Crane Creek Watershed Project Table

BUI Color Code: Impaired | Not Impaired | 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 #1	BUI #2	BUI #3	BUI #4	BUI #5	BUI #6	BUI #7	BUI #8	BUI #9	BUI #10	BUI #11	BUI #12	BUI #13	BUI #14	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			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	
All	All	GIS Water Quality database (Phase 1)	2) Export LE Tribs data to a GIS format				complete				X		X			X								X	
All	All	GIS Water Quality database (Phase 1)	3) Publish relational database and GIS online				complete				X		X			X								X	
All	All	GIS Water Quality database (Phase 2)	Expand GIS to entire AOC				in progress				X		X			X								X	
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	2005-2010	in progress	Study 60+ miles of stream to determine the current floodplain			X	X	X			X					X			X	
Flow Alterations	Changing Land Uses	Lucas County Floodplain Map	2) Conduct new studies			2005-2008	in progress				X	X	X			X					X			X	
Flow Alterations	Changing Land Uses	Lucas County Floodplain Map	3) Redelinate existing studies			2005-2008	in progress				X	X	X			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			X					X			X	
Flow Alterations	Changing Land Uses	Lucas County Floodplain Map	5) Finalize maps and release electronically			2010	in progress				X	X	X			X					X			X	
Flow alterations	channelization	Stream restoration demonstration project	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	
Flow alterations	channelization	Stream restoration demonstration project	2) assess possible stream restoration projects				concept						X			X								X	
Flow alterations	channelization	Stream restoration demonstration project	3) Select demonstration sites				concept						X			X								X	
Flow alterations	channelization	Stream restoration demonstration project	4) conduct landowner contact				concept						X			X								X	
Flow alterations	channelization	Stream restoration demonstration project	5) conduct public education				concept						X			X								X	
Flow alterations	channelization	Stream restoration demonstration project	5) complete project				concept						X			X								X	
Flow alterations	channelization	Stream restoration demonstration project	6) assess and monitor results				concept						X			X								X	
Flow alterations	Channelization	Volunteer monitoring of wildlife populations	Volunteers report sightings of rare birds and wildlife	Ottawa National Wildlife Refuge			ongoing			HUC 04100010010			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	Lake Erie Protection Fund, USEPA GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	concept			HUC 04100010010			X			X								X	
Habitat modification	Changing land uses in the watershed	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	1) 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			X			X								X	
Habitat modification	Changing land uses in the watershed	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	2) create GIS map of wetlands and potential wetlands				complete						X			X								X	
Habitat modification	Changing land uses in the watershed	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	3) Identify restoration needs				complete						X			X								X	
Habitat modification	Changing land uses in the watershed	Wetlands Inventory and Mapping (Phase 2) (Wood 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	planning			portion of watershed in Wood Co			X			X								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								X	
Habitat modification	Changing land uses in the watershed	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	3) Identify restoration needs				planning						X			X								X	
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., 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	
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						X			X								X	
Habitat modification	Changing land uses in the watershed	Wetlands Inventory and Mapping (Phase 3) (Ottawa Co.)	3) Identify restoration needs				concept						X											X	

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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			X								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								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	Lake Erie Protection Fund, 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	3) Field assessment of habitat conditions and quality				concept						X			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	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 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 Coalition, Farm Bureau	Ohio Livestock Coalition, Farm Bureau, ODRN-DSWC	2006	concept				X		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	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	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			X	
Nutrients	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	2) Assess possible BMPs				concept						X					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			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					X		X	X			X	
Nutrients	Erosion & runoff from fertilized fields	Encourage buffer strips to trap sediments		Lucas and Wood SWCD			ongoing											X		X	X			X	
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	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	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	

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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 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	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	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	
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	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	
Nutrients	Erosion & runoff from fertilized fields	Implementation of Agricultural BMPs	2) Assess possible BMPs				concept						X					X		X	X			X	
Nutrients	Erosion & runoff from fertilized fields	Implementation of Agricultural BMPs	3) Select demonstration sites				concept						X					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	Erosion & runoff from fertilized fields	Implementation of Agricultural BMPs	6) complete project				concept						X					X		X	X			X	
Nutrients	Erosion & runoff from fertilized fields	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	Ohio Lake Erie Commission, USDA - NRCS, SWCDs		ongoing						X					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		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			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			X	
Nutrients	Erosion & runoff from fertilized fields	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools			Sept	ongoing						X					X		X	X			X	
Nutrients	Erosion & runoff from fertilized fields	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)			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)			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						X					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						X					X		X	X			X	

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Nutrients	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		X	X			X	
Nutrients	Urban Runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	2) Release RFP/Hire contractors			9/3/04	complete						X					X		X	X			X	
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						X					X		X	X			X	
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						X					X		X	X			X	
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						X					X		X	X			X	
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						X					X		X	X			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						X					X		X	X			X	
Nutrients	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					X		X	X			X	
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						X					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						X					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			X	
Nutrients	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						X					X		X	X			X	
Nutrients	Urban Runoff	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools			Sept	ongoing						X					X		X	X			X	
Nutrients	Urban Runoff	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)			mid-Oct	ongoing						X					X		X	X			X	
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		X	X			X	
Nutrients	Urban Runoff	Student Watershed Watch	7) Student share data and finding at Student Summit			mid-Nov	ongoing						X					X		X	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		X	X			X	
Nutrients	Urban Runoff	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training				concept						X					X		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	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	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			X	
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			X		X			X			X	
Organic enrichment	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	Lake Erie Protection 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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Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 1)	2) Convert electronic data into GIS map files				complete						X			X		X			X			X	
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 1)	3) Intergrate with AERIS data				complete						X			X		X			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				in progress						X			X		X			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	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						X			X		X			X			X	
Organic enrichment	Human & animal excreta	GIS Septic System Inventory (Phase 2)	3) Intergrate with AERIS data				in progress						X			X		X			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				in progress						X			X		X			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	Lake Erie Protection Fund, Ohio Sea Grant, USEPA, OEPA	2005-2006	concept			entire watershed			X			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 permit				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			X	
Organic enrichment	Human & animal excreta	Plankton Survey and Bioassay	2) Identify sample sites				concept			entire watershed			X			X		X			X			X	
Organic enrichment	Human & animal excreta	Plankton Survey and Bioassay	3) Conduct sampling				concept						X			X		X			X			X	
Organic enrichment	Human & animal excreta	Plankton Survey and Bioassay	4) Analyze data				concept						X			X		X			X			X	
Organic enrichment	Human & animal excreta	Plankton Survey and Bioassay	5) Determine status				concept						X			X		X			X			X	
Organic enrichment	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, 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)	2) Place bulk order for local jurisdictions and organizations			Jun-05	complete						X			X					X			X	
Organic enrichment	Human & animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	3) 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)	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												X			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				ongoing														X			X	
Organic enrichment	Human & 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, 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	
Organic enrichment	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 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			X			X	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	2) Identify septic system dye testing locations				complete						X			X		X			X			X	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	3) Conduct stream sampling and dye testing				complete						X			X		X			X			X	
Organic enrichment	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	4) Prioritize areas for enforcement based on testing results				complete						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 #2	BUI #3	BUI #4	BUI #5	BUI #6	BUI #7	BUI #8	BUI #9	BUI #10	BUI #11	BUI #12	BUI #13	BUI #14	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, 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		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			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, 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		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, TMACOG, Ohio EPA, public and private schools	private donations	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						X			X		X			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			X		X			X			X	
Organic enrichment	Human & animal excreta	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools			Sept	ongoing						X			X		X			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			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)			late Oct- early Nov	ongoing						X			X		X			X			X	
Organic enrichment	Human & animal excreta	Student Watershed Watch	7) Student share data and finding at Student Summit			mid-Nov	ongoing						X			X		X			X			X	
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		X			X			X	
Organic enrichment	Human & animal excreta	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training				concept						X			X		X			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		X			X			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 04100010010			X			X		X			X			X	
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 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				concept													X	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				
Pathogens	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				
Pathogens	Cropland or pasture where manure is spread	Implementation of Agricultural BMPs	2) Assess possible BMPs				concept													X	X				

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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				
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, TMACOG, Ohio EPA, public and private schools	private donations	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				
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				
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 Data Collector)			late Oct- early Nov	ongoing													X	X				
Pathogens	Cropland or pasture where manure is spread	Student Watershed Watch	7) Student share data and finding at Student Summit			mid-Nov	ongoing													X	X				
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	X				
Pathogens	Cropland or pasture where manure is spread	SWW Teacher Training/Creditable Data Certification	2) Award a certificate completion for training				concept													X	X				
Pathogens	Cropland or pasture where manure is spread	SWW Teacher Training/Creditable Data Certification	3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC) certification				concept													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	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													X	X				
Pathogens	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	X				
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	Lake Erie Protection Fund, TMACOG, Toledo/Lucas County Health Dept, Lucas County Auditor's Office	2002-2005	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	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	Human & animal excreta	GIS Septic System Inventory (Phase 2)	2) Convert electronic data into GIS map files				in progress													X	X				
Pathogens	Human & animal excreta	GIS Septic System Inventory (Phase 2)	3) Intergrate with AERIS data				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				

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Pathogens	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, 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						X			X					X			X	
Pathogens	Human & animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	3) Distribute stencils and door hangers for local jurisdictions and organizations to use			Jul-05	complete						X			X					X			X	
Pathogens	Human & 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	OEEF; 319 grants; ODNR/CZM grants; foundations; local donations; cities		ongoing	# of stenciling manuals sold	Chapter 10.5; 5.7.1												X			X	
Pathogens	Human & animal excreta	Storm Drain Stenciling Program (Drains are for Rain) (Phase 2)	2) Fill orders for local jurisdictions and organizations as placed				ongoing														X			X	
Pathogens	Human & 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, 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 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	Human & animal excreta	Stream and Septic System Sampling Project (Phase 1)	2) Identify septic system dye testing locations				complete													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 excreta	Stream and Septic System Sampling Project (Phase 1)	4) Prioritize areas for enforcement based on testing results				complete													X	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													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	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	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	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	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													X	X				
Pathogens	Human & animal excreta	Student Watershed Watch	2) Conduct teacher training (see SWW Teacher Training/Creditable Data Certification)				ongoing													X	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													X	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				
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													X	X				

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Pathogens	Human & animal excreta	Student Watershed Watch	7) Student share data and finding at Student Summit			mid-Nov	ongoing													X	X				
Pathogens	Human & animal excreta	SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	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	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				
Pathogens	Septic systems	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards				concept													X	X				
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													X	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	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 files				complete													X	X				
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)	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													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				
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	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													X	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 Project (Phase 1)	4) Prioritize areas for enforcement based on testing results				complete													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				complete													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	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													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, 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				

Crane Creek Watershed Project Table

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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 #2	BUI #3	BUI #4	BUI #5	BUI #6	BUI #7	BUI #8	BUI #9	BUI #10	BUI #11	BUI #12	BUI #13	BUI #14	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													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)			Sept	ongoing													X	X				
Pathogens	Septic systems	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools			Sept	ongoing													X	X				
Pathogens	Septic systems	Student Watershed Watch	5) Teachers conduct student training and sampling on designated sampling day (perferably)			mid-Oct	ongoing													X	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	X				
Pathogens	Septic systems	Student Watershed Watch	7) Student share data and finding at Student Summit			mid-Nov	ongoing													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				
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	2) Develop framewprk for publishing and updating data via online GIS				concept													X	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													X	X				
Pathogens	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	X				
Pathogens	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													X	X				
Pathogens	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													X	X				
Pathogens	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				
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	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				
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													X	X				
Pathogens	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	X				
Pathogens	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													X	X				

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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													X	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)			Sept	ongoing													X	X				
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)			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													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				
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	3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC) certification				concept													X	X				
Pathogens	Wastewater treatment plant	Establish/Utilize volunteer stream monitoring networks	1) Train volunteers in as per EPA QA standards				concept													X	X				
Pathogens	Wastewater treatment plant	Establish/Utilize volunteer stream monitoring networks	2) Develop framewprk for publishing and updating data via online GIS				concept													X	X				
Pathogens	Wastewater treatment plant	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	Wastewater treatment 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	Identify and assess package plant discharges	2) Review NPDES permits				concept													X	X				
Pathogens	Wastewater treatment plant	Identify and assess package plant discharges	3) Identify plants operating without permit				concept													X	X				
Pathogens	Wastewater treatment plant	Identify and assess package plant discharges	4) Sample adjecent streams				concept													X	X				
Pathogens	Wastewater treatment plant	Identify and assess package plant discharges	5) Assess water quality impacts				concept													X	X				
Pathogens	Wastewater treatment plant	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	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	Wastewater treatment plant	Student Watershed Watch	4) Supplies are distributed to participating teacher/schools			Sept	ongoing													X	X				
Pathogens	Wastewater treatment 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	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 plant	Student Watershed Watch	7) Student share data and finding at Student Summit			mid-Nov	ongoing													X	X				
Pathogens	Wastewater treatment plant	SWW Teacher Training/Creditable Data Certification	1) Conduct Teacher Training	Maumee RAP, Ohio EPA, Lucas SWCD		2006	concept													X	X				
Pathogens	Wastewater treatment plant	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	3) Submit certificate to Ohio EPA for Level 1 Qualified Data Collector (QDC) certification				concept													X	X				

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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 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								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	3) Determine best location of BMPs for optimal impact				concept				X		X			X								X	
Pesticides	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	
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	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								X	
Pesticides	Cropland	Plankton Survey and Bioassay	2) Identify sample sites				concept			entire watershed	X		X			X								X	
Pesticides	Cropland	Plankton Survey and Bioassay	3) Conduct sampling				concept				X		X			X								X	
Pesticides	Cropland	Plankton Survey and Bioassay	4) Analyze data				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	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	Volunteer monitoring of wildlife populations	Volunteers report sightings of rare birds and wildlife	Ottawa National Wildlife refuge			ongoing			HUC 04100010010	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	X		X			X								X	
Pesticides	Cropland	Implementation of Agricultural BMPs	2) Assess possible BMPs				concept				X		X			X								X	
Pesticides	Cropland	Implementation of Agricultural BMPs	3) Select demonstration sites				concept				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				X		X			X								X	
Pesticides	Cropland	Implementation of Agricultural BMPs	6) complete project				concept				X		X			X								X	
Pesticides	urban/suburban areas	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			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		X			X								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				X		X			X								X	
Pesticides	urban/suburban areas	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	4) Create and distribute 6 tip cards & bonus items			10/03-4/05	complete				X		X			X								X	
Pesticides	urban/suburban areas	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	5) Create and Implement pre-/post-campaign phone survey			12/03 & 5/05	complete				X		X			X								X	
Pesticides	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			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				X		X			X								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	
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)	Maumee RAP, TMACOG, local jurisdictions, organizations	Maumee RAP, TMACOG, local jurisdictions, organizations	Spring 2005	complete				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				X		X			X								X	
Pesticides	urban/suburban areas	Give Water a Hand Campaign (Phase 3) (Watershed Awareness Campaign)	3) Distribute signs for local jurisdictions and organizations to use			Jul-05	complete				X		X			X								X	

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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				X		X			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									X			X	
Refuse, litter, etc	litter	CYS Day	2) Solicit contributions and site captain support			April - Sept	ongoing						X								X			X	
Refuse, litter, etc	litter	CYS Day	3) Distribute promotional materials			June - Sept	ongoing						X								X			X	
Refuse, litter, etc	litter	CYS Day	4) Select waterways and sites to be cleaned			Aug	ongoing						X								X			X	
Refuse, litter, etc	litter	CYS Day	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)	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	
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						X			X					X			X	
Refuse, litter, etc	litter	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	3) Distribute stencils and door hangers for local jurisdictions and organizations to use			Jul-05	complete						X			X					X			X	
Refuse, litter, etc	litter	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		ongoing	# of stenciling manuals sold	Chapter 10.5; 5.7.1												X			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														X			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													X			X	
Sedimentation/Siltation	Construction	Assessment of stream for storm water flows pre- and post- development					concept				X		X			X		X		X	X			X	
Sedimentation/Siltation	Construction	Educate developers/contractors on need and use of BMPs		Maumee RAP Urban Runoff Action Group, SWC	Ohio Environmental Education Fund, 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		X	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 Action Group	LEPF, Local jurisdictions		concept				X		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, TMACOG, Lucas, Wood, Ottawa Co., University of Toledo	Lake Erie Protection Fund, USEPA GLNPO, OEPA 319, Ohio Sea Grant	2005-2006	concept			Maumee AOC	X		X			X		X		X	X			X	
Sedimentation/Siltation	Construction	Regional Storm Water Standards Manual (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	
Sedimentation/Siltation	Construction	Regional Storm Water Standards Manual (Phase 1)	2) Write manual				complete				X		X			X		X		X	X			X	
Sedimentation/Siltation	Construction	Regional Storm Water Standards Manual (Phase 1)	3) Identify alternative development designs/layouts that protect water quality				complete				X		X			X		X		X	X			X	
Sedimentation/Siltation	Construction	Regional Storm Water Standards Manual (Phase 1)	4) Encourage local jurisdications to adopt manual as their standards				complete				X		X			X		X		X	X			X	
Sedimentation/Siltation	Construction	Regional Storm Water Standards Manual (Phase 2)	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	X		X			X		X		X	X			X	
Sedimentation/Siltation	Construction	Regional Storm Water Standards Manual (Phase 2)	2) Update chapters with new content and regulations			2005-2006	in progress				X		X			X		X		X	X			X	

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Sedimentation/Siltation	Construction	Regional Storm Water Standards Manual (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	
Sedimentation/Siltation	Construction	Regional Storm Water Standards Manual (Phase 3)	Maintain and update manual as needed				ongoing				X		X			X		X		X	X			X	
Sedimentation/Siltation	Construction	Require BMPs on smaller developments					concept			entire watershed	X		X			X		X		X	X			X	
Sedimentation/Siltation	Cropland	Develop potential project list based on Cropland Inventory Project Results					concept			entire watershed	X		X			X		X		X	X			X	
Sedimentation/Siltation	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 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		X		X	X			X	
Sedimentation/Siltation	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		X	X			X	
Sedimentation/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	X			X	
Sedimentation/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			X	
Sedimentation/Siltation	Cropland	Implementation of Agricultural BMPs	1) Identify potential Partners	Maumee RAP Rural Runoff Action Group, SWCD [Lucas, Wood, Ottawa Co]	Lake Erie Protection Fund, USEPA GLNPO, OEPA 319, Great Lkes Commission Great Lakes Basin Program for Soil Erosion and Sediment Control	2005-2010	concept			HUC 04100010010	X		X			X		X		X	X			X	
Sedimentation/Siltation	Cropland	Implementation of Agricultural BMPs	2) Assess possible BMPs				concept				X		X			X		X		X	X			X	
Sedimentation/Siltation	Cropland	Implementation of Agricultural BMPs	3) Select demonstration sites				concept				X		X			X		X		X	X			X	
Sedimentation/Siltation	Cropland	Implementation of Agricultural BMPs	4) conduct land owner contact				concept				X		X			X		X		X	X			X	
Sedimentation/Siltation	Cropland	Implementation of Agricultural BMPs	5) conduct public education				concept				X		X			X		X		X	X			X	
Sedimentation/Siltation	Cropland	Implementation of Agricultural BMPs	6) complete project				concept				X		X			X		X		X	X			X	
Sedimentation/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	Ohio Lake Erie Commission, USDA - NRCS, SWCDs		concept			entire watershed	X		X			X		X		X	X			X	
Sedimentation/Siltation	Cropland	Incentives and equipment rental for conservation tillage		Lucas and Wood SWCDs		ongoing	ongoing				X		X			X		X		X	X			X	
Sedimentation/Siltation	Cropland	Inventory watershed for amount of acreage in cropland	1) Develop inventory methodology utilizing existing AERIS system and other available resources	Maumee RAP Ag Runoff Action Group, SWCDs, ODNR - SWC	U.S. ACE, Section 319, NatureWorks (ODNR)		concept			entire watershed	X		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		X			X		X		X	X			X	
Sedimentation/Siltation	Cropland	Inventory watershed for amount of acreage in cropland	3) Intergrate with AERIS data				concept				X		X			X		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				concept				X		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, ODNR - SWC, Ohio EPA 319	Ohio EPA 319		concept			entire watershed	X		X			X		X		X	X			X	
Sedimentation/Siltation	Cropland	Volunteer monitoring of wildlife populations	Volunteers report sightings of rare birds and wildlife	Ottawa National Wildlife refuge			ongoing			HUC 04100010010	X		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	Lake Erie Protection Fund, Ohio Sea Grant, USEPA, OEPA	2005-2006	concept			entire watershed	X		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	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			X	

Crane Creek Watershed Project Table

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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 #2	BUI #3	BUI #4	BUI #5	BUI #6	BUI #7	BUI #8	BUI #9	BUI #10	BUI #11	BUI #12	BUI #13	BUI #14	Comments & Misc. Info.
Sedimentation/Siltation	Cropland or pasture where manure is spread	Plankton Survey and Bioassay	4) Analyze data				concept				X		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			X	
Sedimentation/Siltation	land clearing and infilling for development	Incentives and equipment rental for conservation tillage		Lucas and Wood SWCDs			ongoing				X		X			X		X		X	X			X	
Sedimentation/Siltation	land clearing and infilling for development	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			Maumee AOC	X		X			X		X		X	X			X	
Sedimentation/Siltation	land clearing and infilling for development	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	1) 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	X		X			X		X		X	X			X	
Sedimentation/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				X		X			X		X		X	X			X	
Sedimentation/Siltation	land clearing and infilling for development	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	3) Identify restoration needs				complete				X		X			X		X		X	X			X	
Sedimentation/Siltation	land clearing and infilling for development	Wetlands Inventory and Mapping (Phase 2) (Wood 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	planning			portion of watershed in Wood Co	X		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		X			X		X		X	X			X	
Sedimentation/Siltation	land clearing and infilling for development	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	3) Identify restoration needs				planning				X		X			X		X		X	X			X	
Sedimentation/Siltation	land clearing and infilling for development	Wetlands 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	X			X	
Sedimentation/Siltation	land clearing and infilling for development	Wetlands Inventory and Mapping (Phase 3) (Ottawa Co.)	2) create GIS map of wetlands and potential wetlands				concept				X		X			X		X		X	X			X	
Sedimentation/Siltation	land clearing and infilling for development	Wetlands Inventory and Mapping (Phase 3) (Ottawa Co.)	3) Identify restoration needs				concept				X		X			X		X		X	X			X	
Sedimentation/Siltation	Pasture	Develop potential project list based on Pasture Inventory Project Results					concept				X		X			X		X		X	X			X	
Sedimentation/Siltation	Pasture	Identify extent & benefit of BMPs used by farmers in watershed		Ohio Lake Erie Commission, USDA - NRCS, SWCDs	Ohio Lake ErieCommission, USDA - NRCS, SWCDs		concept				X		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 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			X	
Sedimentation/Siltation	Pasture	Implementation of Agricultural BMPs	2) Assess possible BMPs				concept				X		X			X		X		X	X			X	
Sedimentation/Siltation	Pasture	Implementation of Agricultural BMPs	3) Select demonstration sites				concept				X		X			X		X		X	X			X	
Sedimentation/Siltation	Pasture	Implementation of Agricultural BMPs	4) conduct land owner contact				concept				X		X			X		X		X	X			X	
Sedimentation/Siltation	Pasture	Implementation of Agricultural BMPs	5) conduct public education				concept				X		X			X		X		X	X			X	
Sedimentation/Siltation	Pasture	Implementation of Agricultural BMPs	6) complete project				concept				X		X			X		X		X	X			X	
Sedimentation/Siltation	Pasture	Incentive programs for implementation of agricultural BMPs such as filter strips, manure management, pesticide management	Continue to promote and support the implementation of these programs				concept				X		X			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 other available resources	RAP Ag Runoff Action Group, SWCDs, ODNR - SWC	U.S. ACE, Section 319, NatureWorks (ODNR)		concept			entire watershed	X		X			X		X		X	X			X	
Sedimentation/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			X	
Sedimentation/Siltation	Pasture	Inventory watershed for amount of acreage in pasture	3) Intergrate with AERIS data				concept				X		X			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		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		X		X	X			X	
Sedimentation/Siltation	Streambanks	Collect additional data, as needed					concept				X		X			X		X		X	X			X	

Crane Creek Watershed Project Table

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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 #2	BUI #3	BUI #4	BUI #5	BUI #6	BUI #7	BUI #8	BUI #9	BUI #10	BUI #11	BUI #12	BUI #13	BUI #14	Comments & Misc. Info.
Sedimentation/Siltation	Streambanks	Define Stabilization Problem					concept				X		X			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	X			X	
Sedimentation/Siltation	Streambanks	Identify additional data needed					concept				X		X			X		X		X	X			X	
Sedimentation/Siltation	Streambanks	Implemented project(s) from proposed list					concept				X		X			X		X		X	X			X	
Sedimentation/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	X			X	NOTE: ACE recognizes & recommends use of 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	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		X		X	X			X	
Sedimentation/Siltation	Streambanks	Streambank Tree Planting	2) Locate areas in need of bank stabilization				concept				X		X			X		X		X	X			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, 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	
Thermal stress/sunlight	Removal of riparian vegetation	Plankton Survey and Bioassay	2) Identify sample sites				concept			entire watershed			X			X		X						X	
Thermal stress/sunlight	Removal of riparian vegetation	Plankton Survey and Bioassay	3) Conduct sampling				concept						X			X		X						X	
Thermal stress/sunlight	Removal of riparian vegetation	Plankton Survey and Bioassay	4) Analyze data				concept						X			X		X						X	
Thermal stress/sunlight	Removal of riparian vegetation	Plankton Survey and Bioassay	5) Determine status				concept						X			X		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			X			X		X						X	
thermal stress/sunlight	riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	1) 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			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						X			X		X						X	
thermal stress/sunlight	riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 1) (Lucas Co.)	3) Identify restoration needs				complete						X			X		X						X	
thermal stress/sunlight	riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 2) (Wood 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	planning			portion of watershed in Wood Co			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						X			X		X						X	
thermal stress/sunlight	riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 2) (Wood Co.)	3) Identify restoration needs				planning						X			X		X						X	
thermal stress/sunlight	riparian cooridor destruction	Wetlands 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	
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		X						X	
thermal stress/sunlight	riparian cooridor destruction	Wetlands Inventory and Mapping (Phase 3) (Ottawa Co.)	3) Identify restoration needs				concept						X			X		X						X	
Toxic substances	Industrial discharges (current or old)	Identify point sources		Ohio EPA	Ohio EPA		concept				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	
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	X	X	X	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	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	X			X	X	X	X	X	
Toxic substances	Urban Runoff	Educate public on sources/pathways					concept				X		X			X					X			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				X		X			X					X			X	

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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	
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 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			X	
Toxic substances	Urban Runoff	Give Water a Hand Campaign (Phase 1) (Residential Campaign)	2) Release RFP/Hire contractors			9/3/04	complete				X		X			X					X			X	
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		X			X					X			X	
Toxic substances	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				X		X			X					X			X	
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				X		X			X					X			X	
Toxic substances	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	
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			X	
Toxic substances	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	
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	
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				X		X			X					X			X	
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		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 and Wood SWCDs	Maumee RAP; Lucas, Ottawa and and Wood SWCDs	year round	ongoing				X		X			X					X			X	
Toxic substances	Urban Runoff	Identify illicit connections					concept				X		X			X					X			X	
Toxic substances	Urban Runoff	Identify sources not addressed by existing regulations (i.e. commercial)					concept				X		X			X					X			X	
Toxic substances	Urban Runoff	Identify vulnerable areas					concept				X		X			X					X			X	
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		X			X					X			X	
Toxic substances	Urban Runoff	Performance bond/tie compliance into building permits.					concept				X		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			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				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			Jun-05	complete						X			X					X			X	
Toxic substances	Urban Runoff	Storm Drain Stenciling Program (Drains are for Rain) (Phase 1)	3) Distribute stencils and door hangers for local jurisdictions and organizations to use			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		ongoing	# of stenciling manuals sold	Chapter 10.5; 5.7.1												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				ongoing														X			X	
Toxic substances	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	

Crane Creek Watershed Project Table

BUI Color Code: Impaired | Not Impaired | 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 #1	BUI #2	BUI #3	BUI #4	BUI #5	BUI #6	BUI #7	BUI #8	BUI #9	BUI #10	BUI #11	BUI #12	BUI #13	BUI #14	Comments & Misc. Info.
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	Lake Erie Protection Fund, Ohio Sea Grant, USEPA, OEPA	2005-2006	concept			entire watershed	X		X			X					X			X	
Toxic substances	Wastewater treatment plant	Identify and assess package plant discharges	2) Review NPDES permits				concept				X		X			X					X			X	
Toxic substances	Wastewater treatment plant	Identify and assess package plant discharges	3) Identify plants operating without permit				concept				X		X			X					X			X	
Toxic substances	Wastewater treatment plant	Identify and assess package plant discharges	4) Sample adjecent streams				concept				X		X			X					X			X	
Toxic substances	Wastewater treatment plant	Identify and assess package plant discharges	5) Assess water quality impacts				concept				X		X			X					X			X	