

Table 5.5 Lower Huron River Watershed Action Plan

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#	Management Alternative	Goals Addressed										Level of Effort	Cost		Technical/Financial Resources	E						
		1 Public Info & Ed	2 Protect Natural Features	3 WMP Fulfillment	4 Reduce Flow Variability	5 Soil Erosion/Sediment	6 Reduce Nutrients	7 Reduce Pathogens	8 Low Impact Development	9 Increase Monitoring	10 Recreational Uses		Capital	Annual		Berlin Twp	Brownstown Twp	Flat Rock	Gibraltar	Huron Twp	Rockwood	
Managerial: Illicit Discharge Elimination																						
1	Conduct outfall screening program ♣					a	c					sewered areas	\$100/staff investigation per property ^b			●	○	●	●	●	●	
2	Perform smoke/dye testing ♣					a	c					sewered areas	\$600/dye test ^b \$30/manhole for smoke testing ^a			✓	●	□	●	✓	✓	
3	Develop reporting system/ follow-up plan for illicit discharges ♣	b					c					13 entities	\$100/hr per municipal staff ^a			✓	✓	✓	✓	●	●	
4	Trace illicit discharges ♣					a	c					sewered areas	\$100/staff investigation per property ^b							✓	●	
5	Enforcement for non-correction of illicit discharges ♣	bcd					c					sewered areas	\$5k-15k per property ^b							✕	●	
6	Train staff to identify illicit discharges ♣	bd					c					6 entities	\$100/hr municipal staff ^a							✓	●	
7	Minimize seepage from sanitary sewers						c					sewered areas	\$1-2/lineal ft for TV inspection ^c and design/construction costs			●	●	●	●	✓	✓	
8	Minimize seepage from on-site sewage disposal systems						c					2 entities				●	●	●	●	●	●	
9	Update outfall and/or drainage map					a	c					5 entities	\$100/hr per municipal staff ^a			consultant assistance	●	●	●	●	●	●
10	Develop and implement method to identify and record outfalls from new construction					a	c					sewered areas	\$100/hr per municipal staff ^a			in cooperation w/ County government					●	✓

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Managerial: Public Information & Education																					
11	Homeowner education about septic system maintenance ◆	acd					a				communities with septic	\$0.2/hh for print ads; \$0.5/piece for print and mail ^c		I/E materials from HRWC; SE MI Partners for Clean Water	●	x	x	□	●	x	
12	Provide watershed education materials to residents ◆	ad	a	e	bd			a	a		community-wide	\$0.2/hh for print ads; \$0.5/piece for print and mail ^c		I/E materials from HRWC; SE MI Partners for Clean Water	●	●	●	●	●	●	
13	Provide trash management information and education to public ◆	ad							a		community-wide	\$0.2/hh for print ads; \$0.5/piece for print and mail ^c			●	✓	●	●	●	✓	
14	Provide Information and education program to homeowners on yard and lawn care, native landscapes ◆	acd	ag		bd						community-wide	\$0.2/hh for print ads; \$0.5/piece for print and mail ^c		I/E materials from HRWC; SE MI Partners for Clean Water	●	✓	●	✓	●	✓	
15	Provide Information and education program to homeowners on proper pet waste management ◆	acd									sewered areas	\$0.2/hh for print ads; \$0.5/piece for print and mail ^c		I/E materials from HRWC; SE MI Partners for Clean Water	●	○	✓	✓	●	✓	
16	Provide Information and education to farmers ◆	ad	ag		bd						agricultural communities	No cost for materials distributed by Conservation District; \$1500 for 3 meetings/roundtable sessions ^d			●	x	□	□	●	x	
17	Recreational Vehicle (RV) Waste Disposal Education ◆	acd									public facilities	\$.25 per SEMCOG brochure ^d		Materials from SEMCOG; SE MI counties	●	○	●	●	●	✓	
18	Environmental Information Line and Pollution Complaint Hotline◆	ac	a	e							watershed-wide			provided through Wayne County						●	
19	Regular airing of stormwater-related information on cable TV	ac		e					a		community-wide	\$100/hr+cost for cable TV, consult w/ local media ^c				✓		●	●	●	
20	Send watershed press releases to local media outlets	a		e					a		community-wide	\$100/release + printing costs				✓		✓	●	□	
21	Watershed-related articles in community newsletters ◆	ac		e					a		community-wide	\$50-100/hr ^d			●	●	●	●	●	●	
22	Watershed-related news and I & E materials on entity website ◆	a		e					a		community-wide	\$50-100/hr to update website ^{a,c}			●	●	●	●	●	●	
23	Support Lower Huron River Watershed webpage maintenance	a		e							3-5 hrs/month	\$100/hr ^d			●	●	●	●	●	●	
24	Develop and distribute education materials on LID tools for land use decision makers	ac						b			community-wide	\$.50 per set of 5 LID fact sheets from Washtenaw County Drain Office ^d			●	●	●	●	●	●	
25	Promote reporting system for illicit discharges ◆	abc					c				community-wide	\$100/hr +cost for cable TV, consult w/ local media ^c			●	●	●	●	●	●	
26	Household Hazardous Waste Collection Site/Day ◆	abc									per community	Recycling station expenses ^e			●	●	●	●	●	●	
27	Yard Waste Collection and/or Recycling ◆	abc									per community	Recycling station expenses ^e			●	●	●	●	●	●	

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28	Watershed and River crossing signage	a										strategic locations along road ROW and public facilities	\$20 per 24"x30" sign, or \$23 per 24"x36" sign, plus cost of sign post and installation (Co. Road Commission may supply posts and installation for free)		in coordination w/ county road commissions, SEMCOG	○	○	○	○	○	○

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Managerial: Ordinances and Policies																						
29	Adopt fertilizer reduction ordinance or policy	abcd	a									7 entities	\$10k			obtain sample ordinances	○	○	□	○	●	□
30	Adopt native landscaping ordinance or policy ◆	abcd	agj		a	d					c	10 entities	\$5k-10k			obtain sample ordinances	●	●	●	●	●	●
31	Adopt no dumping ordinance or policy ◆	abc										12 entities	\$5k-10k			obtain sample ordinances	●	✓	✓	✓	✓	✓
32	Adopt pet waste ordinance or policy	abcd										5 entities	\$5k-10k			obtain sample ordinances	□	□	●	✓	□	●
33	Adopt private roads ordinance or policy		ag		a						c	6 entities	\$5k-10k			obtain sample ordinances	✓	●	□	□	✓	□
34	Adopt Purchase of Development Rights ordinance		ag								c	3 entities	\$5k-10k ^d			obtain sample ordinances	●	●	□	□	□	×
35	Adopt stormwater management ordinance (e.g., Wayne Co.) ◆	abcd	agh		a	d					c	10 entities	\$5k-10k ^a				□	✓	●	✓	●	●
36	Adopt wetlands ordinance w/ natural features setback; create local map of wetlands ◆	abcd	abh		a	d					c	9 entities	\$5k-10k			obtain HRWC model ordinance; GIS, GPS capabilities	●	✓	●	●	○	●
37	Support County OSDS Ordinance	abcd										5 entities	\$3k-5k ^d				×	●	□	□	●	×
38	Adopt overlay zoning for riparian corridor ◆	abcd	abgh			d					c	8 entities					●	●	□	□	●	○
39	Disallow Occupancy Permits pending inspection for illicit connections										c	8 entities					●	×	✓	✓	●	✓
40	Enhance site plan review requirements ◆		bchi		a						ac	11 entities	\$5k-10k ^d			County Drain Offices; HRWC	✓	●	●	✓	●	●
41	Incorporate Low Impact Development principles ◆		agh		c	bd					ac	watershed-wide					●	○	●	●	●	✓
42	Implement septic system inspection at time-of-sale	abcd					a	c				4 entities	\$5k-10k ^a	\$300/ inspection			□	●	×	●	●	×
43	Improve enforcement of litter laws and nuisance properties	abc	aj								a	11 entities					✓	●	●	●	●	●
44	Improve enforcement of SESC policies					cd						4 entities					×	×	×	✓	●	×
45	Improve enforcement of construction site inspections ◆		ahij		a	bcd						11 entities					●	✓	●	●	●	●
46	Minimize total impervious cover in zoning ordinance ◆		ach		a						c	10 entities	\$5k-10k			obtain sample ordinances	✓	●	●	✓	✓	●
47	Promote open space preservation in zoning ordinance and master plan ◆	bc	abchi		a	d					c	10 entities	\$5k-10k ^a				✓	✓	✓	✓	✓	●
48	Review and revise grading and land clearing policies ◆		ahij		a	bcd					c	11 entities	\$5k-10k ^a			obtain sample standards	●	●	●	✓	●	✓
49	Review and revise SESC policies and practices	bc	ahi		a	cd						7 entities	\$5k-10k ^a			obtain sample standards	×	×	×	✓	●	●
50	Revise parking standards for new development/ redevelop. ◆		ah		a						c	11 entities	\$5k-10k ^a			obtain sample standards	●	●	●	✓	✓	●
51	Revise Stormwater Management Standards - pond landscaping					bd						10 entities	\$100/hr per municipal staff \$200/hr legal review ^e			County Drain Offices	●	○	●	●	□	●

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Managerial: Practices																					
52	Incorporate results of conservation planning analyses into local ordinances and policies ◆	abcd	abcgh ij							a		watershed-wide	\$3k-5k ^d		utilizing HRWC's conservation planning analysis	●	●	●	●	●	●
53	Reduce directly connected impervious surfaces	abc	ah		ac	bd						8 entities 1st: new development; 2nd: retrofits	\$50/house ^b			○	●	□	○	○	✓
54	Increase amount of refuse containers and review their distribution		a								a	8 entities			in coordination w/ HCMA	○	●	○	○	□	●
55	Practice high-powered street and paved area sweeping ◆					cd						7 entities; every 1-2 wks except during freeze	\$100k-200k ^{a,b}	\$30-65/curb mile \$10-20/cubic yd disposal	in coordination w/ MDOT; County Road Commissions	×	✓	✓	●	✓	○
56	Practice nutrient management on agricultural land		a									4 entities	\$10/acre	\$10/acre	USDA programs: EQIP; CRP	○	○	□	□	□	×
57	Provide pet waste bags in parks and public areas	abcd										public facilities	\$100/station ^d	some maintenance		□	□	✓	●	□	□
58	Practice alternative drain practices that rehabilitate stream and riparian habitats		abcgh		a	bcd						watershed-wide	\$5k-10k		in coordination w/ County Drain Offices	×	●	×	○	○	●
59	Storm drain/catch basin marking ◆	abcd	ahj									sewered areas	\$1.50/Lexan marker \$3/ crystal coated marker		Volunteers apply markers and hang educational fliers	●	✓	✓	✓	✓	✓
60	Support the Huron Clinton Metropolitan Authority and its Metroparks in the lower Huron River Watershed									a		watershed-wide									
61	Support the Downriver Linked Greenways Initiative									a		9 entities	\$100/hr municipal staff				✓	✓	✓	✓	✓
62	Offer and promote river-focused recreation outings									a		watershed-wide	\$100/hr municipal staff		HCMA						

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Managerial: Studies and Inventories																					
63	Develop or adapt QAPPs for applicable parameters ♦										c	as needed	\$100/hr		MDEQ, HRWC	●	●	●	●	●	●
64	Develop and implement a coordinated monitoring strategy to measure water quality, water quantity and biota ♦	dh	c	b	ad	a	b				ad	watershed-wide		\$50k-100k	in coordination w/ county governments; HRWC Adopt-A-Stream; MDEQ; MDNR	●	●	●	●	●	●
65	Initiate hydrologic and hydraulic studies ♦			b							a	watershed-wide	\$35k-75k ^d	\$10k-25k	MDEQ; USGS; consultant services	●	●	●	●	●	●
66	Inventory and stabilize eroding streambanks	ch			ad						a	as needed	\$1k/mile inventory ^{a, f} \$1.50-3/pp live stake \$2-9/pp joint planting stake \$5-9/ft live fascine \$10-25/sq ft live cribwall \$25-35/sq yd 8" rip-rap \$30-45/sq yd 16" rip-rap \$20-30/ft gabion baskets \$30-75/lineal ft A-Jacks		in coordination w/ County Drain Offices		●	●	●	○	○
67	Inventory areas lacking stormwater management for retrofit opportunities			a	ad								\$100/hr per municipal staff		consultant services	●	●	○	○	●	○
68	Investigate opportunities for recreation areas	cghij									a		\$100/hr per municipal staff			✓	✓	✓	○	●	✓
69	Measure pollutant removal efficiencies of BMPs		c		b	a	a	b	a							○	○	○	○	□	□
70	Conduct field work to refine natural features information and develop a rapid methodology to prioritize for protection ♦	bchij									ad	watershed-wide	\$53,000 (in-kind contribution from HRWC through grants)		MI Natural Features Inventory; universities; consultants; SE MI Stewardship Network; HRWC	●	●	●	●	●	□
71	Conduct natural features inventories ♦	bce									ad	watershed-wide	\$1,200 per site ^d		MI Natural Features Inventory; universities; consultants; SE MI Stewardship Network; HRWC	●	●	●	●	●	□
72	Establish BMP case studies	d									d					●	○	○	○	○	○
73	Study drainage around Cogswell and make improvements	d		a												✕	✕	✕	✕	✕	✕

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Managerial: Coordination and Funding																							
74	Ensure consistency of ordinances among the lower Huron River Watershed communities ◆	abcd	aghij	ac	bcd			c	d					\$100/hr per municipal staff \$200/hr legal review ^a				●	●	●	●	●	●
75	Improve drain maintenance coordination with County and/or MDOT		ah	a	bcd									\$10k-15k			in coordination w/ County Drain Offices; MDOT	●	●	●	●	✓	●
76	Establish and maintain long-term committee of community/entity representatives to promote implementation of the Watershed Management Plan ◆	d	ghij	bd					bd		4 hrs/month			\$100/hr per municipal staff			in coordination w/ existing LHRWIC members	●	●	●	●	●	●
77	Create and maintain partnerships with institutions, schools, and private sector to promote a collaborative effort in watershed management ◆	d	ghij	b					bd		4 hrs/month			\$100/hr per municipal staff				●	●	●	●	●	●
78	Seek alternative funding sources ◆			ac	a		b		b		5 hrs/month			\$100/hr per municipal staff				●	●	●	●	●	●
79	Create a funding source for land acquisition and protection		g	ac	a					a				\$150/hr for development ^a \$200/hr legal review			legal assistance	○	○	○	○	○	○
80	Create law to allow illicit discharge enforcement as a source of revenue			ac							8 entities			\$100/hr for municipal staff \$200/hr legal review ^a			legal assistance	●	○	□	□	●	●
81	Establish enforcement program of O&M component of county stormwater ordinance				a									\$100/hr for municipal staff \$200/hr legal review ^a			legal assistance						
82	Review annual reports from LHRWIC members and other NPDES permittees			b							quarterly meetings			\$100/hr per municipal staff				●	●	●	●	●	●
83	Conduct work sessions to prioritize specific projects for funding, establish estimated costs, and identify funding mechanisms ◆			ac							4 hrs/month			\$100/hr per municipal staff \$200/hr legal review ^e			through long-term committee implementing WMP	●	●	●	●	●	●
84	Secure funding and develop partnerships to conduct monitoring ◆	a		ac					b		as needed						through long-term committee implementing WMP	●	●	●	●	●	●
85	Become a government member of the HRWC	ad		cd							9 entities				\$400 +			●	✓	✓	●	✓	

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Vegetative																					
86	Construct stormwater wetlands	h		a	bd							where feasible	\$30k-50k/acre ^f	2-4% of construction	USDA programs; USFWS; Ducks Unlimited; County Drain Offices; consultant services	×	●	□	□	○	○
87	Create and maintain grassed waterways			a	bd							4 entities	\$3.5k/acre \$4k/acre w/ tile ^b	\$70-90/acre	USDA programs: EQIP; CRP; NRCS	×	✓	□	□	●	×
88	Create and maintain vegetated filter strips	h		a	bd							6 entities	\$200/acre	\$4/acre	USDA programs: EQIP; CRP; NRCS	○	○	□	□	●	×
89	Plant and maintain riparian buffer with native vegetation	gh		a	bd							10 entities	\$350/acre ^b	1-2% of installation	USDA programs; NRCS	●	✓	○	○	●	✓
90	Install bioretention systems in developed/redeveloping areas			a	bd			b				where feasible	\$6.80/cubic ft ^b	2% for O & M		□	●	●	●	○	✓
91	Install grassed swales, where feasible	h		a	bd			b				11 entities	\$.30/sq. foot ^f	\$.02/sq. foot ^f		✓	✓	●	○	○	✓
92	Install pond buffer native plantings	gh		a	bd							10 entities	\$350/acre ^b	1-2% of installation		●	○	○	○	●	●
93	Install vegetated roofs			a								6 entities	\$12-24/sq ft			○	○	●	○	□	○
94	Practice agricultural conservation cover			a	bd							4 entities	\$225/acre	\$11.15/acre	USDA programs: EQIP; CRP; NRCS	○	○	□	□	×	×
95	Practice conservation crop rotation with cover crop and mulch/no-till			a	bd							2 entities	\$170/acre Cover Crop \$10-15/acre Mulch/No-till	\$170/acre Cover Crop \$10-15/acre Mulch/No-till	USDA programs: EQIP; CRP; NRCS	○	□	□	□	×	×
96	Restore wetlands, recreate storage	gh		a	bd							6 entities	\$700-2k/acre ^b	2-4% of construction	USFWS; USDA; Ducks Unlimited; County Drain Offices	□	●	○	○	○	□
97	Install rain gardens			a	bd							residential sites w/ appropriate soils	\$500/homesite, or \$3-5/sq ft up to \$10-12/sq ft for professional work	4% of construction		✓	□	○	○	●	✓
98	Reduce turf with shrubs and trees			a	bd							10 entities	\$5,000/half acre of tree & shrub seedlings and ground cover	\$400/year		✓	○	✓	●	●	●
99	Evaluate areas for installing woody debris or habitat structures and install	ch										5 entities	\$60/ft ^f		consultant services		●	○	□	○	✓

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		1 Public Info & Ed	2 Protect Natural Features	3 WMP Fulfillment	4 Reduce Flow Variability	5 Soil Erosion/Sediment	6 Reduce Nutrients	7 Reduce Pathogens	8 Low Impact Development	9 Increase Monitoring	10 Recreational Uses		Capital	Annual		Berlin Twp	Brownstown Twp	Flat Rock	Gibraltar	Huron Twp	Rockwood
100	Stabilize soils at crossing embankments		h			cd						per Lower Huron Stream Crossing Inventory	Mobilization: 3%-5% of construction costs; Site prep.: \$250/ton avg. for mulching; \$2-4/sq. yd for geotextile fabric; \$1.50-\$6 for seeding; \$2-\$3.50 for sod; \$30/sq. yd. For riprap; design and contingencies 25-30% construction costs. ^f	3-5% of construction costs ^f	in coordination w/ County Drain Offices; County Road Commissions; MDOT	□	●	○	●	●	✓

^a Combined Downriver WMP

^b Mill Creek WMP

^c Middle 1 Rouge SWMP

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^f RPO Cost Estimating Guidelines 1997; 2001

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Table 5.5 Lower Huron River Watershed Action Plan

KEY:
 ✓ currently doing
 ● planned for short-term
 ○ planned for long-term
 □ not planned currently
 ✕ not applicable

◆ = will be reflected in SWPPIs, PEPs, and IDEPs as commitments

letters correspond with objectives

#	Management Alternative	Goals Addressed										Level of Effort	Cost		Technical/Financial Resources	E									
		1 Public Info & Ed	2 Protect Natural Features	3 WMP Fulfillment	4 Reduce Flow Variability	5 Soil Erosion/Sediment	6 Reduce Nutrients	7 Reduce Pathogens	8 Low Impact Development	9 Increase Monitoring	10 Recreational Uses		Capital	Annual		Berlin Twp	Brownstown Twp	Flat Rock	Gibraltar	Huron Twp	Rockwood				
Structural																									
101	Construct infiltration basins/trenches		h		a	bd					b			at strategic locations in 9 entities	\$2-5/cubic ft ^b	<5% of construction	consultant assistance	✓	●	○	○	○	○	✓	
102	Construct wet extended detention ponds for new developments		h		a									variable, depends on amount of development/ redevelopment	\$45,700 for 1-ac ft pond; \$232k for 10-ac ft pond ^g	3-5% of construction costs ^g	in coordination w/ County Drain Offices	□	✓	●	✓	○	✓		
103	Install best available technology to reduce nutrients at permitted point sources													NPDES facilities in 5 entities	varies depending on technology and pollutant				✓	○	○	□	□	○	
104	Install catch basin inserts		h			bd								sewered areas	\$50-800 each ^f	\$20-40/each			●	○	○	○	○	○	
105	Install grade stabilization structures for agricultural operations		h		a	bd								2 entities	\$5k-6k geotextile \$8.5k-9k fabricated	\$50-95/each			□	○	□	□	□	✕	
106	Install porous pavement				a	bd					b			at appropriate new developments and redevelopments	\$40k-80k/acre ^f	\$200/acre			●	○	●	○	●	●	
107	Install sand and organic filters		h			bd								1st: new development; 2nd: retrofits	\$5/cubic ft	\$0.54/cubic ft			□	○	□	□	□	●	
108	Install sediment traps or basins at construction sites		h		a	bd								All sites	\$6k ^b	10% of installation			□	✓	●	✓	●	✓	
109	Install waste storage facilities					bd								where feasible	\$100k-250k ^b	\$2k-5k	USDA programs: EQIP; CRP		○					✕	✕
110	Repair misaligned/obstructed culverts		h		a	d								as identified in Lower Huron Stream Crossing Inventory	\$150k-200k/site					○	○	○	○	✓	✓
111	Stabilize road/bridge surfaces													as identified in Lower Huron Stream Crossing Inventory	Mobilization: 3%-5% of construction costs; Site prep.: \$250/ton avg. for mulching; \$2-4/sq. yd for geotextile fabric; \$1.50-\$6 for seeding; \$2-\$3.50 for sod; \$30/sq. yd. For riprap; design and contingencies 25-30% construction costs. ^f	3-5% of construction costs ^f			○	○	✓	○	●	✓	

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^f RPO Cost Estimating Guidelines 1997; 2001

^g Brown Schueler

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Management Alternative	Entities						
	Romulus	South Rockwood	Sumpter Twp	Van Buren Charter Twp	Wayne County	Woodhaven	W-B School District
Managerial: Illicit Discharge Elimination							
Conduct outfall screening program ◆	✓	●	●	□	✓	●	●
Perform smoke/dye testing ◆	✓	✓	●	✓	●	○	○
Develop reporting system/ follow-up plan for illicit discharges ◆	✓	✓	●	✓	✓	●	✓
Trace illicit discharges ◆			●	✓	✓		○
Enforcement for non-correction of illicit discharges ◆	✓		●	●	✓		✗
Train staff to identify illicit discharges ◆	✓		●	✓	✓		✓
Minimize seepage from sanitary sewers	✓	●	●	✓	✓	●	✗
Minimize seepage from on-site sewage disposal systems	✓	●	●	●	✓	●	✗
Update outfall and/or drainage map	✓	●	○	●	○	●	○
Develop and implement method to identify and record outfalls from new construction			○	●	□		○

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Management Alternative	Entities						
	Romulus	South Rockwood	Sumpter Twp	Van Buren Charter Twp	Wayne County	Woodhaven	W-B School District
Managerial: Public Information & Education							
Homeowner education about septic system maintenance ◆	<input type="checkbox"/>	●	●	✓	✓	x	●
Provide watershed education materials to residents ◆	●	●	●	●	✓	●	●
Provide trash management information and education to public ◆	✓	●	●	✓	✓	✓	○
Provide information and education program to homeowners on yard and lawn care, native landscapes ◆	✓	●	●	✓	✓	✓	○
Provide information and education program to homeowners on proper pet waste management ◆	✓	●	●	✓	✓	✓	○
Provide information and education to farmers ◆		●	●	<input type="checkbox"/>	<input type="checkbox"/>	x	x
Recreational Vehicle (RV) Waste Disposal Education ◆	<input type="checkbox"/>	●	●	●	✓	●	○
Environmental Information Line and Pollution Complaint Hotline◆			●	✓	✓		○
Regular airing of stormwater-related information on cable TV	✓		●	✓	x	✓	<input type="checkbox"/>
Send watershed press releases to local media outlets	●		●	✓	✓	●	x
Watershed-related articles in community newsletters ◆	●	●	●	●	●	●	●
Watershed-related news and I & E materials on entity website ◆	●	●	●	●	✓	●	●
Support Lower Huron River Watershed webpage maintenance	●	●	●	●	●	●	●
Develop and distribute education materials on LID tools for land use decision makers	●	●	●	✓	✓	●	●
Promote reporting system for illicit discharges ◆	●	●	●	✓	✓	●	●
Household Hazardous Waste Collection Site/Day ◆	●	●	●	✓	✓	✓	●
Yard Waste Collection and/or Recycling ◆	●	●	●	✓	✓	✓	●

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Management Alternative	Entities						
	Romulus	South Rockwood	Sumpter Twp	Van Buren Charter Twp	Wayne County	Woodhaven	W-B School District
Watershed and River crossing signage	○	○	○	○	◁	◁	○

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Management Alternative	Entities						
	Romulus	South Rockwood	Sumpter Twp	Van Buren Charter Twp	Wayne County	Woodhaven	W-B School District
Managerial: Ordinances and Policies							
Adopt fertilizer reduction ordinance or policy		○	○	○	x		x
Adopt native landscaping ordinance or policy ◆	<	●	●	●	□		x
Adopt no dumping ordinance or policy ◆	<	●	<	<	<	<	x
Adopt pet waste ordinance or policy	□	□	●	□	x	<	x
Adopt private roads ordinance or policy	□	<	●	○	x	□	x
Adopt Purchase of Development Rights ordinance	□	●	□	□	□		x
Adopt stormwater management ordinance (e.g., Wayne Co.) ◆	<	□	<	<	<	<	x
Adopt wetlands ordinance w/ natural features setback; create local map of wetlands ◆		●	○	●	□		x
Support County OSDS Ordinance	●	x	●	<	<	□	x
Adopt overlay zoning for riparian corridor ◆	○	●	○	○	x		x
Disallow Occupancy Permits pending inspection for illicit connections		●	x	●	x	<	x
Enhance site plan review requirements ◆		<	●	<	<	<	x
Incorporate Low Impact Development principles ◆	<	●	○	○	<	●	x
Implement septic system inspection at time-of-sale	<	x	□	x	<		x
Improve enforcement of litter laws and nuisance properties		<	●	●	<	<	x
Improve enforcement of SESC policies	<	x	x	x	<	x	x
Improve enforcement of construction site inspections ◆		●	●	●	<	●	x
Minimize total impervious cover in zoning ordinance ◆		<	●	<	x	○	x
Promote open space preservation in zoning ordinance and master plan ◆	<	<	○	<	x		x
Review and revise grading and land clearing policies ◆	<	●	●	●	□	●	x
Review and revise SESC policies and practices	<	x	x	●	<	<	x
Revise parking standards for new development/ redevelop. ◆	<	●	●	<	x	<	x
Revise Stormwater Management Standards - pond landscaping		●	●	●	<	●	x

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Table 5.5 Lower Huron River Watershed Action Plan

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Management Alternative	Entities						
	Romulus	South Rockwood	Sumpter Twp	Van Buren Charter Twp	Wayne County	Woodhaven	W-B School District
Managerial: Practices							
Incorporate results of conservation planning analyses into local ordinances and policies ◆	<input type="checkbox"/>	●	●	●	<input type="checkbox"/>	●	x
Reduce directly connected impervious surfaces	<input type="checkbox"/>		○	○	✓	○	x
Increase amount of refuse containers and review their distribution		○	<input type="checkbox"/>	○	<input type="checkbox"/>	●	x
Practice high-powered street and paved area sweeping ◆	✓	x	x	x	<input type="checkbox"/>	✓	x
Practice nutrient management on agricultural land		x	○	x	x	●	x
Provide pet waste bags in parks and public areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	○	<input type="checkbox"/>	●	<input type="checkbox"/>
Practice alternative drain practices that rehabilitate stream and riparian habitats		x	○	○	✓	x	x
Storm drain/catch basin marking ◆	✓	●	○	✓	✓	✓	<input type="checkbox"/>
Support the Huron Clinton Metropolitan Authority and its Metroparks in the lower Huron River Watershed	✓			✓	✓		
Support the Downriver Linked Greenways Initiative	✓			✓	✓	✓	
Offer and promote river-focused recreation outings							

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Management Alternative	Entities						
	Romulus	South Rockwood	Sumpter Twp	Van Buren Charter Twp	Wayne County	Woodhaven	W-B School District
Managerial: Studies and Inventories							
Develop or adapt QAPPs for applicable parameters ◆	●	●	●	●	●	●	●
Develop and implement a coordinated monitoring strategy to measure water quality, water quantity and biota ◆	●	●	●	●	●	●	●
Initiate hydrologic and hydraulic studies ◆	●	●	●	●	●	●	●
Inventory and stabilize eroding streambanks			□	□	●		×
Inventory areas lacking stormwater management for retrofit opportunities		●	□	●	×	○	×
Investigate opportunities for recreation areas	✓	✓	○	✓	□		×
Measure pollutant removal efficiencies of BMPs		○	□	□	●		□
Conduct field work to refine natural features information and develop a rapid methodology to prioritize for protection ◆	○	●	○	●	●	●	●
Conduct natural features inventories ◆	○	●	○	✓	●	●	●
Establish BMP case studies	●	○	○	○	✓	●	○
Study drainage around Cogswell and make improvements	●	×	×	×	×	×	×

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Management Alternative	Entities						
	Romulus	South Rockwood	Sumpter Twp	Van Buren Charter Twp	Wayne County	Woodhaven	W-B School District
Managerial: Coordination and Funding							
Ensure consistency of ordinances among the lower Huron River Watershed communities ◆	<input type="checkbox"/>	●	●	●	●	●	x
Improve drain maintenance coordination with County and/or MDOT	●	●	●	●	●	✓	●
Establish and maintain long-term committee of community/entity representatives to promote implementation of the Watershed Management Plan ◆	●	●	●	●	●	●	●
Create and maintain partnerships with institutions, schools, and private sector to promote a collaborative effort in watershed management ◆	●	●	●	●	●	●	●
Seek alternative funding sources ◆	●	●	●	●	●	●	●
Create a funding source for land acquisition and protection	○	○	□	○	○	○	○
Create law to allow illicit discharge enforcement as a source of revenue	○	●	□	○	□	●	x
Establish enforcement program of O&M component of county stormwater ordinance				●	□		x
Review annual reports from LHRWIC members and other NPDES permittees	●	●	●	●	●	●	●
Conduct work sessions to prioritize specific projects for funding, establish estimated costs, and identify funding mechanisms ◆	●	●	●	●	●	●	●
Secure funding and develop partnerships to conduct monitoring ◆	●	●	●	●	●	●	●
Become a government member of the HRWC		●	●	✓	✓		x

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Management Alternative	Entities						
	Romulus	South Rockwood	Sumpter Twp	Van Buren Charter Twp	Wayne County	Woodhaven	W-B School District
Vegetative							
Construct stormwater wetlands	✓	x	□	○	□	○	□
Create and maintain grassed waterways	✓	x	□	x	□	✓	□
Create and maintain vegetated filter strips			□	○	○	✓	□
Plant and maintain riparian buffer with native vegetation		●	□	○	○	✓	□
Install bioretention systems in developed/redeveloping areas	□	□	□	●	□	○	□
Install grassed swales, where feasible	✓	✓	□	●	○	✓	□
Install pond buffer native plantings		●	□	●	○	●	□
Install vegetated roofs	□	○	□	□	□	□	□
Practice agricultural conservation cover		○	○	x	x	x	x
Practice conservation crop rotation with cover crop and mulch/no-till		○	□	x	x	x	x
Restore wetlands, recreate storage	✓	□	□	□	□	○	□
Install rain gardens		○	○	○	○	□	□
Reduce turf with shrubs and trees		✓	○	●	□	○	□
Evaluate areas for installing woody debris or habitat structures and install	□		□	□	○		□

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Management Alternative	Entities						
	Romulus	South Rockwood	Sumpter Twp	Van Buren Charter Twp	Wayne County	Woodhaven	W-B School District
Stabilize soils at crossing embankments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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Management Alternative	Entities						
	Romulus	South Rockwood	Sumpter Twp	Van Buren Charter Twp	Wayne County	Woodhaven	W-B School District
Structural							
Construct infiltration basins/trenches	<input type="checkbox"/>	✓	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Construct wet extended detention ponds for new developments	✓	<input type="checkbox"/>	<input type="checkbox"/>	✓	<input type="checkbox"/>	✓	✗
Install best available technology to reduce nutrients at permitted point sources		✓	✗	✗	✗	<input type="checkbox"/>	<input type="checkbox"/>
Install catch basin inserts	✓	●	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Install grade stabilization structures for agricultural operations		✗	<input type="checkbox"/>	✗	✗	✗	<input type="checkbox"/>
Install porous pavement	<input type="checkbox"/>	●	<input type="checkbox"/>	●	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Install sand and organic filters		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Install sediment traps or basins at construction sites		<input type="checkbox"/>	<input type="checkbox"/>	✓	<input type="checkbox"/>	✓	<input type="checkbox"/>
Install waste storage facilities		<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Repair misaligned/obstructed culverts	✓	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✓	<input type="checkbox"/>	<input type="checkbox"/>
Stabilize road/bridge surfaces	✓	<input type="checkbox"/>	<input type="checkbox"/>	✗	✓	<input type="checkbox"/>	<input type="checkbox"/>

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