

Table 7-1 Action Item Summary by Subwatershed

12-digit HUC/ Water Body	Dams	CSOs	Contamin. Sites	Sed	Nutrients	GW contam	Flooding	Habitat	Recreation	Category/Practices	Target amt by 2023	Units	Priority (<u>h</u> igh- <u>m</u> od)	Time Frame (yr or On- going)	Cost	Sed. (tons/ yr)	N (lb/ yr)	P (lb/ yr)
041100020305 Main Stem & tribs																		
Main Stem	>			>	>		>	>		Dam Removal	2	Dams	h	0-1	1 million			
Main Stem	>			>	>		>	>		Remove low-head dams Remove Gorge dam	1	Dams	h	by 2018				
Main Stem watershed - Gorge		>								CSO Containment/Diversion	105/yr reduced by 2028	overflows reduced per yr (4 sites)	h	by 2028				
Main stem watershed MS watershed Main stem			>					>		Contamination	9	sites	h	yr 1				
			>							Determine status of DERR listed sites								
			>							Brownfields inventory Initiate cleanup	1 2		h m	yr 1-5 yr 4-8				
Main stem tribs							>			Riparian Restoration	8,000	Linear Feet	h/m	KC-1-3 others by 2023	\$25-200/lf	490	686	264
							>			Restore Streambank								
Main Stem watershed Watershed, lakes				>			>			Riparian plantings - native plants/trees/shrubs	25	Acres	m	start in yr 1 2		11	150	20
							>			Remove/treat Invasive Species	50	Acres	m	yr 3-5				
Main Stem tribs				>			>			Stream Restoration	8	Acres-foot	h/m	KC-1-3 others 3-10		3.5	50	7
							>			Restore Flood Plain								
Main stem tribs							>		>	Restore Channel	4,000	Linear Feet	h/m	KC 1-3	\$100-200/lf			
							>			Wetland Restoration	10	Acres	m	by 2023	\$5k- 100k/ac.	10	280	62
Main stem watershed							>			Reconstruct, Restore, Reconnect Wetlands								
MS watershed MS watershed				>	>		>			Urban runoff and green infrastructure	20,000 10,000	sq feet sq feet	m h	yr 3-10 yr 3-10	\$500,000 \$200,000		2 2	0.50 0.4
				>	>		>			Rain gardens Parking lot retrofit - Bioinfiltration/ perm pavemnt								

12-digit HUC/ Water Body	Dams	CSOs	Contamin. Sites	Sed	Nutrients	GW contam	Flooding	Habitat	Recreation	Category/Practices	Target	Units	Priority	Time	Sed.	N (lb/ yr)	P (lb/ yr)
											amt by 2023	(<u>h</u> igh- <u>m</u> od)	(<u>h</u> igh- <u>m</u> od)	Frame (yr or <u>o</u> n- going)			
MS watershed										Storm water inventory	1	inventory	h	yr 1-3			
MS watershed										Storm water retrofits for water quality	100	ac treated	h	on-going	\$400-17k/ac	70	10
MS watershed										No-mow ditch/veg swale/daylight	1,000	linear feet - treats 4 ac	m	yr 3-8		1	0.4
Middle Cuyahoga River watershed										Neighborhood-scale green infrastructure	1		h	by 2023	\$25-50k design \$20k bumpouts	200	25
MS watershed										Conservation Easements Acquire Wetlands/easements	25	Acres	h	by 2023	\$5-25k/ac	1,400**	316**
MS watershed										Education and Outreach Develop Brochures/Fact Sheets	6	Brochures/ Fact Sheets	m	ongoing			
MS watershed										Watershed Festivals	10	Festivals	h	ongoing			
MS watershed										Websites	1	Website	h	yr 1			
MS watershed										Install Signs	10	Signs	m	ongoing	\$200-500		
MS watershed										Stream Clean-Ups	15	Clean-Ups	h	ongoing			
MS watershed										New lake/stream stewardship groups	1	new group active	m	yr 2-6			
MS watershed										Golf course certification outreach	4	golf course contacted	h	yr 2-6			
MS watershed										Stencil Storm Drains	100		m	ongoing			
MS watershed										Workshops/ Training	5	Workshops	h	ongoing			
MS watershed										Develop Manual(s)	1	Manuals	h	by 2015			
MS watershed										Rain barrel workshops	50	rain barrels	h	ongoing			
MS watershed										Develop Newsletters	10	Newsletters	m	ongoing			
MS watershed										Outreach for dams	2	Press Relea: database	h	yr 1			
MS watershed										maintain stream database	1	database	h	ongoing			
MS watershed										Local Policy Green code audit/update	2	audits/	h	yr 1-5			

12-digit HUC/ Water Body	Dams	CSOs	Contamin. Sites	Sed	Nutrients	GW contam	Flooding	Habitat	Recreation	Category/Practices	Target amt by 2023	Units	Priority (<u>h</u> igh- <u>m</u> od)	Time Frame (yr or <u>Q</u> n- going)	Cost	Sed. (tons/ yr)	N (lb/ yr)	P (lb/ yr)
Cuy River	✓				✓			✓		Monitoring Bacteria sampling Chemical Sampling Macroinv./Fish/QHEI Sampling	6 3 4	Samples Sites Sites	<i>h</i> <i>m</i> <i>m</i>	yr 1, O yr 2-5 yr 3-6				
Cuy river					✓			✓		Recreation Develop water trail Construct/improve access Boardwalk/trail	1 5 8,000	water trail site lf	<i>h</i> <i>m</i> <i>m</i>	yr 1-10 by 2023 by 2023				
Cuy river/tribs					✓			✓		Economic benefit study	1	study	<i>m</i>	yr 2-5				
MS watershed					✓			✓		Develop quest(s)/ virtual watershed tour	2	quests/	<i>m</i>	yr 2-5				
041100020305 (part) Fish Creek												<i>subtotal</i>				674	1871	518
Fish Creek				✓	✓			✓		Riparian Restoration Restore Streambank ***	3,000	Linear Feet	<i>h</i>	start yr 1	\$25-200/lf	34	54	20
Fish Cr. & tribs				✓	✓			✓		Riparian plantings	25	Acres	<i>h</i>	start yr 1		25	200	35
Fish Cr. & tribs					✓			✓		Treat for Invasive Species	40	Acres	<i>m</i>	start yr 2				
Fish Creek				✓	✓			✓		Stream Restoration Restore Flood Plain	50	Acres-foot	<i>h</i>	start yr 1		22	300	41
Fish Creek & tribs				✓	✓			✓		Hydrological study in flood- prone area	1	study	<i>m</i>	yr 3-5				
Fish Creek				✓	✓			✓		Wetland Restoration reconnect/restore Wetlands	100	Acres	<i>h</i>	start yr 1	\$5-100k/ ac.	100	2800	632
FC watershed					✓			✓		Home Sewage Treatment Systems correction of failing HSTS	10	HSTS	<i>h</i>	O				
FC watershed				✓	✓			✓		Urban runoff and green infrastructure Rain gardens	6,000	sq feet	<i>m</i>	start yr 3	\$150,000			1
FC watershed				✓	✓			✓		Retrofit parking lot - bioinfiltration/perm pavmt	10,000	square feet	<i>m</i>	start yr 3				2
FC watershed				✓	✓			✓		Storm water inventory	1	inventory	<i>h</i>	yr 1-3				0.04

12-digit HUC/ Water Body	Dams	CSOs	Contamin. Sites	Sed	Nutrients	GW contam	Flooding	Habitat	Recreation	Category/Practices	Target amt by 2023	Units	Priority (<u>h</u> igh- <u>m</u> od)	Time Frame (yr or <u>o</u> n- going)	Cost	Sed. (tons/ yr)	N (lb/ yr)	P (lb/ yr)
Plum Cr./tribs				✓	✓		✓	✓		Riparian Restoration Restore/stabilize eroding Streambank	1000	Linear Feet	h	yr 2-8	\$25-200/lf	6	13	5
Plum Cr./tribs				✓	✓		✓	✓		streambank stabilization - pasture	3000	lf	h	yr 2-8		14	38	10
Plum Cr. Tribs				✓	✓	✓	✓	✓		Riparian plantings	8	Acres	h	start in yr 1 2	\$4,000 + labor	4	67	7
Plum Cr. Tribs				✓	✓	✓	✓	✓		Stream Restoration Restore Flood Plain	10	Acre-foot	m	yr 2-8		4	60	8
Plum Cr./tribs				✓	✓	✓	✓	✓		Restore Channel	1000	Linear Feet	h	yr 2-8	\$100-200/lf	20		
Plum Cr. Tribs				✓	✓	✓	✓	✓		Wetland Restoration Reconstruct, Restore, Reconnect Wetlands	25	Acres	h	start in yr 1 2	\$5k- 100k/ac.	25	700	158
Plum Cr.				✓	✓	✓	✓	✓		Home Sewage Treatment Systems Repair/Replace HSTS	10	HSTS	h	ongoing			311	122
Plum Cr.				✓	✓	✓	✓	✓		Urban runoff and green infrastructure Rain gardens	6000	sq feet	m	yr 3-10			1	0.1
Plum Cr.				✓	✓	✓	✓	✓		Parking lot retrofit - bioinfiltration/perm. pavemt	5000	sq ft	m	yr 2-8			1	0.14
Pl. C. watershed				✓	✓	✓	✓	✓		Storm water inventory	1	inventory	h	ongoing				
Plum Cr.				✓	✓	✓	✓	✓		Storm water retrofits	60	acres treated	h	ongoing	\$400-17k/	2.7	30	12
Pl. Cr watershed				✓	✓	✓	✓	✓		No-mow ditch/veg swale/ daylight	500	linear feet	m	yr 3-8			0.4	0.2
Mid Cuy wshed				✓	✓	✓	✓	✓		Neighborhood green infra.	1		h	by 2023	see above	150	110	6
Pl C watershed				✓	✓	✓	✓	✓		Agricultural BMPs Survey of practices	1	survey	h	yr 1-3				
Pl Cr/tribs				✓	✓	✓	✓	✓		2-Stage Channel/overwide	500	Linear Feet	m	by 2023			147	46
Plum Cr. and tribs				✓	✓	✓	✓	✓		Grassed Waterways/ vegetated buffer strips	50	Acres treated	h	yr 5-8			211	113
Pl Cr watershed				✓	✓	✓	✓	✓		Cover crops	100	acres	h	yr 3-6			110	128
Pl Cr watershed				✓	✓	✓	✓	✓		Residue applied to fields	50	acres	h	yr 3-6			55	64
Plum Cr. and tribs				✓	✓	✓	✓	✓		Livestock Crossings	1	Crossings	h	yr 3-5			128	64
Plum Cr. and tribs				✓	✓	✓	✓	✓		Livestock Excl. Fence & accompanying measures	3,000	Linear Feet	h	yr 3-5	\$11,300 + watering	7	56	12

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Pl Cr and tribs				✓	✓	✓	✓	✓	✓	Conservation Easements Acquire Wetlands/ conserv. land/ easemts	100	Acres	h	start in yr 1 2	\$5-25k/ac	100**	2800**	632**
Pl Cr and tribs				✓	✓	✓	✓	✓	✓	Education and Outreach Brochures/fact sheets	10	fact sheets	m	ongoing				
Plum Creek				✓	✓	✓	✓	✓	✓	Watershed Festivals	2	Festivals	h	ongoing				
Plum Creek				✓	✓	✓	✓	✓	✓	Websites	1	Website	h	ongoing				
Pl Cr watershed				✓	✓	✓	✓	✓	✓	Install Signs	10	Signs	m	ongoing	\$200-500			
Plum Creek				✓	✓	✓	✓	✓	✓	Stream Clean-Ups	5	Clean-Ups	h	start yr 2				
Plum Creek				✓	✓	✓	✓	✓	✓	New stewardship groups	1	new group	m	yr 2-6				
Pl Cr watershed				✓	✓	✓	✓	✓	✓	Conduct Workshops	5	Workshops	h	ongoing				
Pl Cr watershed				✓	✓	✓	✓	✓	✓	Conduct Training		Training Ses	h	ongoing				
Pl Cr watershed				✓	✓	✓	✓	✓	✓	Develop Manual(s)	1	Manuals	h	by 2015				
Pl Cr watershed				✓	✓	✓	✓	✓	✓	Rain barrel workshops	50	rain barrels	h	ongoing				
Pl Cr watershed				✓	✓	✓	✓	✓	✓	Outreach for golf courses	2	golf courses contacted	h	yr 2-4				
Pl Cr watershed				✓	✓	✓	✓	✓	✓	Develop Newsletters		Newsletters	m	ongoing				
Pl Cr watershed				✓	✓	✓	✓	✓	✓	Local Policy Green code audit/update	2	audits/	h	yr 1-5				
Plum Creek				✓	✓	✓	✓	✓	✓	Monitoring Chemical Sampling	1	Sites	h	start yr 1				
Plum Creek				✓	✓	✓	✓	✓	✓	Macroinv./Fish/QHEI Sampling	3	Sites	h	start yr 1				
Pl Cr watershed				✓	✓	✓	✓	✓	✓	Recreation Construct trail	1	mile	m	by 2023				
Plum Creek				✓	✓	✓	✓	✓	✓	Construct access sites	1	site	m	by 2023				
Pl Cr watershed				✓	✓	✓	✓	✓	✓	Economic benefit study	1	study	m	yr 2-5				
Pl Cr watershed				✓	✓	✓	✓	✓	✓	Quest/ virtual watershed tour	2	2 quests/1 tc	m	yr 2-5				
															Subtotal	469.8	2129	691.4

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041100020202 Breakneck Creek																		
Br Cr watershed			>	>	>	>	>	>	>	Brownfields brownfields inventory status of listed sites	1	inventory sites	h	yr 2-5 yr 1				
Br Cr watershed			>	>	>	>	>	>	>	Brownfields plan Initiate clean-up	11	plan	h	yr 4-8 yr 4-10				
Br Cr watershed			>	>	>	>	>	>	>	Riparian Restoration Restore Streambank Riparian plantings	1	plan	m	yr 4-8 yr 4-10				
Br Cr watershed			>	>	>	>	>	>	>	Treat Invasive Species	1	Acres	m	start yr 1 start yr 1	\$25-200/lf \$6,000 + labor	207	300	112
Breakneck Cr./tribs			>	>	>	>	>	>	>		12	Acres	h	start yr 1 start yr 1		6	93	17
Br Cr. watershed			>	>	>	>	>	>	>	Stream Restoration Restore Flood Plain Restore Channel Hydrological study in flood- prone area	50	Acres	m	start yr 2				
Br Cr/tribs			>	>	>	>	>	>	>	Wetland Restoration Reconnect/Restore Wetlands	50	Acres	h	start yr 1		22	300	41
Br Cr/Tribs			>	>	>	>	>	>	>		5000	Linear Feet	h	start yr 1	\$100-			
Br Cr/tribs			>	>	>	>	>	>	>		1	study	m	yr 3-7				
Br Cr watershed			>	>	>	>	>	>	>		80	Acres	h	start yr 2	\$5- 100k/ac	80	2240	506
Br Cr. Wshed			>	>	>	>	>	>	>	Home Sewage Treatment Systems Correction of failing HSTS	30	HSTS	h	ongoing			933	366
Br Cr watershed			>	>	>	>	>	>	>	Urban runoff and green infrastructure Rain gardens Parking lot retrofit - perm. pavemt/ biofillit.	20,000	sq feet	m	yr 2-10	\$500,000		2	0.50
Br Cr watershed			>	>	>	>	>	>	>	Storm water inventory Storm water retrofits	10,000	sq feet	h	yr 3-8	\$200,000		2	0.4
Br Cr watershed			>	>	>	>	>	>	>	No-mow ditch/veg swale/ daylight Neighborhood green infr.	1	inventory acres	h	yr 1-3 start yr 3	\$400-17k/	4.5	70	10
Br Cr watershed			>	>	>	>	>	>	>	Agricultural BMPs Survey of practices Livestock Excl. Fencing, accompanying measures	100	linear feet - treats 8 ac	m	yr 3-8	see above	0.2	2	0.8
Middle Cuy Watershed			>	>	>	>	>	>	>		2,000	survey	h	by 2023				
Br Cr watershed			>	>	>	>	>	>	>		1	Linear Feet	h	yr 1-2 yr 2-8	\$11,300 + watering	140	280	140
Br Cr/tribs			>	>	>	>	>	>	>		3,000	Linear Feet	h					

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041100020201 Potter Cr. (and Congress Lake Outlet, CLO)																			
										Riparian Restoration									
Po Cr/CLO/tribs				✓	✓		✓	✓		Restore streambank	1,600	Linear Feet	h	start yr 3	\$25-200/lf	110	160	60	
Po Cr/CLO/tribs				✓	✓		✓	✓		Riparian plantings	5	Acres	m	start yr 3	\$2,500 + labor	2.8	40	7	
Po Cr watershed										Remove/treat Invasive Species	50	Acres	m	start yr 3					
Po Cr/CLO/tribs				✓	✓		✓	✓		Stream Restoration	10	Acre-foot	m	start yr 3					
Po Cr/CLO/tribs				✓	✓		✓	✓		Restore Flood Plain									
Po Cr/CLO/tribs				✓	✓		✓	✓		Wetland Restoration	50	Acres	h	start yr 3	\$5-100k/ac	50	1400	316	
Po Cr watershed				✓	✓		✓	✓		Reconnect/Restore Wetlds									
Po Cr watershed				✓	✓		✓	✓		Home Sewage Treatment Systems	15	HSTS	h	ongoing					
Po Cr watershed				✓	✓		✓	✓		Repair/Replace HSTS									
Po Cr watershed				✓	✓		✓	✓		Urban runoff and green infrastructure	1000	sq feet	m	start yr 4					
Po Cr watershed				✓	✓		✓	✓		Rain gardens	20	acres treated	m	start yr 3	\$400-17k/	0.9	10	4	
Po Cr watershed				✓	✓		✓	✓		Storm water retrofits	500	linear feet	m	yr 3-8	see above	0.05	0	0.2	
Mid Cuy wshed				✓	✓		✓	✓		No-mow ditch/veg swale	1								
Po Cr/CLO				✓	✓		✓	✓		Neighborhood green infrastr.									
Po Cr/tribs				✓	✓		✓	✓		Agricultural BMPs	1	survey	h	yr 1-3					
Po Cr/tribs				✓	✓		✓	✓		Survey of practices	3,000	Linear Feet	h	yr 2-8	\$11,300 + watering	140	280	140	
Po Cr/tribs				✓	✓		✓	✓		Livestock Excl. Fence, accompanying measures	1	Supplies	h	yr 2-8					
Po Cr/CLO/tribs				✓	✓		✓	✓		Alternative Water Supplies	1,000	Linear Feet	m	yr 6-10					
Po Cr wshed				✓	✓		✓	✓		2-Stage Channel/overwide	100	Acres treated	h	start yr 3					
Po Cr wshed				✓	✓		✓	✓		Grassed Waterways/ vegetated buffer strips	100	acres	h	start yr 3					
Po Cr wshed				✓	✓		✓	✓		Cover crops	200	acres	h	start yr 3					
Po Cr/tribs				✓	✓		✓	✓		Residue applied to fields	100	acres	h	start yr 3					
				✓	✓		✓	✓		Conservation cover	1	Crossings	h	yr 2-8					
				✓	✓		✓	✓		Livestock Crossings									

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Potter				✓	✓		✓	✓	✓	Conservation Easements Acquire riparian buffer/ Wetlands/ easements	50	Acres	<i>h</i>	start_yr 1	\$5-25k/ac	50**	1400**	316**
Cr.watershed				✓	✓		✓	✓	✓	Education and Outreach Brochures/Fact Sheets Websites	4	Fact Sheets	<i>m</i>	ongoing				
Po Cr wshed			✓	✓	✓		✓	✓	✓	Field Days/workshops	1	Website	<i>h</i>	ongoing				
Po Cr wshed										Develop Manual(s)	3	workshops	<i>h</i>	start_yr 2				
Po Cr wshed										Local Policy	1	Manuals	<i>h</i>	yr 1-2				
Po Cr wshed				✓	✓		✓	✓	✓	Riparian setback	1	jurisdiction	<i>h</i>	yr 2-6				
Po Cr wshed				✓	✓		✓	✓	✓	Green code audit/update	1	audits/ updates	<i>m</i>	yr 1-5				71**
Po Cr/VLO								✓	✓	Monitoring Chemical Sampling	3	Sites	<i>h</i>	yr 1-2				
Po Cr./tribs				✓				✓	✓	(QHEI/HHEI) Sampling	1	Sites	<i>h</i>	yr 3-5				
Subtotal																889.2	4138	1195
Total																3,309	17689	4,822

* Contingent on Long Term Control Plan, assumes reduce all but 3 overflows/yr at each of 4 locations.

** Amount of additional loading prevented by preservation.

*** Primary reasons for restoring this streambank are flood management and habitat. Pollutant loading calculated for 200 lf of eroding bank.