х		x				x		X	
Toxic substances Industrial discharges (current or old)	Maintain compliance with NPDES		Ohio EPA Ohio EPA Permitees	concept				x	х		x				x		X	
Toxic substances Industrial discharges (current or old)	NPDES permit GIS inventory (Phase 1)	1) Collect GIS coordinates for all current NPDES permits		in progress	Coodinates for all permits collected			X	х	х	x	х		x	х	x :	x x	
Toxic substances Industrial discharges (current or old)	NPDES permit GIS inventory (Phase 1)			in progress				X	х	х	x	х		x	х	X	x x	
Toxic substances Industrial discharges (current or old)	NPDES permit GIS inventory (Phase 2)	Intergrate with AERIS data	TMACOG, Lucas Maumee RAP County Auditor's Office	planning				x	x	х	x	x		x	x	x	x x	
Toxic substances Urban Runoff Toxic substances Urban Runoff	Educate public on sources/pathways Evaluate capacity/condition of existing			concept				X	Х		X				Х		X	_
	Evaluate capacity/condition of existing systems; analysis of storm water flow, thermal impacts, runoff quality, erosion and sedimentation, and groundwater recharge.			concept				x	x		x				×		x	

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant		Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed									BUI BU #12 #13		Comments & Misc. Info.
Toxic substances	Urban Runoff	Evaluate impact of Phase II Stormwater regulations		Possibly Health Dept, permitted Phase 2 stormwater jurisdictions			concept				x)	C	×				x		x	
Toxic substances Toxic substances	Urban Runoff Urban Runoff	Evaluate upstream contributions Give Water a Hand Campaign (Phase 1)	1) Develop project	Maumee RAP, TMACOG, local Jurisdictions, US F&WS, ODNR	OEEF, local jurisdictions, US F&WS, ODNR, Maumee RAP, TMACOG	2003-2006	concept	Educate public on sources/pathways of nonpoint and point source pollution; pre- and post-campaign surveys show increased awareness of	5.6.2; 5.7.1; Chapter 10.5	all of Otter Creek watershed	x)		x				x		x	
Toxic substances	Urban Runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	2) Release RFP/Hire contractors			9/3/04	complete	citizens			х)	(х				х		х	
Toxic substances	Urban Runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	3) Create and distribute TV, cinema and newspaper ads			10/03-4/05	complete				x	>	(х				х		х	
Toxic substances	Urban Runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)				10/03-4/05	complete				x)	(х				х		х	
Toxic substances	Urban Runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)				12/03 & 5/05	complete				x)	(х				х		х	·
Toxic substances	Urban Runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)		Maumee RAP, TMACOG, local jurisdictions	Maumee RAP, TMACOG, local jurisdictions	2004-2006	in progress	Educate business owners, manager and employees on sources/pathways of nonpoint and point source pollution; show increased awareness of through the # of businesses voluntarily participating in campaign			x	,	(×				x		x	
Toxic substances	Urban Runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)	2) Create and distribute 4 Guidebooks for local businesses			8/05-12/06	in progress				х)	(x				х		х	
Toxic substances	Urban Runoff	Give Water a Hand Campaign (Phase 2) (Business Campaign)	3) Create and distribute print ads (newspaper, magazines, newsletters,			10/05-12/06	in progress				x)	(x				x		x	
Toxic substances	Urban Runoff	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	bulletins) 1) Design watershed signs for 4 streams (Ottawa, Swan, Maumee & Lake Erie)	Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete				x	>	(x				x		x	
Toxic substances	Urban Runoff	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	2) Place bulk order for local jurisdictions and organizations	organizations	organizations	Jun-05	complete				x)	(х				х		х	
Toxic substances	Urban Runoff	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	3) Distribute signs for local jurisdictions and organizations to use			Jul-05	complete				x	>	(х				х		х	
Toxic substances	Urban Runoff	Give Water a Hand Campaign and educational materials	Distribute info at events, programs and presentations	Lucas, Ottawa and	Maumee RAP; Lucas, Ottawa and	year round	ongoing				x)	(х				х		х	
Toxic substances	Urban Runoff	Identify illicit connections		and Wood SWCDs	and Wood SWCDs		concept				X)	(X				X		X	
Toxic substances	Urban Runoff	Identify sources not addressed by existing regulations (i.e. commercial)					concept				x)	C	X				x		x	
Toxic substances Toxic substances	Urban Runoff Urban Runoff	Identify vulnerable areas Implement a regional/watershed management program:	1) control increases in runoff rates, 2) prevent losses in infiltration, 3) prevent runoff pollution	SWC & other local governments, RAP Urban Runoff Action Group	jurisdictions		concept concept				x x			×				x x		x	
Toxic substances	Urban Runoff	Performance bond/tie compliance into building permits.		Group			concept				x)	(x				х		x	
Toxic substances	Urban Runoff	Provide venues for proper disposal of wastes		Lucas County Solid Waste Mgmt Distrct			concept				x)	(x				x		x	
Toxic substances	Urban Runoff	Provide/identify BMPs (may be based on a performance criteria) to prevent/remove pollutants					concept				×)	(x				x		x	
Toxic substances	Urban Runoff		1) Design new Drains are for Rain storm drain stencils and companion door hangers	Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete	# of supplies ordered; # of households given educational materials; # of purchasing	Chapter 10.5; 5.7.1			>	(x				x		x	
Toxic substances	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	2) Place bulk order for local jurisdictions and organizations	-	-	Jun-05	complete					>	(х				х		х	
Toxic substances	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)		2		Jul-05	complete					>	(x				х		х	
Toxic substances	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	1) Design new Drains are for Rain storm drain stenciling Field Manuals	Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions,	OEEF; 319 grants; ODNR/CZM grants; foundations; local donations; cities		ongoing	# of stenciling manuals sold	Chapter 10.5; 5.7.1									х		x	
Toxic substances	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	 Fill orders for local jurisdictions and organizations as placed 	organizations			ongoing											х		x	
Toxic substances	Urban Runoff		events	Duck and Otter Creeks Partnership, Maumee RAP, TMACOG, local jurisdictions, organizations	OEEF, ODNR/CZM grants; foundations, Maumee RAP, TMACOG, local jurisdictions, organizations	April - Oct	ongoing	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating										х		х	

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI BU #1 #2	UI BUI 2 #3	BUI BU #4 #	JI BUI 5 #6	BUI 8 #7 #	BUI BU #8 #9	BUI #10	BUI BI #11 #1	UI BUI B 12 #13 #	UI Comments 14 Misc. Info.
Toxic substances	Wastewater treatment plant	Identify and assess package plant discharges	1) Locate package plants		Lake Erie Protection Fund, Ohio Sea Grant, USEPA, OEPA	2005-2006	concept			entire watershed	x	x		x				x		C
Toxic substances	Wastewater treatment plant	Identify and assess package plant discharges	2) Review NPDES permits				concept				x	x		x				x		<
Toxic substances	Wastewater treatment plant	Identify and assess package plant discharges	3) Identify plants operating without perm	it			concept				x	х		х				x		< Contract of the second secon
Toxic substances	Wastewater treatment plant	Identify and assess package plant discharges	4) Sample adjecent streams				concept				x	x		х				x		<
Foxic substances		Identify and assess package plant discharges	5) Assess water quality impacts				concept				x	x		x				x		<

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI B	и ві	I BUI		JI BUI	BUI BU		UI <mark>BUI</mark> B 11 #12 #		Comments &
All	All	Conduct a TMDL	 Design watershed survey, 2) Collect water quality data, 3) Assess waterbodies, 4) Identify target conditions, 5) Develop restoration projects, 6) Select restoration scenerio, 7) Prepare implementation plan, 8) Submit TMDL report, 9) Implement TMDL (inside Ohio EPA), 10) Implement TMDL (outside OEPA), 11) Annual validation activities, and 12) Validate water quality status 	OEPA	OEPA	2008-2010	concept			HUC 04100010010		x		×		x	:	x		Source: OEPA
All	All	GIS Water Quality database (Phase 1)	1) Create relational database from OEPA water resources inventory data for Maumee AOC	Universitry of Toledo, Maumee RAP	US EPA GLNPO	2004-2005	complete					×		x					х	
All	All	GIS Water Quality database (Phase 1)	2) Export LE Tribs data to a GIS format				complete					Х		x					x	
All	All	GIS Water Quality database (Phase 1)	 Publish relational database and GIS online 				complete					х		x					х	
All Flow alterations	All channelization	GIS Water Quality database (Phase 2) Stream restoration demonstration project		Maumee RAP Rural Runoff Action Group, SWCD [Lucas, Wood, Ottawa Co]		2005-2010	in progress concept			entire watershed		x		x					x	
Flow alterations	channelization	Stream restoration demonstration project	t 2) assess possible stream restoration projects				concept					×		x					×	
Flow alterations	channelization	Stream restoration demonstration project					concept					×		X					x	
Flow alterations	channelization	Stream restoration demonstration project	t 4) conduct landowner contact				concept					×		x					x	
Flow alterations	channelization	Stream restoration demonstration project	t 5) conduct public education				concept					×		x					x	
Flow alterations	channelization	Stream restoration demonstration project	t 5) complete project				concept					×		x					x	
Flow alterations	channelization	Stream restoration demonstration project	t 6) assess and monitor results				concept					X		x					x	
Habitat modification	Changing land uses in the watershed	Land use/ land cover analysis and mapping of AOC	Use remote sensing and GIS to classify major land use/land cover types	Maumee RAP, TMACOG, Lucas, Wood, Ottawa Co., University of Toledo	LEPF, USEPA GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	concept			HUC 04100010010		×		x					x	
Habitat modification	Changing land uses in the watershed	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	wetlands using remote sensing	University of Toledo, Maumee RAP, TMACOG, Lucas Co.	OEPA 319	1999-2003	complete			portion of watershed in Lucas Co	5	×		×					x	
Habitat modification	Changing land uses in the watershed	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)		00.			complete					X		x					x	
Habitat modification		Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)					complete					X		x					х	
Habitat modification	Changing land uses in	2) (Wood Co.)	 Indentify and evaluate existing wetlands using remote sensing 		LEPF, USEPA GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	planning			portion of watershed in Wood Co		×		x					x	
Habitat modification	Changing land uses in the watershed	2) (Wood Co.)	 2) create GIS map of wetlands and potential wetlands 				planning					x		x					×	L
Habitat modification	the watershed	2) (Wood Co.)	 Identify restoration needs 				planning					x		x					x	L
Habitat modification	Changing land uses in the watershed	Wetlands Inventory and Mapping (Phase 3) (Ottawa Co.)	wetlands using remote sensing	Maumee RAP, TMACOG, Wood, Ottawa Co., University of Toledo	LEPF, USEPA GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	concept			portion of watershed in Ottawa Co		×		×					x	
Habitat modification	Changing land uses in the watershed	Wetlands Inventory and Mapping (Phase 3) (Ottawa Co.)	e 2) create GIS map of wetlands and potential wetlands				concept					X		x					x	
Habitat modification		Wetlands Inventory and Mapping (Phase 3) (Ottawa Co.)					concept					×							x	
Habitat modification	Removal of riparian vegetation	Land use/ land cover analysis and mapping of AOC	major land use/land cover types	Maumee RAP, TMACOG, Lucas, Wood, Ottawa Co., University of Toledo	LEPF, USEPA GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	concept			HUC 04100010010		×		×					x	
Habitat modification	Removal of riparian vegetation	Watershed Wildlife Habitat Inventory and assessment		Maumee RAP, TMACOG, Lucas,	Lake Erie Protection Fund, USEPA GLNPO, OEPA 319	2005-2006	concept			Maumee AOC		×		x					x	
Habitat modification	Removal of riparian vegetation	Watershed Wildlife Habitat Inventory and assessment	2) Identify and map habitat types				concept					X		X					X	
Habitat modification	Removal of riparian vegetation	Watershed Wildlife Habitat Inventory and assessment	 3) Field assessment of habitat conditions and quality 				concept					×		X					x	
Habitat modification	Removal of riparian vegetation	Watershed Wildlife Habitat Inventory and assessment	4) Identify range of habitats				concept					X		x					x	
Habitat modification	Streambank modification/ flow alterations	Stream restoration demonstration project		Maumee RAP Rural Runoff Action Group, SWCD [Lucas, Wood, Ottawa Co]	GLNPO, OEPA 319, Army Corps of	2005-2010	concept			entire watershed		×		×					×	

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Habitat modification	Streambank modification/ flow alterations	Stream restoration demonstration project	2) assess possible stream restoration projects				concept					x		x					x	
Habitat modification	Streambank modification/ flow alterations	Stream restoration demonstration project	3) Select demonstration sites				concept					x		x					x	
Habitat modification	Streambank modification/ flow alterations	Stream restoration demonstration project	4) conduct landowner contact				concept					x		x					x	
Habitat modification	Streambank modification/ flow alterations	Stream restoration demonstration project	5) conduct public education				concept					x		x					x	
Habitat modification	Streambank modification/ flow	Stream restoration demonstration project	5) complete project				concept					x		x					×	. <u> </u>
Habitat modification	alterations Streambank modification/ flow	Stream restoration demonstration project	6) assess and monitor results				concept					x		x					x	
nutrients	alterations Cropland or pasture where manure is spread	Educate Horse owners on proper disposal of manure	Implement Equine Environmental Assurance and Liability Program for Fulton, Lucas and Wood Counties	LSWCD,WSWCD Ohio Livestock Coalition, Farm Bureau	Ohio Livestock Coalition, Farm Bureau, ODRN- DSWC	2006	concept				×	x		x		x	×	x		
Nutrients	Cropland or pasture where manure is spread	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards				concept					x				x		x	x	
Nutrients	Cropland or pasture where manure is spread	Establish/Utilize volunteer stream monitoring networks	 Develop framewprk for publishing and updating data via online GIS 				concept					x				x		x	x	
Nutrients	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	1) Identify potential Partners	Maumee RAP Rural Runoff Action Group SWCD [Lucas, Wood, Ottawa Co]		2005-2010	concept			HUC 04100010010		×				x		x	x	
Nutrients	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	2) Assess possible BMPs				concept					x				x		x	x	
Nutrients	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	3) Select demonstration sites				concept					x				x		x	x	
Nutrients	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	4) conduct land owner contact				concept					x				x		x	x	
Nutrients	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	5) conduct public education				concept					x				x		x	x	
Nutrients	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	6) complete project				concept					x		T		x		x	x	
Nutrients	Erosion & runoff from fertilized fields	Encourage buffer strips to trap sediments		Lucas and Wood Soi and Water Conservation Districts		Ongoing	ongoing									x		x	x	
Nutrients	Erosion & runoff from fertilized fields	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards	Districts			concept					х				x		x	×	
Nutrients	Erosion & runoff from fertilized fields	Establish/Utilize volunteer stream monitoring networks	 Develop framewprk for publishing and updating data via online GIS 				concept					X				x		x	×	
Nutrients	Erosion & runoff from fertilized fields	Expand Student Watershed Watch Program into additional schools		Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	year round	ongoing					x				x		x	x	
Nutrients	Erosion & runoff from fertilized fields	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed	1) Survey SWCDs to determine extent of BMP implementation		LEPF, USEPA , GLNPO, OEPA 319, GLC Great Lakes Basin Program for Soil Erosion and Sediment Control	2005-2010	concept			entire watershed		x				x		x	x	
Nutrients	Erosion & runoff from fertilized fields	in watershed	2) Conduct initial water sampling to determine baseline WQ				concept					x				x		x	x	
Nutrients	Erosion & runoff from fertilized fields	tillage and other BMPs used by farmers in watershed	 Determine best location of BMPs for optimal impact 				concept					x				x		×	×	
Nutrients	Erosion & runoff from fertilized fields	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed	 Conduct post implementation sampling to quantify impacts 				concept					x				x		x	x	

										BUI C	olor Co	de:	In	npaired		Not Ir	mpaired	Ur	iknown		Not Applicable
Causes of Impairment (Pollutant or Stressor)		Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s) Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI BU			BUI B		JI BUI	BUI	BUI			ви	Comments & Misc. Info.
Nutrients	Erosion & runoff from fertilized fields	Implementation of Agricultural BMPs	1) Identify potential Partners	Maumee RAP Rural Runoff Action Group, SWCD [Lucas, Wood, Ottawa Co] Basin Program for Soil Erosion and Sediment Control	2005-2010	concept			HUC 04100010010		x				x			x		x	
Nutrients	Erosion & runoff from	Implementation of Agricultural BMPs	2) Assess possible BMPs			concept					х				x	H		x		x	
Nutrients	fertilized fields Erosion & runoff from	Implementation of Agricultural BMPs	3) Select demonstration sites			concept					х				×	\square		x	+	x	
Nutrients	fertilized fields Erosion & runoff from	Implementation of Agricultural BMPs	4) conduct land owner contact			concept					X				×	\square	\vdash	×		×	
Nutrients	fertilized fields Erosion & runoff from	Implementation of Agricultural BMPs	5) conduct public education			concept					x				×	\square	\vdash	×	+	×	
Nutrients	fertilized fields Erosion & runoff from	Implementation of Agricultural BMPs	6) complete project								x						\vdash	~		×	
Nutrients	fertilized fields Erosion & runoff from fertilized fields	Incentive programs for implementation o agricultural BMPs such as filter strips & conservation tillage, fertilizer/pesticide	f Continue to promote and support the implementation of these programs	Ohio Lake Erie Commission, USDA - Commission, USDA NRCS, SWCDs NRCS, SWCDs		ongoing					×				x			x		x	
Nutrients	Erosion & runoff from fertilized fields	management Reduce the impact of erosion of water quality	Educate watershed landowners of their impact on water quality and of the benefits of riparian habitat protection or restoration			concept					×				x			x		x	
Nutrients	Erosion & runoff from fertilized fields	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, private donations TMACOG, Ohio EPA, public and private schools	August - November	ongoing					х				x			х		x	
Nutrients	Erosion & runoff from fertilized fields	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)			ongoing					х				x			x		x	
Nutrients	Erosion & runoff from fertilized fields	Student Watershed Watch	3) Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector)		Sept	ongoing					x				x			x		x	
Nutrients	Erosion & runoff from	Student Watershed Watch	4) Supplies are distributed to		Sept	ongoing					Х				X	\square		x		x	
Nutrients	fertilized fields Erosion & runoff from fertilized fields	Student Watershed Watch	participating teacher/schools 5) Teachers conduct student training and sampling on designated sampling day	3	mid-Oct	ongoing					х				x			x		x	
Nutrients	Erosion & runoff from fertilized fields	Student Watershed Watch	(perferably) 6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified	3	late Oct- early Nov	ongoing					X		+		×			х		х	
Nutrients	Erosion & runoff from	Student Watershed Watch	Data Collector) 7) Student share data and finding at		mid-Nov	ongoing					X		+		X		\vdash	X		X	
Nutrients	fertilized fields Erosion & runoff from fertilized fields	SWW Teacher Training/Creditable Data Certification	Student Summit 1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD	2006	concept					x				x			x		x	
Nutrients	Erosion & runoff from fertilized fields	SWW Teacher Training/Creditable Data Certification				concept					X		+		x		\vdash	x		x	
Nutrients	Erosion & runoff from fertilized fields	SWW Teacher Training/Creditable Data Certification	training 3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC) certification			concept					x				x			x		x	
Nutrients	Urban Runoff	Establish/Utilize volunteer stream	1) Train volunteers in as per EPA QA			concept					X				x			x		x	
Nutrients	Urban Runoff	monitoring networks Establish/Utilize volunteer stream	standards 2) Develop framewprk for publishing and updating data via apling CIS			concept					х				x			x		x	
Nutrients	Urban Runoff	monitoring networks Expand Student Watershed Watch Program into additional schools	updating data via online GIS	Maumee RAP, private donations TMACOG, Ohio EPA, public and private schools	year round	ongoing					x				x			x		x	
Nutrients	Urban Runoff	Give Water a Hand Campaign and educational materials	Distribute info at events, programs and presentations	Maumee RAP; OEEF; local Lucas, Ottawa and jurisdictions and Wood SWCDs	year round	ongoing					х				x			x		x	
Nutrients	Urban Runoff	Student Watershed Watch	1) Enlist teacher/schools to participate	and Wood SWCDs Maumee RAP, private donations TMACOG, Ohio EPA, public and private schools	August - November	ongoing					x				x			x		x	
Nutrients	Urban Runoff	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)			ongoing					x				x			x		x	
Nutrients	Urban Runoff	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 		Sept	ongoing					x				x			x		x	
Nutrients	Urban Runoff	Student Watershed Watch	 Supplies are distributed to participating teacher/schools 		Sept	ongoing					Х				x			х		x	
Nutrients	Urban Runoff	Student Watershed Watch	 Teachers conduct student training and sampling on designated sampling day (perferably) 		mid-Oct	ongoing					х				x			x		x	

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI BUI #1 #2			BUI BU #7 #1					
Nutrients	Urban Runoff	Student Watershed Watch	6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector)			late Oct- early Nov	ongoing					х		>	:		x		x
Nutrients	Urban Runoff	Student Watershed Watch	7) Student share data and finding at Student Summit			mid-Nov	ongoing					х)	(x		x
Nutrients	Urban Runoff	SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept					×		,			x		x
Nutrients	Urban Runoff	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for				concept					x		,			x		x
Nutrients	Urban Runoff	SWW Teacher Training/Creditable Data Certification	3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC) certification				concept					x		,	(x		x
Organic enrichment	Human & animal excreta	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards				concept					x	×	>			x		×
Organic enrichment	Human & animal excreta	Establish/Utilize volunteer stream monitoring networks	2) Develop framewprk for publishing and updating data via online GIS				concept					x	X	>			x		x
Organic enrichment	Human & animal excreta	Expand Student Watershed Watch Program into additional schools	updating data via onime Gro	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	year round	ongoing					х	x	,	t I		x		x
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 1)			LEPF, TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office	2002-2005	complete		5.6.2;			x	x	×	;		x		x
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 1)	2) Convert electronic data into GIS map files				complete					х	х	×	(x		x
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 1)	3) Intergrate with AERIS data				complete					х	х)	(x		x
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 1)	4) Train Health Dept personnel to input data and use GIS system				complete					х	х)	· 🗌		x		x
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 2)	1) Scan paper copies to create electronic files of existing septic systems	TMACOG, Wood County Health Dept, Lucas County Auditor's Office, Northwest Regional Sewer District	LEPF, TMACOG, Lucas County Auditor's Office, Wood County Health Dept	2005-2007	planning		5.6.2;			x	×	,	:		x		×
Organic enrichment	Human & animal	GIS Septic System Inventory (Phase 2)	2) Convert electronic data into GIS map files				planning					x	x	>	c		x		x
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 2)	3) Intergrate with AERIS data				planning					х	x	5			x		x
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 2)	4) Train Health Dept personnel to input data and use GIS system				planning					х	x	5	(x		x
Organic enrichment	Human & animal excreta	Identify and assess package plant discharges	1) Locate package plants	Maumee RAP, TMACOG, Wood, Lucas, Ottawa Co., Health Depts., OEPA	LEPF, Ohio Sea Grant, USEPA, OEPA	2005-2006	concept		e	ntire watershed		x	×	,	;		×		x
Organic enrichment	Human & animal excreta	Identify and assess package plant discharges	2) Review NPDES permits				concept					x	X)			x		x
Organic enrichment	Human & animal excreta	Identify and assess package plant discharges	3) Identify plants operating without permit				concept					x	x)	(7		x		x
Organic enrichment	Human & animal excreta	Identify and assess package plant discharges	4) Sample adjecent streams				concept					x	x)			x		x
Organic enrichment	Human & animal excreta	Identify and assess package plant discharges	5) Assess water quality impacts				concept					x	x)			x		x
Organic enrichment	Human & animal excreta	Plankton Survey and Bioassay	1) Establish Methodology	Maumee RAP, TMACOG, Wood, Lucas, Ottawa Co., Health Depts.,University of Toledo, OEPA	LEPF, Ohio Sea Grant, USEPA, OEPA	2005-2006	concept		e	ntire watershed		x	x	×	:		x		x
Organic enrichment	Human & animal excreta	Plankton Survey and Bioassay	2) Identify sample sites				concept		e	ntire watershed		х	X)	:		x		x
Organic enrichment	Human & animal excreta	Plankton Survey and Bioassay	3) Conduct sampling				concept					x	X)	:		x		x
Organic enrichment	Human & animal excreta	Plankton Survey and Bioassay	4) Analyze data				concept					x	X)	:		x		x
Organic enrichment	Human & animal excreta	Plankton Survey and Bioassay	5) Determine status				concept					x	X)	:		x		x
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)		TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept	US ACE [WRDA /sec. 401]	2004	complete	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage	5.6.2; Chapter 11			x	x	×	:		×		x
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	2) Identify septic system dye testing locations				complete					х	х)	:		x		x
Organic enrichment	Human & animal	Stream and Septic System Sampling	3) Conduct stream sampling and dye				complete		<u> </u>			x	x	;			x		x
	excreta	Project (Phase 1)	testing						1										

										BUI Co	lor Cod	e:	Impa	aired		Not Impaired	u 🗌 u	nknown		Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	ви ви	I BUI	BUI B		II BUI	BUI	BUI #9 #10	BUI E		BUI	Comments & Misc. Info.
Organic enrichment	Human & animal	Stream and Septic System Sampling	4) Prioritize areas for enforcement based			complete					х		x		x		x		x	
Organic enrichment		Project (Phase 1) Stream and Septic System Sampling Project (Phase 1)	on testing results 5) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems			complete					x		x		x		x		x	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 2)	1) Conduct additional stream sampling and dye testing	TMACOG, WRDA 401, Ohio Toledo/Lucas County EPA 319 Health Dept, Lucas County Auditor's Office, Wood County Health Dept	2005	in progress	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage				x		x		x		x		x	
Organic enrichment	Human & animal	Stream and Septic System Sampling	2) Modify priority areas (if necessary)			in progress					х		x		x		х		х	
Organic enrichment	excreta Human & animal excreta	Project (Phase 2) Stream and Septic System Sampling Project (Phase 2)	3) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available)			in progress					x		x		x		x		x	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 3)	1) Continue to sample and dye test to identify problem areas	TMACOG, WRDA 401, Ohio Toledo/Lucas County EPA 319 Health Dept, Lucas County Auditor's Office, Wood County Health Dept	2006 - ?	in progress	Sample stream sites and dye test septic systems as needed per county to reduced discharges of unmeasurable amounts of inadequately treated sewage				x		x		x		x		x	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 3)	2) Continue to pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) until priority areas are addressed			in progress					x		x		x		x		x	
Organic enrichment	Human & animal excreta	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, private donations TMACOG, Ohio EPA, public and private schools	August - November	ongoing					x		x		x		x		x	
Organic enrichment	Human & animal excreta	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)			ongoing					х		x		x		х		х	
Organic enrichment	Human & animal excreta	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 		Sept	ongoing					х		×		×		x		×	
Organic enrichment	Human & animal excreta	Student Watershed Watch	 Supplies are distributed to participating teacher/schools 		Sept	ongoing					Х		X		x		х		Х	
Organic enrichment	Human & animal excreta	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)		mid-Oct	ongoing					х		х		x		х		х	
Organic enrichment	Human & animal excreta	Student Watershed Watch	6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector)		late Oct- early Nov	ongoing					х		x		x		х		х	
Organic enrichment	Human & animal excreta	Student Watershed Watch	 Student share data and finding at Student Summit 		mid-Nov	ongoing					х		x		x		х		х	
Organic enrichment	Human & animal excreta	SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD	2006	concept					х		х		x		х		х	
Organic enrichment	Human & animal excreta	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training			concept					Х		X		x		х		Х	
Organic enrichment	Human & animal excreta	SWW Teacher Training/Creditable Data Certification				concept					х		х		x		х		х	
Pathogens	Cropland or pasture where manure is spread	Encourage Bufferstrips to trap sediment		Lucas and Wood Soil and Water Conservation Districts	Ongoing	ongoing											х			
Pathogens	Cropland or pasture where manure is spread	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards			concept											x			
Pathogens	Cropland or pasture where manure is spread	Establish/Utilize volunteer stream monitoring networks	 Develop framewprk for publishing and updating data via online GIS 			concept											x			
Pathogens	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	1) Identify potential Partners	Maumee RAP Rural LEPF, USEPA Runoff Action Group, GLNPO, OEPA 319, SWCD [Lucas, GLC Great Lakes Basin Program for Soil Erosion and Sediment Control	2005-2010	concept			HUC 04100010010								x			
Pathogens	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	2) Assess possible BMPs			concept											x			
Pathogens	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	3) Select demonstration sites			concept											x			

											BUI C	olor Cod	e:	Impai	ired	Not	Impaired	Ur	known	٩ 📃	Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed									UI BUI 12 #13		Comments & Misc. Info.
Pathogens	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	4) conduct land owner contact				concept											x			
Pathogens	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	5) conduct public education				concept											x			
Pathogens	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	6) complete project				concept											x			
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	August - November	ongoing											х			
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data	private scribbis			ongoing											х			
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	Certification) 3) Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data			Sept	ongoing											х			
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	Collector) 4) Supplies are distributed to participating teacher/schools			Sept	ongoing											х			
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day			mid-Oct	ongoing											х			
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	(perferably) 6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified			late Oct- early Nov	ongoing											х			
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	Data Collector) 7) Student share data and finding at Student Summit			mid-Nov	ongoing											х			
Pathogens	Human & animal excreta	Educate Horse owners on proper disposal of manure	Implement Equine Environmental Assurance and Liability Program for Fulton, Lucas and Wood Counties	LSWCD,WSWCD Ohio Livestock Coalition, Farm Bureau	Ohio Livestock Coalition, Farm Bureau, ODRN- DSWC	2006	concept				x	x		×		x	x	x			
Pathogens	Human & animal excreta	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards	Duleau	DSWC		concept											x			
Pathogens	Human & animal	Establish/Utilize volunteer stream	2) Develop framewprk for publishing and				concept											х			
Pathogens	excreta Human & animal excreta	monitoring networks Expand Student Watershed Watch Program into additional schools	updating data via online GIS	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	year round	ongoing											х			
Pathogens	Human & animal excreta	GIS Septic System Inventory (Phase 1)	1) Scan paper copies to create electronic files of existing septic systems	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office	LEPF, TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office	2002-2005	complete		5.6.2;									x			
Pathogens	Human & animal excreta	GIS Septic System Inventory (Phase 1)	2) Convert electronic data into GIS map	onio			complete											х			
Pathogens		GIS Septic System Inventory (Phase 1)	3) Intergrate with AERIS data				complete											x			
Pathogens	Human & animal	GIS Septic System Inventory (Phase 1)	4) Train Health Dept personnel to input				in progress											x			
Pathogens	excreta Human & animal excreta	GIS Septic System Inventory (Phase 2)	data and use GIS system 1) Scan paper copies to create electronic files of existing septic systems	TMACOG, Wood County Health Dept, Lucas County Auditor's Office, Northwest Regional Sewer District	Auditor's Office, Wood County Health	2005-2007	in progress		5.6.2;									x			
Pathogens	Human & animal excreta	GIS Septic System Inventory (Phase 2)	2) Convert electronic data into GIS map	Piotriot			in progress											х			
Pathogens	Human & animal excreta	GIS Septic System Inventory (Phase 2)	3) Intergrate with AERIS data				in progress											х			
Pathogens	Human & animal	GIS Septic System Inventory (Phase 2)	4) Train Health Dept personnel to input data and use GIS system				in progress											х			
Pathogens	excreta Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	1) Identify stream sampling locations	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept		2004	complete	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage										x			
Pathogens	Human & animal	Stream and Septic System Sampling	2) Identify septic system dye testing				complete							-				х			
Pathogens		Project (Phase 1) Stream and Septic System Sampling	locations 3) Conduct stream sampling and dye				complete									+		x			
Pathogens	excreta Human & animal excreta	Project (Phase 1) Stream and Septic System Sampling Project (Phase 1)	testing 4) Prioritize areas for enforcement based on testing results				complete											x			
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	5) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems				complete											х			

											BUI	Color C	ode:	In	mpaired		Not Ir	mpaired	U	nknown		Not Applicable
Causes of Impairment (Pollutant or Stressor)) Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI 8 #1		JI BUI 3 #4	BUI E #5	3UI BI #6 #	JI BU 7 #8	I BUI #9	BUI #10	BUI E #11 #	BUI BU	I BUI 3 #14	Comments & Misc. Info.
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 2)	1) Conduct additional stream sampling and dye testing	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept	WRDA 401, Ohio /EPA 319	2005	concept	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage											x			
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 2)	2) Modify priority areas (if necessary)				concept												х			
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 2)	 Pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) 				concept												x			
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 3)	1) Continue to sample and dye test to identify problem areas	TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office, Wood County Health Dept	WRDA 401, Ohio /EPA 319	2006 - ?	concept	Sample stream sites and dye test septic systems as needed per county to reduced discharges of unmeasurable amounts of inadequately treated sewage											x			
Pathogens	Human & animal excreta	Stream and Septic System Sampling Project (Phase 3)	2) Continue to pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) until priority areas are addressed				concept												x			
Pathogens	Human & animal excreta	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	August - November	ongoing												х			
Pathogens	Human & animal excreta	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)				ongoing												х			
Pathogens	Human & animal excreta	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 			Sept	ongoing												x			
Pathogens	Human & animal excreta	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools			Sept	ongoing												х			
Pathogens	Human & animal excreta	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)	3		mid-Oct	ongoing									T			х			
Pathogens	Human & animal excreta	Student Watershed Watch	6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector)	1		late Oct- early Nov	ongoing									T			х			
Pathogens	Human & animal	Student Watershed Watch	7) Student share data and finding at			mid-Nov	ongoing												х			
Pathogens	excreta Human & animal excreta	SWW Teacher Training/Creditable Data Certification	Student Summit 1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept												x			
Pathogens	Human & animal excreta	SWW Teacher Training/Creditable Data Certification					concept												x			
Pathogens	Human & animal excreta	SWW Teacher Training/Creditable Data Certification	Level 1 Qualified Data Collector (QDC)				concept									T			x			
Pathogens	Septic systems	Establish/Utilize volunteer stream	certification 1) Train volunteers in as per EPA QA				concept												х			
Pathogens	Septic systems	monitoring networks Establish/Utilize volunteer stream	standards 2) Develop framewprk for publishing and				concept												x			
Pathogens	Septic systems	monitoring networks Expand Student Watershed Watch Program into additional schools	updating data via online GIS	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	year round	ongoing												x			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	1) Scan paper copies to create electronic files of existing septic systems	TMACOG,	LEPF, TMACOG, / Toledo/Lucas County Health Dept, Lucas County Auditor's Office	2002-2005	complete		5.6.2;										x			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	2) Convert electronic data into GIS map files				complete												х			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	3) Intergrate with AERIS data				complete												x			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 1)	4) Train Health Dept personnel to input data and use GIS system				in progress												x			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	1) Scan paper copies to create electronic files of existing septic systems	TMACOG, Wood County Health Dept, Lucas County Auditor's Office, Northwest Regional Sewer District	Auditor's Office, Wood County Health	2005-2007	in progress		5.6.2;										x			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	2) Convert electronic data into GIS map	Control District			in progress												x			
Pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	3) Intergrate with AERIS data				in progress											\square	x			

										BUI C	olor Coo	le:	Impa	lired	No ¹	t Impaired	Un	known	No	ot Applicable
Causes of Impairment (Pollutant or Stressor)		Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed									UI BUI 12 #13		Comments & Misc. Info.
Pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	4) Train Health Dept personnel to input data and use GIS system			in progress											x			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	1) Identify stream sampling locations	TMACOG, US ACE [WRDA Toledo/Lucas County sec. 401] Health Dept, Lucas County Auditor's Office, Wood County Health Dept	2004	complete	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage	5.6.2; Chapter 11									x			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	2) Identify septic system dye testing locations			complete											х			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	3) Conduct stream sampling and dye testing			complete											х			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	 4) Prioritize areas for enforcement based on testing results 			complete											х			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	5) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems			complete											х			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	1) Conduct additional stream sampling and dye testing	TMACOG, WRDA 401, Ohio Toledo/Lucas County EPA 319 Health Dept, Lucas County Auditor's Office, Wood County Health Dept	2005	concept	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage										×			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	2) Modify priority areas (if necessary)			concept											x			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	3) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available)			concept											×			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 3)	1) Continue to sample and dye test to identify problem areas	TMACOG, WRDA 401, Ohio Toledo/Lucas County EPA 319 Health Dept, Lucas County Auditor's Office, Wood County Health Dept	2006 - ?	concept	Sample stream sites and dye test septic systems as needed per county to reduced discharges of unmeasurable amounts of inadequately treated sewage										×			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 3)	2) Continue to pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) until priority areas are addressed			concept											x			
Pathogens	Septic systems	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, private donations TMACOG, Ohio EPA, public and private schools	August - November	ongoing											x			
Pathogens	Septic systems	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)			ongoing											x			
Pathogens	Septic systems	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 	3	Sept	ongoing											x			
Pathogens	Septic systems	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools		Sept	ongoing											х			
Pathogens	Septic systems	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)		mid-Oct	ongoing											x			
Pathogens	Septic systems	Student Watershed Watch	 6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector) 		late Oct- early Nov	ongoing											x			
Pathogens	Septic systems	Student Watershed Watch	7) Student share data and finding at Student Summit		mid-Nov	ongoing											х			
Pathogens	Septic systems	SWW Teacher Training/Creditable Data Certification		Maumee RAP, Ohio EPA, Lucas SWCD	2006	concept											x			
Pathogens	Septic systems	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training			concept											x			
Pathogens	Septic systems	SWW Teacher Training/Creditable Data Certification				concept											x			
Pathogens	Urban Runoff	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards			concept											x			
Pathogens	Urban Runoff	Establish/Utilize volunteer stream monitoring networks	 2) Develop framewprk for publishing and updating data via online GIS 			concept											x			
Pathogens	Urban Runoff	Expand Student Watershed Watch Program into additional schools		Maumee RAP, private donations TMACOG, Ohio EPA, public and private schools	year round	ongoing											x			
Pathogens	Urban Runoff	Give Water a Hand Campaign and educational materials	Distribute info at events, programs and presentations	Maumee RAP; OEEF; local Lucas, Ottawa and jurisdictions and Wood SWCDs	year round	ongoing											x			

											BUI	Color C	ode:	In	npaired		Not Im	npaired	U	hknown		Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed				BUI E		л ви	BUI	BUI E	BUI B	BUI BUI 12 #13		Comments & Misc. Info.
Pathogens	Urban Runoff	Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	August - November	ongoing												x			
Pathogens	Urban Runoff	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)				ongoing												х		Π	
Pathogens	Urban Runoff	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 			Sept	ongoing												х			
Pathogens	Urban Runoff	Student Watershed Watch	4) Supplies are distributed to			Sept	ongoing									\square			Х			
Pathogens	Urban Runoff	Student Watershed Watch	participating teacher/schools 5) Teachers conduct student training and sampling on designated sampling day (perferably)			mid-Oct	ongoing												х			
Pathogens	Urban Runoff	Student Watershed Watch	 6) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector) 			late Oct- early Nov	ongoing												x			
Pathogens	Urban Runoff	Student Watershed Watch	7) Student share data and finding at Student Summit			mid-Nov	ongoing												Х			
Pathogens	Urban Runoff	SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept												x		Π	
Pathogens	Urban Runoff	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training				concept												х			
Pathogens	Urban Runoff	SWW Teacher Training/Creditable Data Certification					concept									Γ			x			
Pathogens	Wastewater treatment plant/ package plant	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards				concept												x			
Pathogens	Wastewater treatment	Establish/Utilize volunteer stream	2) Develop framewprk for publishing and				concept												х			
Pathogens	plant/ package plant Wastewater treatment plant/ package plant	monitoring networks Expand Student Watershed Watch Program into additional schools	updating data via online GIS	Maumee RAP, TMACOG, Ohio EPA, public and	private donations	year round	ongoing												x			
Pathogens	Wastewater treatment plant/ package plant	Identify and assess package plant discharges	1) Locate package plants	private schools Maumee RAP, TMACOG, Wood, Lucas, Ottawa Co., Health Depts., OEPA	LEPF, Ohio Sea Grant, USEPA, OEPA	2005-2006	concept			entire watershed									x			
Pathogens	Wastewater treatment plant/ package plant	Identify and assess package plant	2) Review NPDES permits				concept												х			
Pathogens	Wastewater treatment	discharges Identify and assess package plant	3) Identify plants operating without permi				concept												x			
Pathogens	plant/ package plant Wastewater treatment	discharges Identify and assess package plant	4) Sample adjecent streams				concept												X			
Pathogens		discharges Identify and assess package plant	5) Assess water quality impacts				concept												х			
Pathogens		discharges Student Watershed Watch	1) Enlist teacher/schools to participate	Maumee RAP, TMACOG, Ohio EPA, public and private schools	private donations	August - November	ongoing												x			
Pathogens	Wastewater treatment plant/ package plant	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)				ongoing												х		Π	
Pathogens	Wastewater treatment plant/ package plant	Student Watershed Watch	 Teachers submit requests for supplies needed to Maumee RAP and sampling plan to Ohio EPA (if Qualified Data Collector) 			Sept	ongoing												х			
Pathogens	Wastewater treatment plant/ package plant	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools			Sept	ongoing												х			
Pathogens		Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (berferably)			mid-Oct	ongoing												х			
Pathogens	Wastewater treatment plant/ package plant	Student Watershed Watch	 (b) Teachers submit student data to Maumee RAP (and Ohio EPA if Qualified Data Collector) 			late Oct- early Nov	ongoing												х			
Pathogens	Wastewater treatment plant/ package plant	Student Watershed Watch	7) Student share data and finding at Student Summit			mid-Nov	ongoing												х			
Pathogens		SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept												x			
Pathogens	Wastewater treatment plant/ package plant	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training				concept												x			
Pathogens		SWW Teacher Training/Creditable Data Certification					concept												x			

											BUIL	Color Co	de.	Im	paired		lot Impaire	u 🗌 h	nknown		ot Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept,	Performance Indicator/Environmental	Coastal Management	HUC/Stream Segment	BUI B		I BUI	BUI B		II BUI B		BUI	BUI BUI	BUI	Comments & Misc. Info.
Pesticides	Cropland	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed	1) Survey SWCDs to determine extent of BMP implementation	Maumee RAP Rural L Runoff Action Group, G SWCD [Lucas, G Wood, Ottawa Co], B Area Universities S	EPF, USEPA SLNPO, OEPA 319, SLC Great Lakes Sasin Program for Soil Erosion and Sediment Control	2005-2010	ongoing, complete)	Results (Loadings)	Measure	Addressed entire watershed		×			x					x	
Pesticides	Cropland	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed					concept					x	x		x					x	
Pesticides	Cropland		3) Determine best location of BMPs for optimal impact				concept					x	x		x	П				x	
Pesticides	Cropland	Identify extent & benefit of conservation tillage and other BMPs used by farmers in watershed					concept					x	x		x					x	
Pesticides	Cropland	Incentive programs for implementation of agricultural BMPs such as filter strips & conservation tillage, fertilizer/pesticide management	Continue to promote and support the implementation of these programs	Commission, USDA - C	Dhio Lake Erie Commission, USDA - IRCS, SWCDs		concept			entire watershed		x	x		x	Π				x	
Pesticides	Cropland	Plankton Survey and Bioassay	1) Establish Methodology	TMACOG, Wood,	EPF, Ohio Sea Grant, USEPA, DEPA	2005-2006	concept			entire watershed		×	x		×					x	
Pesticides	Cropland	Plankton Survey and Bioassay	2) Identify sample sites	Toledo, OEFA			concept			entire watershed		X	X		x					Х	
Pesticides	Cropland	Plankton Survey and Bioassay	3) Conduct sampling				concept					X	X		X					X	
Pesticides	Cropland	Plankton Survey and Bioassay	4) Analyze data 5) Determine status				concept		-	-			X		X X	4				X	
Pesticides Pesticides	Cropland Cropland	Plankton Survey and Bioassay Survey of Wildlife Managers [tainting of fish and wildlife flavor]	Design and conduct survey for regional wildlife managers in order to determine and tainting of fish anf wildlife flavor	Federal and State F	ake Erie Protection Fund, Ohio Sea Grant	2005-2006	concept concept			Maumee AOC		x			x					x	
Pesticides	Cropland	Implementation of Agricultural BMPs	1) Identify potential Partners	Maumee RAP Rural L Runoff Action Group, G SWCD [Lucas, G Wood, Ottawa Co] B S	EPF, USEPA SLNPO, OEPA 319, SLC Great Lakes Basin Program for Soil Erosion and Sediment Control	2005-2010	concept			HUC 04100010010	0	×	x		x					x	
Pesticides	Cropland	Implementation of Agricultural BMPs	2) Assess possible BMPs				concept						X		X					X	
Pesticides	Cropland	Implementation of Agricultural BMPs	3) Select demonstration sites				concept						X		X	4				X	
Pesticides Pesticides	Cropland Cropland	Implementation of Agricultural BMPs Implementation of Agricultural BMPs	 4) conduct land owner contact 5) conduct public education 				concept concept						X		X X	+++				X	
Pesticides	Cropland	Implementation of Agricultural BMPs	6) complete project				concept						X		x					X	
Pesticides	urban/suburban areas	Give Water a Hand Campaign and educational materials	Distribute info at events, programs and presentations		DEEF; local urisdictions	year round	ongoing						Х		x					x	
Refuse, litter, etc	litter	CYS Day		Maumee RAP; Duck S and Otter Creeks p Partnership; ORKA; g	ublic contributions,	April - Sept (annually)	ongoing	Relative to previous years: 1) tons of garbage and debris removed from area streams; 2) number of volunteers that participate; 3) # of sites/RM cleaned 4) amount of support received for planning and funding the event				x						x		×	
Refuse, litter, etc	litter	CYS Day	2) Solicit contributions and site captain			April - Sept	ongoing					Х				4 V		х		Х	
Refuse, litter, etc	litter	CYS Day	3) Distribute promotional materials			June - Sept	ongoing					Х						Х		Х	
Refuse, litter, etc	litter	CYS Day	 Select waterways and sites to be cleaned 			Aug	ongoing					Х						Х		Х	
Refuse, litter, etc	litter	CYS Day	5) Conduct site captain training			Sept	ongoing					Х						Х		Х	
Refuse, litter, etc	litter	CYS Day	6) Hold event and appreciation picnic			Sept	ongoing					Х						Х		Х	
Sedimentation/Siltation	Construction	Assessment of stream for storm water flows pre- and post- development					concept					x	x		X	X		Х		X	
Sedimentation/Siltation	Construction	Evaluate land use		City of Toledo, RAP Urban Runoff Action Group			concept					x	x		x	x		x		x	
Sedimentation/Siltation	Construction	Identify alternative development designs/layouts that protect water quality	,				concept					×	x		x	×		x		x	
Sedimentation/Siltation	Construction	Implement a watershed storm water management program		Action Group F	ake Erie Protection Fund Local Jurisdictions		concept					x	x		x	x		x		x	
Sedimentation/Siltation	Construction	Land use/ land cover analysis and mapping of AOC	Use remote sensing and GIS to classify major land use/land cover types	Maumee RAP, L TMACOG, Lucas, G	EPF, USEPA GLNPO, OEPA 319, Dhio Sea Grant	2005-2006	concept			Maumee AOC		x	x		x	×		x		x	

Sedimentation/Siltation Construction Regional Std (Phase 1) Sedimentation/Siltation Construction Regional Std (Phase 2) Sedimentation/Siltation Construction Regional Std (Phase 3) Sedimentation/Siltation Construction Regional Std (Phase 3) Sedimentation/Siltation Construction Regional Std (Phase 3)	Storm Water Standards Manual Storm Water Standards Manual	 Write manual Identify alternative development designs/layouts that protect water quality Encourage local jurisdications to adopt manual as their standards Review existing manual Update chapters with new content and regulations Conduct workshops and site visits for consultants, developers, contractors on stormwater plan preparation and post- construction BMPs 	Potential Project Partners Funding Source(s) RAP Urban Runoff Action Group, MRRSWC Lake Erie Protection Fund Marker RAP Urban Runoff Action Group, SWC GLC	Timeline 2002 2005-2007 2005-2006	Status (in progress, planning, concept, ongoing, complete) complete complete complete complete in progress	Performance Indicator/Environmental Results (Loadings) Implement a regional/watershed management program: a) control increases in runoff rates, b) prevent losses in infiltration, c) prevent runoff pollution	Coastal Management Measure	HUC/Stream Segment Addressed all of AOC		#4 1 X X X X X X X X		#7				Comments & Misc. Info.
Sedimentation/Siltation Construction Regional Struction (Phase 1) Sedimentation/Siltation Construction Regional Struction (Phase 2) Sedimentation/Siltation Construction Regional Struction (Phase 3) Sedimentation/Siltation Construction Regional Struction (Phase 3) Sedimentation/Siltation Construction Regional Struction (Phase 3)	Storm Water Standards Manual Storm Water Standards Manual	 2) Write manual 3) Identify alternative development designs/layouts that protect water quality 4) Encourage local jurisdications to adopt manual as their standards 1) Review existing manual 2) Update chapters with new content and regulations 3) Conduct workshops and site visits for consultants, developers, contractors on stormwater plan preparation and post- construction BMPs 	Action Group, MRRSWC MRRSWC Maumee RAP Urban GLC Runoff Action Group,	2005-2007	complete complete complete	management program: a) control increases in runoff rates, b) prevent losses in infiltration, c) prevent runoff pollution		all of AOC	x	x x	x x		x x x	x x		
(Phase 1) Sedimentation/Siltation Construction Regional Station/Siltation Construction Regional Station/Siltation Construction Regional Station/Siltation Construction Sedimentation/Siltation Construction Regional Station/Siltation Construction Sedimentation/Siltation Construction Regional Station/Siltation Construction Sedimentation/Siltation Construction Sedimentation/Siltation Construction Sedimentation/Siltation Construction Sedimentation/Siltation Construction Regional Station Construction Regional Station/Siltation Construction Regional Station/Siltation Construction Regional Station/Siltation Construction Regional Station/Siltation Construction Require BMI Construction	Storm Water Standards Manual Storm Water Standards Manual Storm Water Standards Manual Storm Water Standards Manual Storm Water Standards Manual	 3) Identify alternative development designs/layouts that protect water quality 4) Encourage local jurisdications to adopt manual as their standards 1) Review existing manual 2) Update chapters with new content and regulations 3) Conduct workshops and site visits for consultants, developers, contractors on stormwater plan preparation and post- construction BMPs 	Maumee RAP Urban GLC Runoff Action Group,		complete				x	x	x		x x	x	x	
Sedimentation/Siltation Construction Regional State (Phase 1) Sedimentation/Siltation Construction Regional State (Phase 1) Sedimentation/Siltation Construction Regional State (Phase 1) Sedimentation/Siltation Construction Regional State (Phase 2) Sedimentation/Siltation Construction Regional State (Phase 3) Sedimentation/Siltation Construction Regional State (Phase 3) Sedimentation/Siltation Construction Regional State (Phase 3)	Storm Water Standards Manual Storm Water Standards Manual	designs/layouts that protect water quality 4) Encourage local jurisdications to adopt manual as their standards 1) Review existing manual 2) Update chapters with new content and regulations 3) Conduct workshops and site visits for consultants, developers, contractors on stormwater plan preparation and post- construction BMPs	Maumee RAP Urban GLC Runoff Action Group,		complete				x	x	x		x	x	x	
Sedimentation/Siltation Construction Regional Stc (Phase 1) Sedimentation/Siltation Construction Regional Stc (Phase 2) Sedimentation/Siltation Construction Regional Stc (Phase 3) Sedimentation/Siltation Construction Reguinel Stc (Phase 3) Sedimentation/Siltation Construction Require BMI	Storm Water Standards Manual Storm Water Standards Manual Storm Water Standards Manual Storm Water Standards Manual	designs/layouts that protect water quality 4) Encourage local jurisdications to adopt manual as their standards 1) Review existing manual 2) Update chapters with new content and regulations 3) Conduct workshops and site visits for consultants, developers, contractors on stormwater plan preparation and post- construction BMPs	Maumee RAP Urban GLC Runoff Action Group,		complete				_		^		x		x	
(Phase 1) Sedimentation/Siltation Construction Regional Str (Phase 2) Sedimentation/Siltation Construction Regional Str (Phase 3) Sedimentation/Siltation Construction Reguine BMI	Storm Water Standards Manual Storm Water Standards Manual Storm Water Standards Manual Storm Water Standards Manual	manual as their standards 1) Review existing manual 2) Update chapters with new content and regulations 3) Conduct workshops and site visits for consultants, developers, contractors on stormwater plan preparation and post- construction BMPs	Maumee RAP Urban GLC Runoff Action Group,						х	х	х		X	х		
(Phase 2) Sedimentation/Siltation Construction Regional Str (Phase 2) Sedimentation/Siltation Construction Regional Str (Phase 2) Sedimentation/Siltation Construction Regional Str (Phase 3) Sedimentation/Siltation Construction Regional Str (Phase 3) Sedimentation/Siltation Construction Require BMI	Storm Water Standards Manual Storm Water Standards Manual Storm Water Standards Manual	 2) Update chapters with new content and regulations 3) Conduct workshops and site visits for consultants, developers, contractors on stormwater plan preparation and post- construction BMPs 	Runoff Action Group,		in progress	• • • • • • • • • • •							^		Х	
(Phase 2) Sedimentation/Siltation Construction Regional Sto (Phase 2) Sedimentation/Siltation Construction Regional Sto (Phase 3) Sedimentation/Siltation Construction Regional Sto (Phase 3) Sedimentation/Siltation Construction Require BMI	Storm Water Standards Manual	regulations 3) Conduct workshops and site visits for consultants, developers, contractors on stormwater plan preparation and post- construction BMPs		2005-2006		Completion and distribution of revised manual	Chapter 10.5; 5.7.1	all of watershed	x	x	x		x	x	x	
Sedimentation/Siltation Construction Regional Str (Phase 2) Sedimentation/Siltation Construction Regional Str (Phase 3) Sedimentation/Siltation Construction Regional Str (Phase 3)	Storm Water Standards Manual	3) Conduct workshops and site visits for consultants, developers, contractors on stormwater plan preparation and post- construction BMPs			in progress				х	х	х		х	х	x	
(Phase 3) Sedimentation/Siltation Construction Require BM				2006-2007	in progress	50 percent of consultants, developers, contractors that work in the area participate			x	x	x		x	x	x	
Sedimentation/Siltation Construction Require BMI		Maintain and update manual as needed			ongoing				Х	х	х		х	х	x	
Sedimentation/Siltation Cropland Develop note					concept		(entire watershed	X	x	x		x	x	X	
	otential project list based on Inventory Project Results				concept		(entire watershed	Х	x	x		x	x	х	
Sedimentation/Siltation Cropland Identify external	tent & benefit of conservation I other BMPs used by farmers	1) Survey SWCDs to determine extent of BMP implementation	Maumee RAP Rural LEPF, USEPA Runoff Action Group, GLNPO, OEPA 319, SWCD [Lucas, GLC Great Lakes Wood, Ottawa Co], Basin Program for Area Universities Soil Erosion and Sediment Control Sediment Control	2005-2010	concept			entire watershed	x	x	x		x	x	x	
	l other BMPs used by farmers	2) Conduct initial water sampling to determine baseline WQ			concept				x	×	x		x	x	x	
Sedimentation/Siltation Cropland Identify external	tent & benefit of conservation I other BMPs used by farmers	3) Determine best location of BMPs for optimal impact			concept				x	x	x		x	x	x	
Sedimentation/Siltation Cropland Identify external	tent & benefit of conservation I other BMPs used by farmers	4) Conduct post implementation sampling to quantify impacts			concept				x	×	x		x	x	x	
		1) Identify potential Partners	Maumee RAP Rural LEPF, USEPA Runoff Action Group, GLNPO, OEPA 319, SWCD [Lucas, GLC Great Lakes Wood, Ottawa Co] Basin Program for Soil Erosion and Sediment Control	2005-2010	concept			HUC 04100010010	x	x	x		x	x	x	
Sedimentation/Siltation Cropland Implementation	tation of Agricultural BMPs	2) Assess possible BMPs			concept				X	X	x		x	x	x	
Sedimentation/Siltation Cropland Implementation	tation of Agricultural BMPs	3) Select demonstration sites			concept				X	x	X		x	x	X	
Sedimentation/Siltation Cropland Implementation	tation of Agricultural BMPs	4) conduct land owner contact			concept				X	x	X		x	x	X	
Sedimentation/Siltation Cropland Implementat	tation of Agricultural BMPs	5) conduct public education			concept				X	x	x		x	x	X	
Sedimentation/Siltation Cropland Implementat	tation of Agricultural BMPs	6) complete project			concept				x	X	х		x	x	x	
agricultural E	al BMPs such as filter strips & i ion tillage, fertilizer/pesticide	Continue to promote and support the implementation of these programs	Ohio Lake Erie Commission USDA - NRCS SWCDs (Fulton & Lucas in Ohiol)		concept			entire watershed	x	x	x		x	x	x	
Sedimentation/Siltation Cropland Incentives and conservation	and equipment rental for ion tillage		Lucas and Wood Soil and Water Conservation Districts	ongoing	ongoing				х	x	x		x	x	x	
Sedimentation/Siltation Cropland Inventory wa acreage in c	watershed for amount of n cropland		Maumee RAP Ag Runoff Action Group, 319, NatureWorks SWCDs (Fulton & Lucas in Ohio), ODNR - SWC		concept			entire watershed	x	x	x		x	×	x	
Sedimentation/Siltation Cropland Inventory wa acreage in c		2) Convert electronic data into GIS map files			concept				x	X	х		x	x	x	
	watershed for amount of	3) Intergrate with AERIS data			concept				X	x	x		x	x	x	

										BUI C	olor Co	le: [Impai	red	Not	Impaired	Unk	nown	Not Appli	licable
Causes of Impairment (Pollutant or Stressor)	t Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed							II BUI E #10 #				nments & sc. Info.
Sedimentation/Siltation Cropland	Inventory watershed for amount of acreage in cropland	4) Determine impact on watershed and possible projects to reduce or eliminate				concept					x	x	x		x		x		x	
Sedimentation/Siltation Cropland	Reduce the impact of erosion of water quality	Educate watershed landowners of their impact on water quality and of the benefits of riparian habitat protection or restoration	Maumee RAP Ag Runoff Action Group SWCDs (Fulton & Lucas in Ohio), ODNR - SWC, Ohio EPA 319	Ohio EPA 319 ,		concept			entire watershed		x	x	x		x		x		×	
Sedimentation/Siltation where manure is sprea	Plankton Survey and Bioassay d	1) Esatblish methodology	Maumee RAP, TMACOG, Wood, Lucas, Ottawa Co., Health Depts.,University of Toledo, OEPA	LEPF, Ohio Sea Grant, USEPA, OEPA	2005-2006	concept			entire watershed		x	x	×		x		x		x	
Sedimentation/Siltation Cropland or pasture where manure is sprea	Plankton Survey and Bioassay d	2) Identify sample sites				concept			entire watershed		x	x	x		x		x		x	
Sedimentation/Siltation Cropland or pasture where manure is sprea	Plankton Survey and Bioassay d	3) Conduct sampling				concept					x	×	x		x		x		x	
Sedimentation/Siltation Cropland or pasture where manure is sprea	Plankton Survey and Bioassay d	4) Analyze data				concept					x	×	x		x		x		x	
Sedimentation/Siltation Cropland or pasture where manure is sprea	Plankton Survey and Bioassay d	5) Determine status				concept					x	x	x		x		x		x	
Sedimentation/Siltation land clearing and infillin for development	ng Incentives and equipment rental for conservation tillage		Lucas and Wood SWCDs		ongoing	ongoing					Х	Х	х	1	x		х		х	
Sedimentation/Siltation land clearing and infilli for development	ng Land use/ land cover analysis and mapping of AOC	Use remote sensing and GIS to classify major land use/land cover types	Maumee RAP, TMACOG, Lucas, Wood, Ottawa Co., University of Toledo	LEPF, USEPA GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	concept			Maumee AOC		x	x	x		x		x		x	
Sedimentation/Siltation Iand clearing and infilli for development	ng Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	 Indentify and evaluate existing wetlands using remote sensing 	University of Toledo Maumee RAP, TMACOG, Lucas Co.	OEPA 319	1999-2003	complete			portion of watershed in Luca Co	s	x	x	x		x		x		x	
Sedimentation/Siltation land clearing and infillin for development	ng Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	2) create GIS map of wetlands and potential wetlands	00.			complete					Х	x	x		x		х		х	
Sedimentation/Siltation land clearing and infillin for development						complete					х	x	x		х		х		х	
Sedimentation/Siltation land clearing and infillin for development	ng Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	 Indentify and evaluate existing wetlands using remote sensing 	Maumee RAP, TMACOG, Wood, Ottawa Co., University of Toledo	LEPF, USEPA GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	planning			portion of watershed in Woo Co	t l	x	x	x		x		x		x	
Sedimentation/Siltation land clearing and infillin	ng Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	2) create GIS map of wetlands and potential wetlands				planning					х	х	x		x		x		x	
Sedimentation/Siltation land clearing and infillin						planning					х	х	x	1	x		x		x	
Sedimentation/Siltation land clearing and infilli for development	ng Wetlands Inventory and Mapping (Phase 3) (Ottawa Co.)	 Indentify and evaluate existing wetlands using remote sensing 	Maumee RAP, TMACOG, Wood, Ottawa Co., University of Toledo	LEPF, USEPA GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	concept			portion of watershed in Ottawa Co		x	x	×		x		x		x	
Sedimentation/Siltation land clearing and infillin for development	ng Wetlands Inventory and Mapping (Phase 3) (Ottawa Co.)	e 2) create GIS map of wetlands and potential wetlands				concept					x	x	x	1	x		x		x	
	ng Wetlands Inventory and Mapping (Phase 3) (Ottawa Co.)					concept					x	x	x	1	x		x		x	
Sedimentation/Siltation Pasture	Develop potential project list based on Pasture Inventory Project Results					concept					x	x	x		x		x		x	
Sedimentation/Siltation Pasture	Identify extent & benefit of BMPs used b farmers in watershed	×	Ohio Lake Erie Commission USDA NRCS SWCDs (Fulton & Lucas in Ohio)	Ohio Lake Erie Commission USDA - NRCS SWCDs (Fulton & Lucas in Ohio, Monroe & Lenawee in MI)		concept					x	x	x		x		x		x	
Sedimentation/Siltation Pasture	Implementation of Agricultural BMPs	1) Identify potential Partners	Maumee RAP Rural Runoff Action Group SWCD [Lucas, Wood, Ottawa Co]	LEPF, USEPA	2005-2010	concept			HUC 0410001001		x	x	x		x		x		x	
Sedimentation/Siltation Pasture	Implementation of Agricultural BMPs	2) Assess possible BMPs				concept					x	x	x		x		x		x	
Sedimentation/Siltation Pasture	Implementation of Agricultural BMPs	3) Select demonstration sites				concept					x	x	x		x		x		×	
Sedimentation/Siltation Pasture	Implementation of Agricultural BMPs	4) conduct land owner contact				concept					x	X	X		x		x		X	
1		5) conduct public education	1						1											

										BUI	Color Co	ode:		Impair	ed [Not	Impaired	U	nknown		Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI #1	UI BU	JI BUI 3 #4	BUI #5	BUI #6	BUI B #7 #	UI BL 8 #9	I BUI #10	BUI 8 #11	BUI BU #12 #13	I BUI 3 #14	Comments & Misc. Info.
Sedimentation/Siltation	Pasture	Implementation of Agricultural BMPs	6) complete project			concept					X	x		х)	(х		x	
Sedimentation/Siltation	Pasture	Incentive programs for implementation or agricultural BMPs such as filter strips, manure management, pesticide management	f Continue to promote and support the implementation of these programs			concept					×	x		×	,	<		x		x	
Sedimentation/Siltation	Pasture	Inventory watershed for amount of acreage in pasture	1) Develop inventory methodology utilizing existing AERIS system and other available resources	RAP Ag Runoff U.S. ACE, Section Action Group, 319, NatureWorks SWCDs (Fulton & Lucas in Ohio), ODNR - SWC		concept			entire watershed		x	x		x)	¢		x		x	
Sedimentation/Siltation	Pasture	Inventory watershed for amount of acreage in pasture	2) Convert electronic data into GIS map			concept					x	(X		x)	(x		x	
Sedimentation/Siltation	Pasture	Inventory watershed for amount of	3) Intergrate with AERIS data			concept					x	x x		x)	(x		x	
Sedimentation/Siltation	Pasture	acreage in pasture Inventory watershed for amount of acreage in pasture	4) Determine impact on watershed and possible projects to reduce or eliminate			concept					×	x		x	,	<		x		x	
Sedimentation/Siltation	Pasture	Reduce the impact of erosion of water quality	Educate watershed landowners of their impact on water quality and of the benefits of riparian habitat protection or restoration			concept					×	x		x	,	<		x		×	
Sedimentation/Siltation	Streambanks	Collect additional data, as needed	restoration			concept			1		x	(X		x)	(x		x	
Sedimentation/Siltation	Streambanks	Define Stabilization Problem				concept					×			x				X		×	<u> </u>
Sedimentation/Siltation	Streambanks	Develop potential project list based on				concept			entire watershed		^			×				x		× ×	
Sedimentation/Siltation	Streambanks	Streambank Inventory Project Results Identify additional data needed									^	· ^		×				×	+		
Sedimentation/Siltation		Implemented project(s) from proposed				concept						(X		*	,			×	_	×	
Sedimentation/Siltation	Streambanks	list Inventory watershed for streambank		Ohio EPA, ODNR, US ACE [WRDA ??		concept			entire watershed		X	x x		X)			X		×	NOTE: ACE
Sedmentation/Siltation	Streamballiks	conditions		US F&WS, US ACE 905(b)], Ohio EPA 319		planning			entire watershed		x	. x		x)	C		x		x	recognizes & recommends use o OEPA's QHEI
Sedimentation/Siltation	Streambanks	Review previously collected data		Ohio EPA, ODNR, US ACE [WRDA ?? US F&WS, US ACE 905(b)]		concept					×	x		x	,	(x		×	
Sedimentation/Siltation	Streambanks	Streambank Tree Planting	 Identify nurseries willing to donate plants 	NRCS, SWCDs, Ohio EPA 319 Maumee RAP, TMACOG,	2006-?	concept			entire watershed		x	(X		x)	¢		x		x	
Sedimentation/Siltation	Streambanks	Streambank Tree Planting	 Locate areas in need of bank stabilization 			concept					x	x		x)	(х		x	
Sedimentation/Siltation	Streambanks	Streambank Tree Planting	3) Find receptive landowners			concept					X	x		х)	(х		x	
Sedimentation/Siltation	Streambanks	Streambank Tree Planting	4) Assist in planting			concept					X	(X		x)	(х		x	
Thermal stress/sunlight	Removal of riparian vegetation	Plankton Survey and Bioassay	1) Establish Methodology	Maumee RAP, TMACOG, Wood, Lucas, Ottawa Co., Health Depts.,University of Toledo, OEPA	2005-2006	concept			entire watershed		x	<		x	,	(×	
Thermal stress/sunlight	Removal of riparian vegetation	Plankton Survey and Bioassay	2) Identify sample sites			concept			entire watershed		x	C		x)	(x	
Thermal stress/sunlight		Plankton Survey and Bioassay	3) Conduct sampling			concept					x	(x)	(x	
Thermal stress/sunlight		Plankton Survey and Bioassay	4) Analyze data			concept					x	(x)	(x	
Thermal stress/sunlight	Removal of riparian	Plankton Survey and Bioassay	5) Determine status			concept					x	(x)	(×	
thermal stress/sunlight	vegetation riparian cooridor destruction	Wetlands Inventory and Mapping (Phas 1) (Lucas Co.)	 Indentify and evaluate existing wetlands using remote sensing 	University of Toledo, OEPA 319 Maumee RAP, TMACOG, Lucas Co.	1999-2003	complete			portion of watershed in Lucas Co	s	×			x	,	<				x	
thermal stress/sunlight		Wetlands Inventory and Mapping (Phas				complete					x	<		х)	(x	
thermal stress/sunlight		1) (Lucas Co.) Wetlands Inventory and Mapping (Phas	potential wetlands e 3) Identify restoration needs			complete					x	(х)	(x	
thermal stress/sunlight	destruction riparian cooridor destruction	1) (Lucas Co.) Wetlands Inventory and Mapping (Phas 2) (Wood Co.)	 1) Indentify and evaluate existing wetlands using remote sensing 	Maumee RAP, LEPF, USEPA TMACOG, Wood, GLNPO, OEPA 319, Ottawa Co., Ohio Sea Grant	2005-2006	planning			portion of watershed in Wood Co	E E	x	:		x	,	(×	
thermal stress/sunlight	riparian cooridor destruction	Wetlands Inventory and Mapping (Phas 2) (Wood Co.)	e 2) create GIS map of wetlands and potential wetlands	University of Toledo		planning					X	:		x)	(×	
thermal stress/sunlight	riparian cooridor	Wetlands Inventory and Mapping (Phas 2) (Wood Co.)				planning					x			х)	(x	
thermal stress/sunlight	doordorion	2) (Wood Co.) Wetlands Inventory and Mapping (Phas 3) (Ottawa Co.)	e 1) Indentify and evaluate existing wetlands using remote sensing	Maumee RAP, LEPF, USEPA TMACOG, Wood, GLNPO, OEPA 319, Ottawa Co., Ohio Sea Grant University of Toledo	2005-2006	concept			portion of watershed in Ottawa Co		x	(x	,	(x	

											BUI	Color Co	ode:	Im	paired		Not Impai	ired 🗌	Unkno	wn	Not Applicable
Causes of Impairment (Pollutant or Stressor)		Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed						JI BUI 7 #8					
thermal stress/sunlight	riparian cooridor	Wetlands Inventory and Mapping (Phase					concept					x		;	x	X				;	
thermal stress/sunlight	destruction riparian cooridor destruction	3) (Ottawa Co.) Wetlands Inventory and Mapping (Phase 3) (Ottawa Co.)	potential wetlands 3) Identify restoration needs				concept					X		;	x	x				;	<
Toxic substances	Industrial discharges (current or old)	Identify point sources		Ohio EPA	Ohio EPA		concept					x	x	;	x			х		;	
Toxic substances	Industrial discharges (current or old)	Maintain compliance with NPDES permits		Ohio EPA Permitees	Ohio EPA		concept					x	x	;	x			х		;	
Toxic substances	Industrial discharges (current or old)	NPDES permit GIS inventory (Phase 1)	1) Collect GIS coordinates for all current NPDES permits	Ohio EPA DSW	Ohio EPA	2005-07	in progress	Coodinates for all permits collected			x	X	x	;	x x		>	< X	х	x	<
Toxic substances	Industrial discharges (current or old)	NPDES permit GIS inventory (Phase 1)	2) Convert electronic data into GIS map files				in progress				x	X	x	;	x x		×	< X	х	x	<
Toxic substances	Industrial discharges (current or old)	NPDES permit GIS inventory (Phase 2)	Intergrate with AERIS data	TMACOG, Lucas County Auditor's Office	Maumee RAP		planning				x	x	x	;	x x		>	< x	x	x	(
Toxic substances	Urban Runoff	Educate public on sources/pathways					concept					Х	Х)	X			Х)	
Toxic substances	Urban Runoff	Evaluate capacity/condition of existing systems; analysis of storm water flow, thermal impacts, runoff quality, erosion and sedimentation, and groundwater recharge.					concept					×	x	;	×			x		:	c ,
Toxic substances	Urban Runoff	Evaluate impact of Phase II Stormwater regulations		Possibly Health Dept, permitted Phase 2 stormwater jurisdictions			concept					x	x	;	x			x		;	(
Toxic substances	Urban Runoff	Evaluate upstream contributions					concept					X	X)	x			X			<
Toxic substances	Urban Runoff	Give Water a Hand Campaign and educational materials	Distribute info at events, programs and presentations	Maumee RAP; Lucas, Ottawa and	OEEF; local jurisdictions	year round	ongoing					x	х)	x			х		1	<
Toxic substances	Urban Runoff	Identify illicit connections		and Wood SWCDs			concept					X	×		x	4		X			<
Toxic substances	Urban Runoff	Identify sources not addressed by existing regulations (i.e. commercial)					concept					x	x	;	x			X		;	(
Toxic substances	Urban Runoff	Identify vulnerable areas					concept					Х	X		X			X			K
Toxic substances	Urban Runoff	Implement a regional/watershed management program:	1) control increases in runoff rates, 2) prevent losses in infiltration, 3) prevent runoff pollution	SWC & other local governments, RAP Urban Runoff Action Group	LEPF, local jurisdictions		concept					x	×	;	×			×		;	c ,
Toxic substances	Urban Runoff	Performance bond/tie compliance into building permits.					concept					x	x)	x			х		3	<
Toxic substances	Urban Runoff	Provide venues for proper disposal of wastes		Lucas County Solid Waste Mgmt Distrct			concept					x	x	;	×			x		;	c I I I I I I I I I I I I I I I I I I I
Toxic substances	Urban Runoff	Provide/identify BMPs (may be based or a performance criteria) to prevent/remove pollutants					concept					x	x	;	×			x		;	C
Toxic substances	Wastewater treatment plant	Identify and assess package plant discharges	1) Locate package plants	Maumee RAP, TMACOG, Wood, Lucas, Ottawa Co., Health Depts., OEPA	LEPF, Ohio Sea Grant, USEPA, OEPA	2005-2006	concept			entire watershed		x	x	;	×			x		:	c
Toxic substances	Wastewater treatment	Identify and assess package plant discharges	2) Review NPDES permits				concept					x	x	;	x			x		;	
Toxic substances	Wastewater treatment	Identify and assess package plant discharges	3) Identify plants operating without permi	1			concept					x	x	;	×			x		;	(
Toxic substances	Wastewater treatment plant	Identify and assess package plant discharges	4) Sample adjecent streams				concept					x	x)	×			x		2	(
Toxic substances	Wastewater treatment	Identify and assess package plant discharges	5) Assess water quality impacts				concept					x	x	;	×			X		2	<

											BUI	Color C	de:	Imp	aired	No	t Impaired	u 🗌 u	Inknown		Not Applicable
Causes of Impairment (Pollutant or Stressor)		Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed											Comments & Misc. Info.
All	All	wa wa 5) res imț rep EP OE	Design watershed survey, 2) Collect ter quality data, 3) Assess terbodies, 4) Identify target conditions, Develop restoration projects,6) Select, toration scenerio, 7) Prepare olementation plan, 8) Submit TMDL port, 9) Implement TMDL (inside Ohio A), 10) Implement TMDL (outside iPA), 11) Annual validation activities, d 12) Validate water quality status	OEPA	OEPA	2003-2005	in progress				×	x x	×	x x		x	x	x	x	x	Source: OEPA
All	All	wa	Create relational database from OEPA ter resources inventory data for umee AOC	Universitry of Toledo, Maumee RAP	US EPA GLNPO	2004-2005	complete				x	x x	x	x x	x	х	x	x	x	х	
All	All		Export LE Tribs data to a GIS format				complete				х	x x	x	x x	×	х	х	х	x	х	
All	All	onl	Publish relational database and GIS line				complete				х	x x	х	x x	x	х	х	х	х	х	
All Habitat Modifications	All changing land use	GIS Water Quality database (Phase 2) Ex Create Regional Storm Water Standards	pand GIS to entire AOC	RAP Urban Runoff	Lake Erie Protection		in progress				X	X X	X	X X	X	X	X	X	X	X	
		Manual			Fund	2002	complete					×									
Habitat Modifications	changing land use	Educate developers/contractors on need and use of BMPs		Maumee RAP Urban Runoff Action Group, SWC	Ohio Environmental Education Fund, GLC	2005	planning		5.3.1; 5.3.2; 5.5.1; Chapter 10.5	all of watershed		×									
Habitat Modifications	changing land use	Implement the Phase 2 storm water management program		City of Bowling Green, portions of Wood and Ottawa county in Toledo urbanized area	local jurisdictions; additional grants if necessary	2006	ongoing					×									
Habitat Modifications	changing land use	management program oro RA reg	P manual, ODNR Rainwater manual, jional Storm Water Coalition	City of Bowling Green, portions of		2004	ongoing	stricter BMPs, ordinances that are more protective of stream health	Chapter 5			x									revision/adoption should be complete early 2005
Habitat Modifications	changing land use	Maintain and update Stormwater Standards Manual (as needed)		Maumee RAP Urban Runoff Action Group,	Ohio Environmental Education Fund,	2005	planning		5.3.1; 5.3.2; 5.5.1; Chapter 10.5	all of watershed		×									
Habitat Modifications	changing land use	Propose alternative development designs/layouts and BMPs that protect habitat and water quality				2004-2005	ongoing					×									
Habitat Modifications	changing land use	Work with new development/industries Ide			none needed	2004-2006	ongoing		5.3.1; 5.3.2			×								x	
Habitat Modifications	channelization	· · · · · · · · · · · · · · · · · · ·	monstrate a natural stream channel ywhere in watershed	ODNR, SWCDs, County Engineers	ODNR, NOAA/Coastal NPS, 319 grants	2007	planning	Increase QHEI score to 60.		all of watershed		×									
Habitat Modifications	construction	Create Regional Storm Water Standards Manual		RAP Urban Runoff Action Group, MRRSWC	Lake Erie Protection Fund	2002	complete					×									
Habitat Modifications	construction	management program oro RA reg	vise storm water regulations and tinances; may incorporate Maumee P manual, ODNR Rainwater manual, pional Storm Water Coalition	City of Bowling Green, portions of		2004	ongoing	stricter BMPs, ordinances that are more protective of stream health	Chapter 5			X									revision/adoption should be complete early 2005
Habitat Modifications	construction				none needed	2004-2006	ongoing		5.3.1; 5.3.2			×								x	
Habitat Modifications	construction	Educate developers/contractors on need and use of BMPs		Maumee RAP Urban Runoff Action Group,	Ohio Environmental Education Fund,	2005	planning		5.3.1; 5.3.2; 5.5.1; Chapter 10.5	all of watershed		×									
Habitat Modifications	construction	Implement the Phase 2 storm water management program		City of Bowling Green, portions of Wood and Ottawa county in Toledo urbanized area	local jurisdictions; additional grants if necessary	2006	ongoing					×									
Habitat Modifications	construction	Maintain and update Stormwater Standards Manual (as needed)		Maumee RAP Urban Runoff Action Group, SWC	Ohio Environmental Education Fund, GLC	2005	planning		5.3.1; 5.3.2; 5.5.1; Chapter 10.5	all of watershed		×									
Habitat Modifications	construction	Propose alternative development designs/layouts and BMPs that protect habitat and water quality				2004-2005	ongoing					×									
Habitat Modifications	removal of riparian vegetation	Adopt riparian setback ordinances in residential and urban areas					concept					×		×							

											BUI Co	lor Cod	le:	Imp	paired	<u> </u>	Not Impai	red	Unknown		Not Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI BU #1 #2										Comments & Misc. Info.
Habitat Modifications	removal of riparian vegetation	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	1) Develop scope and tasks for project				concept		8.3.1; 8.3.2; 8.3.3			x		×	(×	
Habitat Modifications	removal of riparian vegetation	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	2) Distribute RFP and hire consultants				concept					x		×	¢					x	
Habitat Modifications	removal of riparian vegetation	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500	3) Desktop review of watershed to id preliminary wetland sites				concept					x		×	¢					x	
Habitat Modifications	removal of riparian vegetation	feet of stream Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500	4) Secure property owner permission for site access for field visits				concept					x		x	(×	
Habitat Modifications	removal of riparian vegetation	feet of stream Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500	5) Conduct detailed survey of each priority site				concept					x		x	<					x	
Habitat Modifications	removal of riparian vegetation	feet of stream Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500	6) Develop detailed conceptual plans and cost estimates for restoration/enhancement of identified				concept					x		×	<					x	
Habitat Modifications	removal of riparian vegetation	feet of stream Inventory watershed for existing wetland sites and potential wetland restoration sites: focus on ribarian corridor w/in 500	wetlands 7) Distribute WIRP to interested stakeholders, agencies, etc				concept					x		×	(\square				x	
Habitat Modifications	removal of riparian vegetation	feet of stream Propose alternative development designs/layouts and BMPs that protect					concept													×	
Habitat Modifications	removal of riparian	habitat and water quality Purchase conservation easements along					concept					x		x	(H		_			
Habitat Modifications	vegetation removal of riparian	riparian corridors Re-planting program	Secure grant and identify available space				concept		5.5.1; 7.6.1			X				H					
Habitat Modifications	vegetation removal of riparian vegetation	Restore streamside vegetation on natura streams	along creeks for replanting Install trees and shrubs along river bank(s)	ODNR, SWCDs, County Engineers	ODNR, NOAA/Coastal NPS, 319 grants	2006	planning	Increase QHEI riparian metric; Increase D.O. to 5.0 mg/l avg.				х									
Habitat Modifications	streambank modifications	Determine feasibility of restoring floodplain access in limited areas			Ŭ		concept					х		x	(\square					
Habitat Modifications	streambank modifications	Identify areas of creek where stream "curves" can be re-created					planning					х				\square				x	
Habitat Modifications	streambank modifications	Identify areas of creek where stream bank stabilization is needed	Continue "walking" creek and general observations			2005	planning		5.5.1; 7.6.1			х				\square					
Habitat Modifications	streambank modifications	Work w/local cities and county to review code and incorporate environmental planning/setbacks							Chapter 5					×	(
Habitat Modifications	streambank modifications	Work with new development/industries moving into the watershed to develop strategies to minimize their impact on the creeks (for instance, storm water BMPs, setbacks, habitat buffers, etc)	Identify BMPs to recommend and literature to support it; become familiar with local storm water rules, wetland and stream mitigation rules, etc		none needed	2004-2006	ongoing		5.3.1; 5.3.2					×	(
Nutrients	Cropland or pasture where manure is spread	Develop Nutrient Management Plans	Cost share on practices to manage manure and fertilizer throughout watershed	SWCDs, OSU Extension, Fertilizer dealers	LEPF, 319 EQIP, CSP	2005	planning	Increase producer participation to 25%, Increase IBI score above 28; Increase QHEI score to at least 60. Eliminate D.E.L.T. anomalies		Throughout Packer Creek watershed		x				×		x			
nutrients	Cropland or pasture where manure is spread	Educate Horse owners on proper disposal of manure	Implement Equine Environmental Assurance and Liability Program for Fulton, Lucas and Wood Counties	LSWCD,WSWCD Ohio Livestock Coalition, Farm Bureau	Ohio Livestock Coalition, Farm Bureau, ODRN- DSWC	2006	concept				x	x		×	(x	;	< x			
Nutrients	Cropland or pasture where manure is spread	Variable rate nutrient application	Provide cost share for soil testing and GPS mapping of fields	SWCDs, OSU Extension, Fertilizer dealers	LEPF, 319 EQIP, CSP	2005	planning	Same		Throughout Packer Creek watershed		x				x		x			
Nutrients	erosion and runoff from fertilized fields	Develop or adopt existing program for Fertilizer/pesticide education/reduction for general public and commercial users					concept		5.7.1; Chapter 10.5			x									
Nutrients	erosion and runoff from fertilized fields	Provide secondary containment for storage tanks		ODA, NRCS	ODA, EQIP							x				x		x			
Nutrients	erosion and runoff from fertilized fields	Research controlled drainage projects to reduce nutrient transport during storm events	Demonstrate a controlled drainage project upstream of RM 21.2 and RM 0.2	ODNR, SWCDs, County Engineers	USDA Farm Bill, 319 grants	2006	planning	Increase QHEI score to 60. Increase D.O to 5.0 mg/l average.		RM 21.2 and 0.2		x				x		x			
Nutrients	urban runoff	periodic observations by watershed coordinator and/or other volunteers to determine if nuisance algae is present	Volunteer reports if nuisance algae is observed and its location, daytime temp, conditions, etc.		none needed		concept									x					What is "normal" and what is nuisance?
Nutrients	urban runoff	Review existing dissolved oxygen data	Determine if meets Ohio WQS or if data is lacking		none needed		concept									x					
Nutrients	urban runoff	Fertilizer/pesticide education program for general public and commercial users					concept		5.7.1; Chapter 10.5							x				x	

											BUI Co	olor Coc	le:	Imp	aired		Not Impa	aired	Unknov	own	Not Applicable
Causes of Impairment (Pollutant or Stressor)	t Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI BU #1 #2							BUI BU #10 #1		BUI BU #13 #14	
Organic Enrichment	decaying plant/animal matter	Develop or obtain educational material to deter landowners from dumping grass clippings and such into creeks	1) Research available materials				concept	# of households reached; survey of indiviudal implementation?	Chapter 10.5			x		×	:	\square				×	
Organic Enrichment	decaying plant/animal matter	Develop or obtain educational material to deter landowners from dumping grass clippings and such into creeks	2) Distribute to landowners, especially adjacent to creek				concept					x		×	:					×	
Organic Enrichment	decaying plant/animal matter	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	1) Identify additional project partners		OEEF; 319 grants; ODNR/CZM grants; foundations; local donations; cities		concept	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating	Chapter 10.5; 5.7.1	all of watershed								x		×	
Organic Enrichment	decaying plant/animal matter	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	2) Identify specific grant funding				concept											x		×	
Organic Enrichment	decaying plant/animal matter	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	3) Revise/update old SDS manual and supplies				concept											x		×	
Organic Enrichment	decaying plant/animal matter	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	4) Secure funding to kickoff project in watershed				concept									\square		x		x	
Organic Enrichment	decaying plant/animal matter	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	5) Implement project in subwatersheds				concept									\square		x		×	
Organic Enrichment	discarded litter/food waste	CYS Day	1) Establish planning team	TMACOG; various other community partners	Solicit private and public contributions, grants when available		concept	Relative to previous years: 1) tons of garbage and debris removed from area streams; 2) number of volunteers that participate; 3) # of sites/RM cleaned 4) amount of support received for planning and funding the event	Chapter 10.5			x		×	:					×	
Organic Enrichment	discarded litter/food waste	CYS Day	2) Solicit contributions and site captain support				concept					x		×	:					×	
Organic Enrichment	discarded litter/food waste	CYS Day	3) Distribute promotional materials				concept					х		×		\square				×	
Organic Enrichment	discarded litter/food	CYS Day	4) Select waterways and sites to be cleaned				concept					х		×						×	
Organic Enrichment	discarded litter/food	CYS Day	5) Conduct site captain training				concept					х		>						×	
Organic Enrichment	discarded litter/food	CYS Day	6) Hold event and appreciation picnic				concept					х		>						×	
Organic Enrichment	discarded litter/food waste	Work with local communities to encourage "adopt a stream segment" or neighborhood stewardship program					concept					x								×	
Organic Enrichment	human and animal excreta	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	1) Identify additional project partners		OEEF; 319 grants; ODNR/CZM grants; foundations; local donations; cities		concept	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating	Chapter 10.5; 5.7.1	all of watershed		x		×	:			x x		×	
Organic Enrichment	human and animal excreta	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	2) Identify specific grant funding				concept					x		×	:	\square		x x		x	
Organic Enrichment	human and animal excreta	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	3) Revise/update old SDS manual and supplies				concept					x		x	:	\square		x x		×	
Organic Enrichment	human and animal excreta	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	4) Secure funding to kickoff project in watershed				concept					x		x	:			x x		×	
Organic Enrichment	human and animal excreta	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	5) Implement project in subwatersheds				concept					x		x	:	\square		x x		×	
Organic Enrichment	human and animal excreta	Install pet waste bag/collection stations in Public access areas with educational signage	ſ				concept	# of stations installed	Chapter 10.5			x		×	c 👘			x			
Organic Enrichment	septic systems	Connect to sanitary sewer or provide centralized wastewater treatment					ongoing					Х				х					
Organic Enrichment	septic systems	Develop approved Home Sewage Treatment System (HSTS) Plans for counties in the watershed	Inventory the home sewage systems throughout the county and designate critical areas with priority for connection to sewers, installation of centralized treatment facilities or replacement with an individual on-site treatment system.	Local HDs, TMACOG, Maumee RAP committee, Ohio EPA	LEPF local sources	2005	complete	Approved county wide or watershed HSTS plan	5.6.1; 5.6.2	whole watershed		x				x					
Organic Enrichment	septic systems	Repair or replace failed home sewage treatment systems	Provide grant or loan assistance to eligible homeowners in critical HSTS areas	Local Health Departments	DEFA Linked Deposit Ioan, 319 grants	2006	planning	Eliminate discharge to surface or ground water; Increase D.O.to 5 mg/l avg; Fecal coliforms below 1000 per 100ml	r 5.6.1; 5.6.2	RM 15.6 and other critical areas throughout watershed		x		×		×					
Organic Enrichment	urban runoff	Watershed partners distribute GWAH tip cards at community events	 Distributed at County Fairs and community events. 	Counties and local iurisdictions	1	2006 - ??	ongoing		5.6.2; 5.7.1; Chapter 10.5	1	X	х	x	y							
Pathogens	Human & animal excreta	Educate Horse owners on proper disposal of manure	Implement Equine Environmental Assurance and Liability Program for Fulton, Lucas and Wood Counties	LSWCD,WSWCD Ohio Livestock Coalition, Farm Bureau	Ohio Livestock Coalition, Farm Bureau, ODRN- DSWC	2006	concept				x	x		x	:	x		x x			

											BU	Color C	ode:		Impai	red	Not	Impaire	ed 🗌	Unknown	Not Applicable
Causes of Impairment (Pollutant or Stressor)		Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed										BUI BI #12 #1	
Pathogens	human and animal excreta	Implement baseline water quality sampling program	 Implement seasonal sampling for variety of parameters at fixed, repeated locations, 2) Share data with other entities, such as UT LERC, 3) Identify problems areas and/or trends 	Ottawa, Sandusky and Wood Co. Health Depts; Ohio EPA		2006	concept	# of samples taken, # of locations sampled	Chapter 11									×			
pathogens	Septic systems	GIS Septic System Inventory (Phase 2	 Scan paper copies to create electronic files of existing septic systems 	Ottawa, Sandusky and Wood Co. Health Depts; Ohio EPA	Lake Erie Protection Fund, TMACOG, Lucas County Auditor's Office, Wood County Health Dept	2005-2007	planning		5.6.2;									x			
pathogens	Septic systems	GIS Septic System Inventory (Phase 2) 2) Convert electronic data into GIS map files			2005-2007	planning											х			
pathogens	Septic systems	GIS Septic System Inventory (Phase 2) 3) Intergrate with AERIS data			2005-2007	planning											х			
pathogens	Septic systems	GIS Septic System Inventory (Phase 2) 4) Train Health Dept personnel to input data and use GIS system			2005-2007	planning											х			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	1) Identify stream sampling locations	TMACOG, Ottawa, Sandusky, and Wood County Health Depts, Northwest Regional Sewer District	US ACE [WRDA sec. 401]	2004	complete	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage		RM 2.0								x			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	 Identify septic system dye testing locations 				complete											х			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	3) Conduct stream sampling and dye testing				complete			1				\square				x			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	 4) Prioritize areas for enforcement based on testing results 	1			complete											x			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	5) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems				complete											х			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	1) Conduct additional stream sampling and dye testing	TMACOG, Ottawa, Sandusky, and Wood County Health Depts, Northwest Regional Sewer District	WRDA 401, Ohio EPA 319	2005	concept	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage										x			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	2) Modify priority areas (if necessary)				concept											х			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	 Pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) 				concept											x			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 3)	1) Continue to sample and dye test to identify problem areas	TMACOG, Ottawa, Sandusky, and Wood County Health Depts, Northwest Regional Sewer District	WRDA 401, Ohio EPA 319	2006 - ?	concept	Sample stream sites and dye test septic systems as needed per county to reduced discharges of unmeasurable amounts of inadequately treated sewage										x			
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 3)	2) Continue to pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) until priority areas are addressed	Ottawa, Sandusky and Wood Co. Health Depts; Ohio EPA	319 grants	2007	concept											x			
Pathogens	septic systems	Develop approved Home Sewage Treatment System (HSTS) Plans for counties in the watershed	Inventory the home sewage sytems throughout the county and designate critcal areas with priority for connection to sewers, installation of centralized treatment facilities or replacement with an individual on-site treatment system.	Local HDs, TMACOG, Maumee RAP committee, Ohio EPA	LEPF local sources	2005	complete	Approved county wide or watershed HSTS plan		Throughout Packer Creek watershed	r		ĸ								
Pathogens	septic systems	Repair or replace failed home sewage treatment systems	Provide grant or loan assistance to eligible homeowners in critical HSTS areas	Local Health Departments	DEFA Linked Deposit Ioan, 319 grants	2006	planning	Eliminate discharge to surface or ground water; Increase D.O.to 5 mg/l avg; Fecal coliforms below 1000 per 100ml		RM 15.6 and other critical areas throughout watershed			ĸ								
Pathogens	urban runoff	Obtain and review current water quality data to id areas of high bacteria or nutrient loading	Request Data from Ohio EPA (TMDL report)	TMACOG, Health Depts		2005-2006	in progress											x			
Pathogens	urban runoff	Work with Health Dept to review available sediment and water data for creeks to identify if contact advisories should be posted	1) Review data with Health Dept to id problem areas	Ottawa, Sandusky and Wood Co. Health Depts; Ohio EPA	Ohio Department of Health	2005-2006	concept											x			
Pathogens	urban runoff	Work with Health Dept to review available sediment and water data for creeks to identify if contact advisories should be posted	2) Send available data to LC Health Dept for review	t			concept											x			
Pathogens	urban runoff	Work with Health Dept to review available sediment and water data for creeks to identify if contact advisories should be posted	3) Meet with L.C. Health Dept. to determine next steps (I.e additional sampling?)				concept											x			

											BUI	Color C	ode:		Impair	ed	Not	Impaired	U	nknown	1	Not Applicable
Causes of Impairment (Pollutant or Stressor)		Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI #1	BUI B #2 #	UI <mark>BUI</mark> 3 #4	BUI #5	BUI #6	BUI B		I BUI	BUI	BUI BUI #12 #13	BUI	Comments & Misc. Info.
Pesticides	urban runoff	Distribute contact information for household haz, waste disposal options and existing programs for collection					concept		5.7.1; Chapter 10.5	5	x		×									
Pesticides	urban runoff	Educational workshop for residents and other appliers (golf course staff, etc) to stress proper application and alternative management measures					concept		5.7.1; Chapter 10.5	5	×											
Pesticides	urban runoff	Survey of wildlife officials to determine if reports of tainting; if unknown by wildlife officials, survey local residents to determine if eat fish and if so, if tainted?		University; volunteer student; ODNR	unknown		concept					x									o si C h	Ask wildlife officials? Mark S says probably not- DDNR would have neard reports, but ainting is
Pesticides	urban runoff	Watershed partners distribute GWAH tip cards at community events	 Distributed at County Fairs and community events. 	Counties and local jurisdictions		2006 - ??	ongoing		5.6.2; 5.7.1; Chapter 10.5		х		x x		Х		+				S	subjective
Refuse, litter	litter	Continue/expand Sign our Streams program to increase community awareness of stream locations and increase stewardship of stream by the community (in turn, reduce dumping/aesthetic degradation)	1) Purchase signs/images from Clearwater	Maumee RAP Rural/Ag Runoff Action Group, TMACOG	OEEF; foundations; local donations; cities	3	concept	# of locations "signed"	Chapter 10.5	whole watershed									x			
Refuse, litter	litter	Continue/expand Sign our Streams program to increase community awareness of stream locations and increase stewardship of stream by the community (in turn, reduce	 Identify sign locations at visible road crossings in watershed 	Maumee RAP Rural/Ag Runoff Action Group, TMACOG	OEEF; foundations; local donations; cities	3	concept	# of locations "signed"	Chapter 10.5	whole watershed									x			
Refuse, litter	litter	dumping/aesthetic degradation) Continue/expand Sign our Streams program to increase community awareness of stream locations and increase stewardship of stream by the community (in turn, reduce dumping/aesthetic degradation)	3) Install signs	Maumee RAP Rural/Ag Runoff Action Group, TMACOG	OEEF; foundations; local donations; cities	3	concept	# of locations "signed"	Chapter 10.5	whole watershed									x			
Refuse, litter	litter	periodic observations by watershed coordinator or other volunteers to report noticeable "free froms"	enlist volunteers and discuss what to look for and report	Friends of volunteers, community members	none needed	2005-2006	concept												x			
Refuse, litter	litter	periodic observations by watershed coordinator or other volunteers to report	Throughout year, compile list of potentia CYS sites and areas that regularly have	l watershed coordinator	none needed	2004-2005	concept												x			
Refuse, litter, etc	litter	noticeable "free froms" CYS Day	litter, etc 1) Establish planning team	TMACOG; various other community partners	Solicit private and public contributions, grants when available	April - Sept (annually)	concept	Relative to previous years: 1) tons of garbage and debris removed from area streams; 2) number of volunteers that participate; 3) # of sites/RM cleaned 4) amount of support received for planning and fundin- the event	Chapter 10.5			:	<						x			
Refuse, litter, etc	litter	CYS Day	2) Solicit contributions and site captain support				concept					:	(x			
Refuse, litter, etc Refuse, litter, etc	litter litter	CYS Day CYS Day	3) Distribute promotional materials 4) Select waterways and sites to be cleaned				concept concept						((-		X X			
Refuse, litter, etc	litter	CYS Day	5) Conduct site captain training				concept												X			
Refuse, litter, etc Salinity	litter road deicing	CYS Day Implement alternative deicing products (such as corn-based products) and other	6) Hold event and appreciation picnic Begin using alternative deicing products			2005-2006	concept planning	% of salt use reduced; # of miles of road where alternative applied	5.8.4 1				(x				X		x	
Salinity	road deicing	control measures Install computerized spreaders on all salt trucks to control application rate	t				planning	# of trucks converted; % of salt use reduced	5.8.4			:	(х						х	
Salinity	road deicing	Research more environmentally-friendly road salt options; encourage cities to apply less or to use better alternatives					planning		5.8.4			:	<		x						x	
Salinity	road deicing	Sampling program for conductivity, pH, and other salinity factors during winter months	Determine if salinity is a limiting factor or concentrated pollutant leading to fish/habitat impairments	-			planning		Chapter 11			1	(x						x	
Sediment/Siltation	channelization	Modified dredging procedures, Natural stream channel and/or 2-Stage ditch	Demonstrate a natural stream channel anywhere in watershed	ODNR, SWCDs, County Engineers	ODNR, NOAA/Coastal NPS, 319 grapts	2007	planning	Increase QHEI score to 60.		Throughout Packe Creek watershed	r		c									
Sediment/Siltation	construction	Create Regional Storm Water Standards Manual	urban runoff/construction controls,	RAP Urban Runoff Action Group, MRRSWC	Lake Erie Protection Fund	2002	complete		5.3.1; 5.3.2; 5.5.1; 10.5										x		x	
Sediment/Siltation	construction	Educate developers/contractors on need and use of BMPs	setbacks, etc	MRRSWC Maumee RAP Urban Runoff Action Group	Ohio Environmental , Education Fund,	2005	planning		5.3.1; 5.3.2; 5.5.1; Chapter 10.5	all of watershed									x		x	
Sediment/Siltation	construction	Implement the Phase 2 storm water management program		SWC Cities of Bowling Green, Northwood o county	GLC local jurisdictions; r additional grants if necessary	2004	ongoing												х		×	
Sediment/Siltation	construction	Maintain and update Stormwater Standards Manual (as needed)		Maumee RAP Urban Runoff Action Group	Ohio Environmental	2005	planning		5.3.1; 5.3.2; 5.5.1; Chapter 10.5	all of watershed									x		x	

											BUI	Color C	ode:	mpaire	d	Not I	npaired	Ur	nknown		Not Applicable
Causes of Impairment (Pollutant or Stressor)	t Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed									BUI BUI #12 #13		Comments & Misc. Info.
Sediment/Siltation	construction	Propose alternative development designs/layouts and BMPs that protect habitat and water guality			none needed	2004-2005	planning)		x				×			
Sediment/Siltation	construction	Review all site plan and require pre/post construction controls for water quality, even for sites < 1 acre		Ohio EPA, TMACOG,local planning commissions			ongoing		5.3.1; 5.3.2; 5.3.3; 5.4.1; 5.4.2											х	
Sediment/Siltation	construction	Revise storm water regulations and ordinances; may incorporate Maumee RAP manual, ODNR Rainwater manual, regional Storm Water Coalition recommendations and other references					concept	stricter BMPs, ordinances that are more protective of stream health	Chapter 5											×	
Sediment/Siltation	construction	Work with new development/industries moving into the watershed to develop strategies to minimize their impact on the creeks (for instance, storm water BMPs, setbacks, habitat buffers, etc)	Identify BMPs to recommend and literature to support it; become familiar with local storm water rules, wetland and stream mitigation rules, etc	ł	none needed	2004-2006	ongoing		5.3.1; 5.3.2			>		x				x			
Sediment/Siltation	cropland	Controlled Drainage (surface and subsurface)	Demonstrate controlled drainage projects upstream of RM 15.6 and RM 21.2	ODNR, SWCDs, County Engineers	LEPF, GLC, USDA Farm Bill, 319 grants	2006	planning	Increased QHEI substrate metric score to 12.5; Increase D.O to 5.0 mg/l average; Increase ICI score above 34									x				
Sediment/Siltation	cropland	Controlled Drainage (surface and subsurface)	Demonstrate a controlled drainage project	ODNR, SWCDs, County Engineers	LEPF, GLC, USDA Farm Bill, 319 grants	2006	planning	Increase IBI score above 28; Increased QHEI substrate metric score to 12.5. Increase D.O to 5.0 mg/l average.)		x							
Sediment/Siltation	cropland	Continue to promote new conservation tillage practices with rental and equipment buydown incentives	Target additional grants from 319 and Lake Erie CREP programs to areas not currently participating	Wood, Ottawa & Sandusky SWCDs, OSU Extension, NRCS	USDA Farm Bill, 319 grants	2005	planning	Increase IBI score above 28; Increased QHEI substrate metric score to 12.5.)									
Sediment/Siltation	cropland	Continue to promote new conservation tillage practices with rental and equipment buydown incentives	Target additional grants from 319 and Lake Erie CREP programs to areas not currently participating	Wood, Ottawa & Sandusky SWCDs, OSU Extension, NRCS	USDA Farm Bill, 319 grants	2005	ongoing	Increase IBI score above 28; Increased QHEI substrate metric score to 12.5.	3.3.1)		х							
Sediment/Siltation	cropland	Promote cover crops in field rotations when conventional tillage is occasionally done	Target additional grants from 319 and Lake Erie CREP programs to areas not currently participating	SWCDs	USDA Farm Bill, 319 grants	2005	planning)									
Sediment/Siltation	cropland	Promote cover crops in field rotations when conventional tillage is occasionally done	Target additional grants from 319 and Lake Erie CREP programs to areas not currently participating	SWCDs	USDA Farm Bill, 319 grants	2005	ongoing		3.3.1			>	(х							
Sediment/Siltation	cropland	Toussaint Improvement Incentive Program (Phase 2)	1) Install 2194 acres of Conservation tillage	Wood, Ottawa & Sandusky SWCDs, OSU Extension, NRCS	Toussaint 319 Grant #1, Toussaint 319 Grant #2, Lake Erie Buffer Program, Lake Erie CREP	2000 - 2004	complete	Increase IBI score above 28; Increase QHEI score to at least 60. Eliminate D.E.L.T. anomalies		all of Packer Creek watershed		>									
Sediment/Siltation	cropland	Toussaint Improvement Incentive Program (Phase 2)	2) Install 240,381 ft (47 miles) of filter strips and 34.8 acres of concentrated flow filter areas.				complete	Increase IBI score above 28; Increased QHEI substrate metric score to 12.5.	:	all of Packer Creek watershed	x										
Sediment/Siltation	cropland	Toussaint Improvement Incentive Program (Phase 2)	1) Install 2194 acres of Conservation tillage	Wood, Ottawa & Sandusky SWCDs, OSU Extension, NRCS	Toussaint 319 Grant #1, Toussaint 319 Grant #2, Lake Erie Buffer Program, Lake Erie CREP	2000 - 2004	complete	Increase IBI score above 28; Increase QHEI score to at least 60. Eliminate D.E.L.T. anomalies		all of Toussaint and Packer watersheds		>		x							also includes all of Packer Creek Watershed
Sediment/Siltation	cropland	Toussaint Improvement Incentive Program (Phase 2)	2) Install 240,381 ft (47 miles) of filter strips and 34.8 acres of concentrated flow filter areas.				complete	Increase IBI score above 28; Increased QHEI substrate metric score to 12.5.		all of Toussaint and Packer watersheds		>	:	х							also includes all of Packer Creek Watershed
Sediment/Siltation	roads	Create Regional Storm Water Standards Manual	manual includes recommended BMPs for urban runoff/construction controls, setbacks, etc	RAP Urban Runoff Action Group, MRRSWC	Lake Erie Protection Fund	2002	complete		5.3.1; 5.3.2; 5.5.1; 10.5			>	:	х							
Sediment/Siltation	roads	Educate developers/contractors on need and use of BMPs		Maumee RAP Rural/Ag Runoff Action Group, SWCDs	Ohio Environmental Education Fund, GLC	2006	planning		5.3.1; 5.3.2; 5.5.1; Chapter 10.5	all of watershed)		x							
Sediment/Siltation	roads	Implement alternative deicing products (such as corn-based products) and other control measures					concept	% of salt use reduced; # of miles of road where alternative applied	5.8.4					×							
Sediment/Siltation	roads	Implement the Phase 2 storm water management program		Cities of Bowling Green, Northwood of county	local jurisdictions; r additional grants if necessary	2004	ongoing		5.3.1; 5.3.2; 5.5.1; Chapter 10.5	all of watershed		>		х							
Sediment/Siltation	roads	Install computerized spreaders on all salt trucks to control application rate		City, county and state highway depts	, i i i i i i i i i i i i i i i i i i i		concept	# of trucks converted; % of salt use reduced	5.8.4					x							
Sediment/Siltation	roads	Maintain and update Stormwater Standards Manual (as needed)		Maumee RAP Rural/Ag Runoff Action Group, SWCDs	Ohio Environmental Education Fund, GLC	2005	planning		5.3.1; 5.3.2; 5.5.1; Chapter 10.5	all of watershed)		x							
Sediment/Siltation	roads	Review all site plans and require pre/pos construction controls for water quality, even for sites < 1 acre		Ohio EPA, TMACOG,local planning commissions			ongoing		5.3.1; 5.3.2; 5.3.3; 5.4.1; 5.4.2					х							

										BUI	Color C	ode:	I	Impaire	d	Not Ir	mpaired	ı 🗌 i	Unknown		Not Applicable
Causes of Impairment (Pollutant or Stressor)	t Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed										BUI BUI #12 #13		Comments & Misc. Info.
Sediment/Siltation	roads	Revise storm water regulations and ordinances; may incorporate Maumee RAP manual, ODNR Rainwater manual, regional Storm Water Coalition recommendations and other references		Ohio EPA, TMACOG, City of Bowling Green, portions of Wood and Ottawa county in Toledo urbanized area		concept	stricter BMPs, ordinances that are more protective of stream health	Chapter 5						x							
Sediment/Siltation	streambanks	determine feasibility of restoring floodplain access in limited areas				planning											x				
Sediment/Siltation	streambanks (eroding)		1) Develop scope and tasks for project	Ohio EPA Section 319 grant, ODNR- 319, ODNR-Division of Wildlife, Ducks Unlimited	2006	concept	Increased QHEI scores (Steam channel metric), Nutrient reduction	8.3.1; 8.3.2; 8.3.3												x	
Sediment/Siltation	streambanks (eroding)		2) Desktop review of watershed to id preliminary wetland sites	Ohio EPA Section 319 grant, ODNR- 319, ODNR-Division CZM grant of Wildlife, Ducks Unlimited	2006	concept	Increased QHEI scores (Steam channel metric), Nutrient reduction	8.3.1; 8.3.2; 8.3.3												×	
Sediment/Siltation	streambanks (eroding)		3) Secure property owner permission for site access for field visits	Ohio EPA Section 319 grant, ODNR- 319, ODNR-Division CZM grant of Wildlife, Ducks Unlimited	2006	concept	Increased QHEI scores (Steam channel metric), Nutrient reduction	8.3.1; 8.3.2; 8.3.3												×	
Sediment/Siltation	streambanks (eroding)	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	4) Conduct detailed survey of each priority site	Ohio EPA Section 319 grant, ODNR- 319, ODNR-Division CZM grant of Wildlife, Ducks Unlimited	2006	concept	Increased QHEI scores (Steam channel metric), Nutrient reduction	8.3.1; 8.3.2; 8.3.3												×	
Sediment/Siltation	streambanks (eroding)	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	wetlands	319, ODNR-Division CZM grant of Wildlife, Ducks Unlimited	2006	concept	Increased QHEI scores (Steam channel metric), Nutrient reduction	8.3.1; 8.3.2; 8.3.3												×	
Sediment/Siltation	streambanks (eroding)	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	6) Find funding source(s)	Ohio EPA Section 319 grant, ODNR- 319, ODNR-Division CZM grant of Wildlife, Ducks Unlimited	2006	concept	Increased QHEI scores (Steam channel metric), Nutrient reduction	8.3.1; 8.3.2; 8.3.3)			x						×	
Sediment/Siltation	streambanks eroding	Identify areas of creek where stream bank stabilization is needed	Continue "walking" creek and general observations	TMACOG and or volunteers		concept		7.6.1; 8.3.3												X	
Thermal Stress	Riparian vegetation removal	Restore streamside vegetation on natura streams	a Install trees and shrubs along river bank(s) upstream of RM 13.9	ODNR, SWCDs, ODNR, County Engineers NOAA/Coastal NPS, 319 grants	2006	planning	Increase QHEI riparian metric; Increase D.O. to 5.0 mg/l avg.	7.6.1; 8.3.3			>										
toxic substances	historical	Work with EPA and Ohio Dept of Health to review available sediment and water data for creeks to identify if contact advisories should be posted	Have ODH review available data and identify if more current sampling is needed	Ottawa, Sandusky and Wood Co. Health Depts; Ohio EPA		concept											x				
toxic substances	landfills (current or old)	Implement baseline water quality sampling program	 Implement seasonal sampling for variety of parameters at fixed, repeated locations, 2) Share data with other entities, such as UT LERC, 3) Identify problem areas and/or trends 		2006	concept	# of samples taken, # of locations sampled	Chapter 11									×				
toxic substances	urban runoff	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	1) Identify additional project partners	OEEF; 319 grants; ODNR/CZM grants; foundations; local donations; cities		concept	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating	Chapter 10.5; 5.7.1	all of watershed									×			
toxic substances	urban runoff	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	2) Identify specific grant funding			concept												x			
toxic substances	urban runoff	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	3) Revise/update old SDS manual and supplies			concept												x			
toxic substances	urban runoff	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	4) Secure funding to kickoff project in watershed			concept												x			
toxic substances	urban runoff	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	5) Implement project in subwatersheds			concept												x			
toxic substances (e.g. heavy metals, PCBs, etc)	industrial discharges	Map of NPDES locations; basic information on type of discharge, frequency of use, permit parameters, etc.	Continue to add new information to GIS inventory	university volunteer or graduate student in GIS		concept				×											
toxic substances (e.g. heavy metals, PCBs, etc)	urban runoff	Conduct survey of local residents to determine if fish and/or turtles caught in creek are eaten	Obtain funding or student volunteer	University of Toledo; ? Bowling Green State U		concept				x											
toxic substances (free from)	urban runoff	periodic observations by watershed coordinator or other volunteers to report noticeable "free froms"	enlist volunteers and discuss what to look for and report	Partnership none needed members, Friends of volunteers, community members	2006	concept												x			
Toxic Substances - Heavy metals	Undetermined source of Strontium	biology and biomagnification				planning															
Toxic Substances - Petroleum	Fuel and Ag chemical storage business	Provide secondary containment for storage tanks		ODA, NRCS ODA, EQIP		ongoing					>			x							

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Indicator/Environmental	Coastal Management Measure	HUC/Stream Segment Addressed			JI BUI E 3 #4 ;									Comments & Misc. Info.
All	All	Conduct a TMDL	 Design watershed survey, 2) Collect water quality data, 3) Assess waterbodies, 4) Identify target conditions, 5) Develop restoration projects, 6) Select restoration scenerio, 7) Prepare implementation plan, 8) Submit TMDL report, 9) Implement TMDL (inside Ohio EPA), 10) Implement TMDL (outside OEPA), 11) Annual validation activities, and 12) Validate water quality status 	OEPA	OEPA	2003-2005	in progress				×	××	×	×	¢	x		x	××		X So	urce: OEPA
All	All	GIS Water Quality database (Phase 1)	1) Create relational database from OEPA water resources inventory data for Maumee AOC	Universitry of Toledo Maumee RAP	, US EPA GLNPO	2004-2005	complete				x	x x	x	x x	x x	х		x >	x x		х	
		GIS Water Quality database (Phase 1)	2) Export LE Tribs data to a GIS format				complete				х	x x	х	x ×	x x	х		x >	x x		x	
All	All	GIS Water Quality database (Phase 1)	3) Publish relational database and GIS online				complete				х	x x	х	x x	х х	х		x >	x x		х	
	All	GIS Water Quality database (Phase 2) Create Regional Storm Water Standards	Expand GIS to entire AOC	DAD Listers Domest	Laba Eria Drata stian		in progress				Х	XX	X	XX	X X	Х		X	(X		Х	
Habitat Modifications	changing land use	Manual		RAP Urban Runoff Action Group, MRRSWC	Lake Erie Protection Fund	2002	complete					×										
Habitat Modifications	changing land use	Educate developers/contractors on need and use of BMPs		Maumee RAP Urbar Runoff Action Group	Ohio Environmental , Education Fund,	2005	planning		5.3.1; 5.3.2; 5.5.1; Chapter 10.5	all of watershed		×										
Habitat Modifications	changing land use	Implement the Phase 2 storm water management program		City of Bowling Green, portions of Wood and Ottawa county in Toledo urbanized area	local jurisdictions; additional grants if necessary	2006-	ongoing					×										
Habitat Modifications	changing land use	Implement the Phase 2 storm water management program	Review all site plan and require pre/post construction controls for water quality, even for sites < 1 acre	City of Bowling Green, portions of Wood and Ottawa county in Toledo urbanized area		2004-	ongoing		5.3.1; 5.3.2; 5.3.3; 5.4.1; 5.4.2			×										
Habitat Modifications	changing land use	Implement the Phase 2 storm water management program	Revise storm water regulations and ordinances; may incorporate Maumee RAP manual, ODNR Rainwater manual, regional Storm Water Coalition recommendations and other references	City of Bowling Green, portions of Wood and Ottawa county in Toledo urbanized area		2004	ongoing	stricter BMPs, ordinances that are more protective of stream health	Chapter 5			×										
Habitat Modifications	changing land use	Maintain and update Stormwater Standards Manual (as needed)		Maumee RAP Urban Runoff Action Group	Ohio Environmental , Education Fund,	2005	planning		5.3.1; 5.3.2; 5.5.1; Chapter 10.5	all of watershed		×										
Habitat Modifications	changing land use	Propose alternative development designs/layouts and BMPs that protect habitat and water quality		000		2004-2005	ongoing					×										
Habitat Modifications	changing land use	Work with new development/industries moving into the watershed to develop strategies to minimize their impact on the creeks (for instance, storm water BMPs, setbacks, habitat buffers, etc)	Identify BMPs to recommend and literature to support it; become familiar with local storm water rules, wetland and stream mitigation rules, etc		none needed	2004-2006	ongoing		5.3.1; 5.3.2			×									x	
Habitat Modifications	Channelization	Modified dredging procedures, Natural stream channel and/or 2-Stage ditch design	Demonstrate a natural stream channel anywhere in watershed	ODNR, SWCDs, County Engineers	ODNR, NOAA/Coastal NPS, 319 grants	2007	planning	Increase QHEI score to 60.	7.4.1; 7.4.2	RM 36.5 13.9 4.7		×		>	K							
Habitat Modifications	construction	Create Regional Storm Water Standards Manual	5 	RAP Urban Runoff Action Group, MRRSWC	Lake Erie Protection Fund	2002	complete					×										
Habitat Modifications	construction	Educate developers/contractors on need and use of BMPs		Maumee RAP Urbar Runoff Action Group	Ohio Environmental , Education Fund,	2005	planning		5.3.1; 5.3.2; 5.5.1; Chapter 10.5	all of watershed		×										
Habitat Modifications	construction	Implement the Phase 2 storm water management program		City of Bowling Green, portions of Wood and Ottawa county in Toledo urbanized area	local jurisdictions; additional grants if necessary	2006-	ongoing					×										
Habitat Modifications	construction	Implement the Phase 2 storm water management program	even for sites < 1 acre	City of Bowling Green, portions of Wood and Ottawa county in Toledo urbanized area		2004-	ongoing		5.3.1; 5.3.2; 5.3.3; 5.4.1; 5.4.2			×										
Habitat Modifications	construction	Implement the Phase 2 storm water management program	Revise storm water regulations and ordinances; may incorporate Maumee RAP manual, ODNR Rainwater manual, regional Storm Water Coalition recommendations and other references	City of Bowling Green, portions of Wood and Ottawa county in Toledo		2004	ongoing	stricter BMPs, ordinances that are more protective of stream health	Chapter 5			×										
Habitat Modifications	construction	Maintain and update Stormwater Standards Manual (as needed)		Maumee RAP Urbar Runoff Action Group SWC	Ohio Environmental , Education Fund, GLC	2005	planning		5.3.1; 5.3.2; 5.5.1; Chapter 10.5	all of watershed		×										
Habitat Modifications	construction	Propose alternative development designs/layouts and BMPs that protect habitat and water quality				2004-2005	ongoing					×										

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		1		1						вого		Jue.	Imp	Daired		ot impair	ed	Unknown		lot Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding	Source(s) Timelin	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed									BUI BU #12 #13		Comments & Misc. Info.
Habitat Modifications	construction	Work with new development/industries moving into the watershed to develop strategies to minimize their impact on the creeks (for instance, storm water BMPs, setbacks, habitat buffers, etc)	Identify BMPs to recommend and literature to support it; become familiar with local storm water rules, wetland and stream mitigation rules, etc	none nee	ded 2004-200	6 ongoing		5.3.1; 5.3.2			X								x	
Habitat Modifications	removal of riparian vegetation	Adopt riparian setback ordinances in residential and urban areas				concept					×	:	>	()						
Habitat Modifications	removal of riparian	Inventory watershed for existing wetland	1) Develop scope and tasks for project					8.3.1; 8.3.2; 8.3.3												
	vegetation	sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream				concept					×		>	(×	
Habitat Modifications	removal of riparian vegetation	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	2) Distribute RFP and hire consultants			concept					×		>	(×	
Habitat Modifications	removal of riparian vegetation	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	 Desktop review of watershed to id preliminary wetland sites 			concept					×	:	>	(×	
Habitat Modifications	removal of riparian vegetation	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	 Secure property owner permission for site access for field visits 			concept					×		>	(×	
Habitat Modifications	removal of riparian vegetation	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	5) Conduct detailed survey of each priority site			concept					×		>	(×	
Habitat Modifications	removal of riparian vegetation	Inventory watershed for existing wetland sites and potential wetland restoration	6) Develop detailed conceptual plans and cost estimates for restoration/enhancement of identified wetlands			concept					×		>	(×	
Habitat Modifications	removal of riparian vegetation	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	7) Distribute WIRP to interested stakeholders, agencies, etc			concept					×		>	(×	
Habitat Modifications	removal of riparian vegetation	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream				concept					×		>	(x	
Habitat Modifications	removal of riparian vegetation	Propose alternative development designs/layouts and BMPs that protect habitat and water quality				concept													×	
Habitat Modifications	removal of riparian	Purchase conservation easements along riparian corridors	1			concept					×	:	>	(
Habitat Modifications	removal of riparian vegetation	Re-planting program	Secure grant and identify available space along creeks for replanting	3		concept		5.5.1; 7.6.1			×	:								
Habitat Modifications	removal of Riparian vegetation	Restore streamside vegetation on natura streams	Install trees and shrubs along river bank(s) upstream of RM 12.6	ODNR, SWCDs, ODNR, County Engineers NOAA/Co	pastal NPS, 2006	planning	Increase QHEI riparian metric; Increase D.O. to 5.0 mg/l avg.	7.6.1; 8.3.3	RM 12.6 Stange R (2003)	d	×	:	>	(
Habitat Modifications	streambank modifications	Determine feasibility of restoring		oro gran		concept					×		>	(
Habitat Modifications	streambank	floodplain access in limited areas Identify areas of creek where stream									×								x	
Habitat Modifications	modifications streambank	"curves" can be re-created Identify areas of creek where stream	Continue "walking" creek and general		2005			5.5.1; 7.6.1						_						
Habitat Modifications	modifications streambank	bank stabilization is needed Work w/local cities and county to review	observations	county planning	2005			Chapter 5			^									
	modifications	code and incorporate environmental planning/setbacks	ldesife DMDs to second and	commissions, TMACOG	ded	concept							>	(
Habitat Modifications	streambank modifications	Work with new development/industries moving into the watershed to develop strategies to minimize their impact on the creeks (for instance, storm water BMPs, setbacks, habitat buffers, etc)	Identify BMPs to recommend and literature to support it; become familiar with local storm water rules, wetland and stream mitigation rules, etc	none nee	2004-200	6 ongoing		5.3.1; 5.3.2					>	(
Nutrients	Cropland or pasture where manure is spread	Develop Nutrient Management Plans	Cost share on practices to manage manure and fertilizer throughout watershed	SWCDs, OSU LEPF, 31 Extension, Fertilizer CSP dealers	9 EQIP, 2005	planning	Increase producer participation to 25%, Increase IBI score above 28; Increase QHEI score to at least 60. Eliminate D.E.L.1 anomalies	e	all of Toussaint River Watershed		×		>	(x		x			
nutrients	Cropland or pasture where manure is spread		Implement Equine Environmental Assurance and Liability Program for Fulton, Lucas and Wood Counties	LSWCD,WSWCD Ohio Live Ohio Livestock Coalition, Coalition, Farm Bureau, C Bureau DSWC	Farm 2006 DDRN-	concept				x	×		>	(x	×	x			
Nutrients	Cropland or pasture where manure is spread	Variable rate nutrient application	Provide cost share for soil testing and GPS mapping of fields	SWCDs, OSU LEPF, 31 Extension, Fertilizer CSP dealers	9 EQIP, 2005	planning	Same	3.3.4	Toussaint RM 36.5 Rusha Ck RM 5.0, RM 3.0		×		>	(x		x			
Nutrients	erosion and runoff from fertilized fields	Develop or adopt existing program for Fertilizer/pesticide education/reduction for general public and commercial users				concept		5.7.1; Chapter 10.	5		×									
Nutrients	erosion and runoff from fertilized fields	periodic observations by watershed coordinator and/or other volunteers to determine if nuisance algae is present	Volunteer reports if nuisance algae is observed and its location, daytime temp, conditions, etc.	none nee	ded	concept									x				ar	/hat is "normal" nd what is uisance?

											BUI	Color C	ode:	lr	mpaired	d 🚺	Not	Impaire	3 🗌	Unknown	1 [Not Applicable
Causes of Impairment (Pollutant or Stressor)		Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed				BUI	BUI E	виі ви	л ви	JI BUI	BUI	BUI B	UI BUI 13 #14	Comments &
Nutrients	erosion and runoff from fertilized fields	Provide secondary containment for storage tanks		ODA, NRCS,	ODA, EQIP	2007	planning			all of Toussaint River Watershed		;	:		х	x			x			
Nutrients	erosion and runoff from fertilized fields	Research controlled drainage projects to reduce nutrient transport during storm events	Demonstrate a controlled drainage project upstream of RM 36.5 and 28.5	ODNR, SWCDs, County Engineers	USDA Farm Bill, 319 grants	2006	planning	Increase QHEI score to 60. Increase D.O to 5.0 mg/l average.	3.3.1; 3.3.2; 3.3.3	RM 14@ Graytown Rd; RM 28.5@ Lemoyne Rd; RM 36.5@ Poe Rd (2003)		;	:		x	x			×			
Nutrients	erosion and runoff from fertilized fields	Review existing dissolved oxygen data	Determine if meets Ohio WQS or if data is lacking		none needed		concept			(====)						x						
Nutrients	urban runoff	Fertilizer/pesticide education program for general public and commercial users	<u> </u>				concept		5.7.1; Chapter 10.5	5						×					×	
Nutrients	urban runoff	periodic observations by watershed coordinator and/or other volunteers to determine if nuisance algae is present	Volunteer reports if nuisance algae is observed and its location, daytime temp, conditions, etc.		none needed		concept									×						What is "normal" and what is nuisance?
Nutrients	urban runoff	Review existing dissolved oxygen data	Determine if meets Ohio WQS or if data		none needed		concept								\neg	×			\vdash			nuisance?
Nutrients	Wastewater treatment plants	Eliminate CSOs in Luckey	is lacking Develop CSO elimination plan and schedule or a long term control plan for CSOs	Village of Luckey, Ohio EPA	DEFA, WPCLF	2006	ongoing	NPDES permit		RM 28.6		;	:									
Nutrients	Wastewater treatment	Upgrade Luckey WWTP	Develop general plan for wastewater	Village of Luckey,	DEFA, WPCLF	2006	ongoing	NPDES permit		RM 28.6)	:						\square			
Organic Enrichment	plants decaying plant/animal matter	Develop or obtain educational material to deter landowners from dumping grass	treatment plant improvements 1) Research available materials	Ohio EPA		2006?	concept	# of households reached; survey of indiviudal implementation?	Chapter 10.5			;			x						x	
Organic Enrichment	decaying plant/animal matter	clippings and such into creeks Develop or obtain educational material to deter landowners from dumping grass	2) Distribute to landowners, especially adjacent to creek			2006?	concept					;	:		x						×	
Organic Enrichment	decaying plant/animal matter	clippings and such into creeks Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	1) Identify additional project partners		OEEF; 319 grants; ODNR/CZM grants; foundations; local donations: cities		concept	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating	Chapter 10.5; 5.7.	all of watershed									x		×	
Organic Enrichment	decaying plant/animal matter	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	2) Identify specific grant funding				concept	participating											x		x	
Organic Enrichment	decaying plant/animal matter	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	3) Revise/update old SDS manual and supplies				concept												x		x	
Organic Enrichment	decaying plant/animal matter	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	4) Secure funding to kickoff project in watershed				concept												x		x	
Organic Enrichment	decaying plant/animal matter	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	5) Implement project in subwatersheds				concept												x		×	
Organic Enrichment	discarded litter/food waste	CYS Day	1) Establish planning team	TMACOG; various other community partners	Solicit private and public contributions, grants when available		concept	Relative to previous years: 1) tons of garbage and debris removed from area streams; 2) number of volunteers that participate; 3) # of sites/RM cleaned 4) amount of support received for planning and funding the event	Chapter 10.5			;	:		x						x	
Organic Enrichment	discarded litter/food	CYS Day	2) Solicit contributions and site captain support				concept					;	:		x						x	
Organic Enrichment	discarded litter/food	CYS Day	3) Distribute promotional materials				concept			1		;			x						x	<u> </u>
Organic Enrichment	discarded litter/food	CYS Day	4) Select waterways and sites to be cleaned		1		concept			1		;			x						x	<u> </u>
Organic Enrichment	discarded litter/food	CYS Day	5) Conduct site captain training				concept		1	1		;			x						x	<u> </u>
Organic Enrichment	discarded litter/food	CYS Day	6) Hold event and appreciation picnic				concept			1		;			x						x	<u> </u>
Organic Enrichment	discarded litter/food waste	Work with local communities to encourage "adopt a stream segment" or neighborhood stewardship program					concept					;			x						×	
Organic Enrichment	human and animal excreta	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	1) Identify additional project partners		OEEF; 319 grants; ODNR/CZM grants; foundations; local donations; cities		concept	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating	Chapter 10.5; 5.7.	all of watershed		;	:		x			x	x		×	
Organic Enrichment	human and animal excreta	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	2) Identify specific grant funding				concept					;			x			x	x		×	
Organic Enrichment	human and animal excreta	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	3) Revise/update old SDS manual and supplies				concept					;			x			x	x		×	
Organic Enrichment	human and animal excreta	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	4) Secure funding to kickoff project in watershed				concept					;			x			x	x		×	
Organic Enrichment	human and animal excreta	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	5) Implement project in subwatersheds				concept					;			x			x	x		×	

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed	BUI #1	BUI E	BUI B #3 #	BUI BU #4 #5	I BUI #6	BUI E #7 ;	8UI B #8 #	UI BU 9 #10	I BUI) #11	BUI BU #12 #1:	BUI #14	Comments & Misc. Info.
Organic Enrichment	human and animal excreta	Install pet waste bag/collection stations i Public access areas with educational signage	r			2006-2007	concept	# of stations installed	Chapter 10.5				x		x			x				
Organic Enrichment	urban runoff	Watershed partners distribute GWAH tip cards at community events	 Distributed at County Fairs and community events. 	Counties and local jurisdictions		2006 - ??	ongoing		5.6.2; 5.7.1; Chapter 10.5		Х		X	Х	Х							
Organic Enrichment/Low D.O.	failed septic systems	Connect to sanitary sewer or provide centralized wastewater treatment					ongoing						Х				х					
Organic Enrichment/Low D.O.	failed septic systems	Develop approved Home Sewage Treatment System (HSTS) Plans for counties in the watershed	Inventory the home sewage systems throughout the county and designate critical areas with priority for connection to sewers, installation of centralized treatment facilities or replacement with an individual on-site treatment system.	Local HDs, TMACOG, Maumee RAP committee, Ohio EPA	LEPF local sources	2005	complete	Approved county wide or watershed HSTS plan	5.6.1; 5.6.2	whole watershed			x		x							
Organic Enrichment/Low D.O.	failed septic systems	Repair or replace failed home sewage treatment systems	Provide grant or loan assistance to eligible homeowners in critical HSTS areas	Local Health Departments	DEFA Linked Deposit loan, 319 grants	2006	ongoing	Eliminate discharge to surface or ground water; Increase D.O.to 5 mg/I avg; Fecal coliforms below 1000 per 100ml	5.6.1; 5.6.2	RM 36.5, 12.5			х		х		x					
Organic Enrichment/Low D.O.	Wastewater treatment plants	Eliminate CSOs in Luckey	Develop CSO elimination plan and schedule, or a long term control plan for CSOs	Village, Ohio EPA	DEFA, WPCLF		ongoing	NPDES permit		RM 28.6 (ditch along Luckey road)			х									
Organic Enrichment/Low D.O.	Wastewater treatment plants	Upgrade Luckey WWTP	Develop general plan for wastewater treatment plant improvements	Village, Ohio EPA	DEFA, WPCLF		ongoing	NPDES permit		RM 28.6			х									
Pathogens	Human & animal excreta	Educate Horse owners on proper disposal of manure	Implement Equine Environmental Assurance and Liability Program for Fulton, Lucas and Wood Counties	LSWCD,WSWCD Ohio Livestock Coalition, Farm Bureau	Ohio Livestock Coalition, Farm Bureau, ODRN- DSWC	2006	concept				x		x		x		x	x	x			
Pathogens	Human and animal excreta	Implement baseline water quality sampling program	1) Implement seasonal sampling for variety of parameters at fixed, repeated locations, 2) Share data with other entities, such as UT LERC, 3) Identify problems areas and/or trends	Ottawa, Sandusky and Wood Co. Health Depts; Ohio EPA		2006	concept	# of samples taken, # of locations sampled	Chapter 11									x				
Pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	 Scan paper copies to create electronic files of existing septic systems 	TMACOG, Ottawa, Sandusky, and Wood County Health Depts, Northwest Regional Sewer District	LEPF, TMACOG, Lucas County h Auditor's Office, Wood County Health Dept	2005-2007	planning		5.6.2;									x				
Pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	2) Convert electronic data into GIS map files	Diotriot			planning											x				
Pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	3) Intergrate with AERIS data				planning											х				
Pathogens	Septic systems	GIS Septic System Inventory (Phase 2)	4) Train Health Dept personnel to input data and use GIS system				planning											х				
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	1) Identify stream sampling locations	TMACOG, Ottawa, Sandusky, and Wood County Health Depts, Northwest Regional Sewer District	US ACE [WRDA sec. 401] h	2004	complete	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage		RM 2.0								x				
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	2) Identify septic system dye testing locations				complete											х				
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	3) Conduct stream sampling and dye testing				complete											х				
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	 Prioritize areas for enforcement based on testing results 	I			complete											х				
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 1)	5) Pursue enforcement requiring upgrades or replacement of failed or inadequate systems				complete											x				
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	1) Conduct additional stream sampling and dye testing	TMACOG, Ottawa, Sandusky, and Wood County Health Depts, Northwest Regional Sewer District	WRDA 401, Ohio EPA 319 h	2005	concept	Sample 50 stream sites and dye test 100 septic systems per county to reduced discharges of unmeasurable amounts of inadequately treated sewage										x				
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	2) Modify priority areas (if necessary)				concept			<u> </u>								×				
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 2)	 Pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) 				concept											x				
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 3)	1) Continue to sample and dye test to identify problem areas	TMACOG, Ottawa, Sandusky, and Wood County Health Depts, Northwest Regional Sewer District	WRDA 401, Ohio EPA 319 h	2006 - ?	concept	Sample stream sites and dye test septic systems as needed per county to reduced discharges of unmeasurable amounts of inadequately treated sewage										x				
Pathogens	Septic systems	Stream and Septic System Sampling Project (Phase 3)	2) Continue to pursue enforcement requiring upgrades or replacement of failed or inadequate systems with cost share incentives (if available) until priority areas are addressed	Ottawa, Sandusky and Wood Co. Health Depts; Ohio EPA	319 grants	2007	concept											x				

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Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed					JI BUI E		JI BUI	BUI	BUI BUI #12 #13	BUI Co	comments & Misc. Info.
Pathogens	septic systems	Develop approved Home Sewage Treatment System (HSTS) Plans for counties in the watershed	Inventory the home sewage systems throughout the county and designate critical areas with priority for connection to sewers, installation of centralized treatment facilities or replacement with an individual on-site treatment system.	Local HDs, TMACOG, Maumee RAP committee, Ohio EPA	LEPF local sources	2005	planning	Approved county wide or watershed HSTS plan	5.6.1; 5.6.2	whole watershed							x				
Pathogens	septic systems	Repair or replace failed home sewage treatment systems	Provide grant or loan assistance to eligible homeowners in critical HSTS areas	Local Health Departments	DEFA Linked Deposit Ioan, 319 grants	2006	planning	Eliminate discharge to surface or ground water; Increase D.O.to 5 mg/I avg; Fecal coliforms below 1000 per 100ml	5.6.1; 5.6.2	RM 36.5, 12.5							x				
Pathogens	urban runoff	Obtain and review current water quality data to id areas of high bacteria or nutrient loading	Request Data from Ohio EPA (TMDL report)	TMACOG, Health Depts		2005-2006	in progress									T	x				
Pathogens	urban runoff	Work with Health Dept to review available sediment and water data for creeks to identify if contact advisories should be posted	1) Review data with Health Dept to id problem areas	Ottawa, Sandusky and Wood Co. Health Depts; Ohio EPA	Ohio Department of Health	2005-2006	concept										x				
Pathogens	urban runoff	Work with Health Dept to review available sediment and water data for creeks to identify if contact advisories should be posted	2) Send available data to LC Health Dept for review				concept										×				
Pathogens	urban runoff	Work with Health Dept to review available sediment and water data for creeks to identify if contact advisories should be posted	3) Meet with L.C. Health Dept. to determine next steps (I.e additional sampling?)				concept										×				
Pesticides	urban runoff	Distribute contact information for household haz. waste disposal options and existing programs for collection					concept		5.7.1; Chapter 10.5		x		×								
Pesticides	urban runoff	Educational workshop for residents and other appliers (golf course staff, etc) to stress proper application and alternative management measures					concept		5.7.1; Chapter 10.5		×										
Pesticides	urban runoff	Survey of wildlife officials to determine if reports of tainting; if unknown by wildlife officials, survey local residents to determine if eat fish and if so, if tainted?		University; volunteer student; ODNR	unknown		concept					x								officia says p ODNF heard taintin	wildlife ials? Mark S probably not- IR would have d reports, but ing is ective
Pesticides	urban runoff	Watershed partners distribute GWAH tip cards at community events	1) Distributed at County Fairs and community events.	Counties and local iurisdictions		2006 - ??	ongoing		5.6.2; 5.7.1; Chapter 10.5		х	×	X	X						Subject	Jouve
Refuse, litter	litter	Continue/expand Sign our Streams program to increase community awareness of stream locations and increase stewardship of stream by the community (in turn, reduce dumping/aesthetic degradation)	1) Purchase signs/images from Clearwater	Maumee RAP Rural/Ag Runoff Action Group, TMACOG	OEEF; foundations; local donations; cities		concept	# of locations "signed"	Chapter 10.5	whole watershed								x			
Refuse, litter	litter	Continue/expand Sign our Streams program to increase community awareness of stream locations and increase stewardship of stream by the community (in turn, reduce dumping/aesthetic degradation)	 Identify sign locations at visible road crossings in watershed 	Maumee RAP Rural/Ag Runoff Action Group, TMACOG	OEEF; foundations; local donations; cities		concept	# of locations "signed"	Chapter 10.5	whole watershed								x			
Refuse, litter	litter	Continue/expand Sign our Streams program to increase community awareness of stream locations and increase stewardship of stream by the community (in turn, reduce dumping/aesthetic degradation)	3) Install signs	Maumee RAP Rural/Ag Runoff Action Group, TMACOG	OEEF; foundations; local donations; cities		concept	# of locations "signed"	Chapter 10.5	whole watershed								x			
Refuse, litter	litter	periodic observations by watershed coordinator or other volunteers to report noticeable "free froms"	enlist volunteers and discuss what to look for and report	Friends of volunteers, community members	none needed	2005-2006	concept											x			
Refuse, litter	litter	periodic observations by watershed coordinator or other volunteers to report noticeable "free froms"	Throughout year, compile list of potential CYS sites and areas that regularly have litter, etc		none needed	2004-2005	ongoing											×			
Refuse, litter, etc	litter	CYS Day	1) Establish planning team	TMACOG; various other community partners	Solicit private and public contributions, grants when available	April - Sept (annually)	concept	Relative to previous years: 1) tons of garbage and debris removed from area streams; 2) number of volunteers that participate; 3) # of sites/RM cleaned 4) amount of support received for planning and funding the event	Chapter 10.5			>						x			
Refuse, litter, etc	litter	CYS Day	2) Solicit contributions and site captain support				concept					×						х			
Refuse, litter, etc Refuse, litter, etc	litter litter	CYS Day CYS Day	3) Distribute promotional materials4) Select waterways and sites to be				concept					X		+	++	-		X			·
Refuse, filler, elc			cleaned				concept														

											BUI	Color C	ode:	i I	mpaire	d [Not I	mpaired	U	nknown	N	ot Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners	Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed										BUI BUI 12 #13		Comments & Misc. Info.
Salinity	road deicing	Implement alternative deicing products (such as corn-based products) and other control measures	Begin using alternative deicing products			2005-2006	planning	% of salt use reduced; # of miles of road where alternative applied	\$ 5.8.4 1			:	(x						x	
Salinity	road deicing	Install computerized spreaders on all salt trucks to control application rate					planning	# of trucks converted; % of salt use reduced	5.8.4			:	(х						x	
Salinity	road deicing	Research more environmentally-friendly road salt options; encourage cities to apply less or to use better alternatives					planning		5.8.4			:	(x						x	
Salinity	road deicing	Sampling program for conductivity, pH, and other salinity factors during winter	Determine if salinity is a limiting factor or concentrated pollutant leading to				planning		Chapter 11			:	c		x						x	
Sediment/Siltation	construction		fish/habitat impairments manual includes recommended BMPs for urban runoff/construction controls, setbacks, etc	rRAP Urban Runoff Action Group, MRRSWC	Lake Erie Protection Fund	2002	complete		5.3.1; 5.3.2; 5.5.1; 10.5			:	(x							
Sediment/Siltation	construction	Educate developers/contractors on need and use of BMPs		Maumee RAP Urban Runoff Action Group	Ohio Environmental , Education Fund,	2005	planning		5.3.1; 5.3.2; 5.5.1; Chapter 10.5	all of watershed		:	(x							
Sediment/Siltation	construction	Implement the Phase 2 storm water management program		Cities of Bowling Green, Northwood of county	local jurisdictions; additional grants if necessary	2004-	ongoing					:	(x							
Sediment/Siltation	construction	Maintain and update Stormwater Standards Manual (as needed)		Maumee RAP Urban Runoff Action Group SWC	Ohio Environmental	2005	ongoing		5.3.1; 5.3.2; 5.5.1; Chapter 10.5	all of watershed		:	(х							
Sediment/Siltation	construction	Propose alternative development designs/layouts and BMPs that protect habitat and water quality			none needed	2004-2005	ongoing					:	(х							
Sediment/Siltation	construction	Work with new development/industries moving into the watershed to develop strategies to minimize their impact on the creeks (for instance, storm water BMPs, setbacks, habitat buffers, etc)	Identify BMPs to recommend and literature to support it; become familiar with local storm water rules, wetland and stream mitigation rules, etc		none needed	2004-2006	ongoing		5.3.1; 5.3.2				(x							
Sediment/Siltation	Cropland	Controlled Drainage (surface and subsurface)	Demonstrate controlled drainage projects upstream of RM 14 and RM 28.5	ODNR, SWCDs, County Engineers	LEPF, GLC, USDA Farm Bill, 319 grants	2006	planning	Increase IBI score above 28; Increased QHEI substrate metric score to 12.5. Increase D.O to 5.0 mg/l average.		RM 14@ Graytown Rd, and RM 28.5@ Lemoyne Rd. (2003)		:	(x							
Sediment/Siltation	Cropland	Continue to promote new conservation tillage practices with rental and equipment buydown incentives	Target additional grants from 319 and Lake Erie CREP programs to areas not currently participating	Wood, Ottawa & Sandusky SWCDs, OSU Extension, NRCS	USDA Farm Bill, 319 grants	2005	ongoing	Increase IBI score above 28; Increased QHEI substrate metric score to 12.5.	3.3.1	Toussaint River RM 36.5, 28.6, 13.9, 12.5, 1.7 Rusha Ck RM 5.0 Rusha 4.0.		:	(х							
Sediment/Siltation	Cropland	Promote cover crops in field rotations when conventional tillage is occasionally done	Target additional grants from 319 and Lake Erie CREP programs to areas not currently participating	SWCDs	USDA Farm Bill, 319 grants	2005	ongoing		3.3.1	Toussaint River RM 36.5, 28.6, 13.9, 12.5, 1.7 Rusha Ck RM 5.0 Rusha 4.0.		:	(х							
Sediment/Siltation	Cropland	Toussaint Improvement Incentive Program (Phase 1)	1) Install 1480 acres of Conservation Tillage	Wood, Ottawa & Sandusky SWCDs, OSU Extension, NRCS	USDA Farm Bill, 319 grants	1997 - 2000	complete	Increase IBI score above 28; Increase QHEI score to at least 60. Eliminate D.E.L.T. anomalies	3.3.1; Chapter 10.5 Chapter 11			:	(x							
Sediment/Siltation	Cropland		 Install 142,213 ft (27 miles) of filter strips and 233 acres of floodplain set- aside. 				complete	Increase IBI score above 28; Increased QHEI substrate metric score to 12.5.	>	all of Toussaint River mainstem		:	(х							
Sediment/Siltation	Cropland	Toussaint Improvement Incentive Program (Phase 2)	1) Install 2194 acres of Conservation tillage	Wood, Ottawa & Sandusky SWCDs, OSU Extension, NRCS	Toussaint 319 Grant #1, Toussaint 319 Grant #2, Lake Erie Buffer Program, Lake Erie CREP	2000 - 2004	complete	Increase IBI score above 28; Increase QHEI score to at least 60. Eliminate D.E.L.T. anomalies		all of Toussaint River watershed		:	(x						Pa	so includes all of acker Creek /atershed
Sediment/Siltation	Cropland		2) Install 240,381 ft (47 miles) of filter strips and 34.8 acres of concentrated flow filter areas.				complete	Increase IBI score above 28; Increased QHEI substrate metric score to 12.5.	>	all of Toussaint River watershed		3	(х						Pa	so includes all of acker Creek /atershed
Sediment/Siltation	roads		manual includes recommended BMPs for urban runoff/construction controls, setbacks, etc	r RAP Urban Runoff Action Group, MRRSWC	Lake Erie Protection Fund	2002	complete		5.3.1; 5.3.2; 5.5.1; 10.5			:	(х							
Sediment/Siltation	roads	Educate developers/contractors on need and use of BMPs		Maumee RAP Rural/Ag Runoff Action Group,	Ohio Environmental Education Fund, GLC	2006	planning		5.3.1; 5.3.2; 5.5.1; Chapter 10.5	all of watershed		:	(x							
Sediment/Siltation	roads	Implement the Phase 2 storm water management program		Cities of Bowling Green, Northwood of	local jurisdictions; additional grants if	2004-	ongoing		5.3.1; 5.3.2; 5.5.1; Chapter 10.5	all of watershed		:	(х							
Sediment/Siltation	roads	Maintain and update Stormwater Standards Manual (as needed)		county Maumee RAP Rural/Ag Runoff Action Group, SWCDs	necessary Ohio Environmental Education Fund, GLC	2005	planning		5.3.1; 5.3.2; 5.5.1; Chapter 10.5	all of watershed			(x							
Sediment/Siltation	streambanks	Identify areas of creek where stream bank stabilization is needed	Continue "walking" creek and general observations	TMACOG and or volunteers			concept		7.6.1; 8.3.3												x	
Sediment/Siltation	streambanks		1) Develop scope and tasks for project	Ohio EPA Section 319, ODNR-Division of Wildlife, Ducks Unlimited	319 grant, ODNR- CZM grant	2006	concept	Increased QHEI scores (Steam channel metric), Nutrient reduction	8.3.1; 8.3.2; 8.3.3	Rusha Creek, Toussaint River below RM 10											x	

										BUIC	olor Co	le:	Impa	red [Not Ir	mpaired	Un	known	Not	ot Applicable
Causes of Impairment (Pollutant or Stressor)	Sources of Pollutant	Projects	Major Tasks/ Milestones	Potential Project Partners Funding Source(s)	Timeline	Status (in progress, planning, concept, ongoing, complete)	Performance Indicator/Environmental Results (Loadings)	Coastal Management Measure	HUC/Stream Segment Addressed		UI BU 2 #3	BUI B #4 #		BUI B #7 #	UI BUI #8 #9			JI BUI 2 #13		Comments & Misc. Info.
Sediment/Siltation	streambanks	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	preliminary wetland sites	Ohio EPA Section 319 grant, ODNR- 319, ODNR-Division CZM grant of Wildlife, Ducks Unlimited	2006	concept	Increased QHEI scores (Steam channel metric), Nutrient reduction	8.3.1; 8.3.2; 8.3.3	Rusha Creek, Toussaint River below RM 10										×	
Sediment/Siltation	streambanks	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	 Secure property owner permission for site access for field visits 	Ohio EPA Section 319 grant, ODNR- 319, ODNR-Division CZM grant of Wildlife, Ducks Unlimited	2006	concept	Increased QHEI scores (Steam channel metric), Nutrient reduction	8.3.1; 8.3.2; 8.3.3	Rusha Creek, Toussaint River below RM 10										×	
Sediment/Siltation	streambanks	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	4) Conduct detailed survey of each priority site	Ohio EPA Section 319 grant, ODNR- 319, ODNR-Division CZM grant of Wildlife, Ducks Unlimited	2006	concept	Increased QHEI scores (Steam channel metric), Nutrient reduction	8.3.1; 8.3.2; 8.3.3	Rusha Creek, Toussaint River below RM 10										x	
Sediment/Siltation	streambanks	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	5) Develop detailed conceptual plans and cost estimates for restoration/enhancement of identified wetlands	Ohio EPA Section 319 grant, ODNR- 319, ODNR-Division CZM grant of Wildlife, Ducks Unlimited	2006	concept	Increased QHEI scores (Steam channel metric), Nutrient reduction	8.3.1; 8.3.2; 8.3.3	Rusha Creek, Toussaint River below RM 10										x	
Sediment/Siltation	streambanks	Inventory watershed for existing wetland sites and potential wetland restoration sites; focus on riparian corridor w/in 500 feet of stream	6) Find funding source(s)	Ohio EPA Section 319 grant, ODNR- 319, ODNR-Division CZM grant of Wildlife, Ducks Unlimited	2006	concept	Increased QHEI scores (Steam channel metric), Nutrient reduction	8.3.1; 8.3.2; 8.3.3	Rusha Creek, Toussaint River below RM 10		x		x						x	
Thermal Stress	Riparian corridor destruction	Restore streamside vegetation on natura streams	Install trees and shrubs along river bank(s) upstream of RM 13.9	ODNR, SWCDs, County Engineers NOAA/Coastal NPS, 319 grants	2006	planning	Increase QHEI riparian metric; Increase D.O. to 5.0 mg/l avg.	7.6.1; 8.3.3	RM 13.9 Graytowr	1?	x									
Toxic Substances	industrial discharges	Provide secondary containment for storage tanks		ODA, NRCS ODA, EQIP		ongoing			RM 13.9 Graytowr	1?	Х		Х							
toxic substances	industrial discharges	Work with EPA and Ohio Dept of Health to review available sediment and water data for creeks to identify if contact advisories should be posted	Have ODH review available data and identify if more current sampling is needed	Ottawa, Sandusky and Wood Co. Health Depts; Ohio EPA		concept										x				
toxic substances	landfills (current or old)		 Implement seasonal sampling for variety of parameters at fixed, repeated locations, 2) Share data with other entities, such as UT LERC, 3) Identify problem areas and/or trends 		2006	concept	# of samples taken, # of locations sampled	Chapter 11								x				
toxic substances	urban runoff	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	1) Identify additional project partners	OEEF; 319 grants; ODNR/CZM grants; foundations; local donations; cities		concept	# of new storm drains stenciled; # of households given ed materials; # of volunteers participating	Chapter 10.5; 5.7.	all of watershed								x			
toxic substances	urban runoff	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	 Identify specific grant funding 			concept											x			
toxic substances	urban runoff	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	3) Revise/update old SDS manual and supplies			concept											x			
toxic substances	urban runoff	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	 Secure funding to kickoff project in watershed 			concept											x			
toxic substances	urban runoff	Implement Storm Drain Stenciling Program (to reduce pet waste and other dumping)	5) Implement project in subwatersheds			concept											x			
toxic substances	industrial discharges	Map of NPDES locations; basic information on type of discharge, frequency of use, permit parameters, etc.	Continue to add new information to GIS inventory	university volunteer or graduate student in GIS		concept				x										
toxic substances	urban runoff	Conduct survey of local residents to determine if fish and/or turtles caught in creek are eaten	Obtain funding or student volunteer	University of Toledo; ? Bowling Green State U		concept				x										
toxic substances	urban runoff	periodic observations by watershed coordinator or other volunteers to report noticeable "free froms"	enlist volunteers and discuss what to look for and report	Partnership none needed members, Friends of volunteers, community members	2006	concept											x			