## Complete Management Action Project List for Maumee AOC Wildlife Habitat BUI 14b (WildMAPs)

On 12/14/17 the MAAC approved the projects below for recommendation to Ohio EPA. Ohio EPA endorsed these projects on 1/18/18 and US EPA accepted them on 2/12/18. It is expected that once implemented these projects will achieve the restoration target for BUI 14b: Loss of Wildlife Habitat.

Project ID	Project name (Site name)							
COMPLET	COMPLETED		AOC GLRI Funding	Other Funding	Implementer	Funding Source	Complete	
1-16	Magee Marsh State Wildlife Area		\$1,075,000		ODNR-Wildlife	COMPLETE (GLRI via U.S. EPA)	6/22	
2-16 & 3-16	Toussaint Parcel East and Toussaint Parcel West	242.6	\$2,297,000		DU, U.S. FWS	COMPLETE (GLRI via U.S. FWS)	9/22	
4-16	Irwin upland site 5 (Griswold property)	20	\$150,000		Metroparks	COMPLETE (GLRI via U.S. EPA)	9/18	
6-16	Habitat Restoration Plans	0	\$400,000		Ohio EPA	COMPLETE (GLRI via U.S. EPA)	3/19	
7-16	Maumee State Forest site 1 (Carter and Rusin-1 property)	25	\$261,668		ODNR-Forestry	COMPLETE (GLRI via U.S. EPA)	4/21	
8-16	Maumee State Forest site 2 (Hight wetland & forest property)	75	\$99,332		ODNR-Forestry, TNC	COMPLETE (GLRI via U.S. EPA)	4/21	
9-16	Maumee State Forest site 3 (Hight upland & flatwoods property)	85	\$95,000		ODNR-Forestry, TNC	COMPLETE (GLRI via U.S. EPA)	4/21	
10-16	Irwin wet prairie site 3a (Neyland property)	10	\$97,300		Metroparks	COMPLETE (GLRI via U.S. EPA)	3/18	
11-16	Irwin wet prairie site 3b	31.8	\$300,000		Metroparks	COMPLETE (GLRI via U.S. EPA)	12/20	
15-16	Oak Savannah Expansion at Secor Metropark	39.3	\$510,000		Metroparks	COMPLETE (GLRI via U.S. EPA)	12/22	
22-17	Fox Property Restoration Project	38	\$51,340		Friends of Ottawa National Wildlife Refuge	COMPLETE (GLRI via U.S. EPA passthru to OEPA)	11/21	
23a-17	Restoring Coastal Wetlands at Toussaint State Wildlife Area Phase I & II	63	\$600,000	\$888,000	ODNR-Wildlife, TNC, DU	COMPLETE (GLRI via NOAA, GLFWRA, SOGL)	2019	
23b-17	Restoring Coastal Wetlands at Toussaint State Wildlife Area Phase III	62	\$750,000		ODNR-Wildlife, DU	COMPLETE (NOAA/DU Partnership)	9/21	
24-17	Penn 7 Wetland Restoration	59	\$2,954,619		City of Toledo, GLC	COMPLETE (NOAA/GLC Partnership)	1/23	
27-17	Kitty Todd Expansion	321	\$1,400,000	\$3,545,700	TNC, Metroparks	COMPLETE (GLRI via U.S. EPA passthru OEPA, WRRSP)	2/22	
29-17	Maumee Bay State Park Coastal Wetland	137	\$500,000	\$2,200,000	ODNR-Wildlife, Parks	COMPLETE (GLRI via U.S. EPA, H2Ohio)	12/22	
		2208.8	\$11,541,259	\$6,633,700				

FUNDED (In Progress)		Project Acreage	AOC GLRI Funding	Other Funding	Implementer	Funding Source	Estimated Complete
13-16	Navarre Unit of Ottawa National Wildlife Refuge	732	\$1,300,000	\$1,351,297	US FWS, DU	Funded (GLRI to U.S. FWS, GLFWRA, H2Ohio)	9/23
14-16	Cedar Point National Wildlife Refuge Pool 2	150	\$850,000	\$96,000	US FWS	Funded (GLRI to U.S. FWS)	Spring 2023
25-17	Howard Marsh Phase 2	243	\$4,272,000		Metroparks, DU	Funded (NOAA Partnership)	6/23
28-17	Maumee State Forest Expansion	152	\$1,369,500		ODNR-Forestry	Funded (GLRI via U.S. EPA)	7/24
		1277.0	\$7,791,500	\$1,447,297			

NEE	NEEDS FUNDNG/FUNDING being PROCESSED		Project Acreage	Funding Needed	Other Funding	Proposed Implementer	Funding Status	
	ALL Projects Funded							
				40	40		•	

3485.8 = Total Acres of Recommended MAPs
3427.0 = BUI 14b Target Acreage
-58.8 = Remaining Acres that Need to be Identified\*

Estimated <u>Total AOC GLRI Funds</u> = \$19,332,759 \$8,080,997

Estimated <u>Total Cost</u> = \$27,413,756

Estimated <u>Funding Needed</u> = \$0

Estimated Percentage of Non-AOC Funds Leveraged = 29.5%

Estimated Cost per Acre to Achieve Target\*\* = \$7,999.35

= Estimated Total Non-AOC GLRI Funds

<sup>\*</sup> Based on past experience, it is expected that the actual acreage of projects will change slightly as they are implemented. Any remaining acreage needed to achieve the BUI 14b restoration target is expected to be realized through project(s) that have similar objectives to this BUI target, but are funded by non-AOC GLRI sources.

<sup>\*\*</sup> In NW Ohio in-lieu mitigation costs average \$48,000 per acre and mitigation bank costs average \$35,000 per acre in 2016

Complete Management Action Project List for Maumee AOC Aquatic BUIs 3a, 6, and 14a (AquaMAPs)

On 4/30/20 the MAAC approved these projects for recommendation to Ohio EPA. Ohio endorsed these projects on 5/7/20 and US EPA accepted them on 7/29/20. BUI 3b is not impaired. BUI 14b has all mgmt. actions being implemented. Once this list of projects is implemented the Restoration Targets for BUI 3: Degradation of Fish & Wildlife Populations, BUI 6: Degradation of Benthos, and BUI 14: Loss of Fish & Wildlife Habitat is expected to be achieved.

Duois et 18	he Restoration Targets for BUI 3: Degradation of Fish & Wildlife Populations, BUI 6: Degradation of Bentho	1	I I I I I I I I I I I I I I I I I I I					
Project ID	Project name (Site name)	Target	AOC GLRI	Other	Implementer	Funding	Project	Date
		BUI(s)	Funding	Funding	•	Source GLRI via	Status Funded	Complete
PD-5.0	Prairie Ditch Restoration at Secor Park: North of Visitor's Center	14a, 6	\$150,000		Metroparks Toledo	U.S. EPA	(4/21)	1/23
PD-6.0	Prairie Ditch Two-Stage and Floodplain Planting: Secor Park Expansion, Phase II	14a, 6	\$160,000		Metroparks Toledo	GLRI via U.S. EPA	Funded (4/21)	1/23
		T	\$310,000	\$0	]	F P	T	F.11
UNDED (In	Progress)/FUNDING being PROCESSED	Target BUI(s)	AOC GLRI Funding	Other Funding	Implementer	Funding Source	Project Status	Estimated Complete
TuC-17.0	Wetland Enhancement in the Riverine of Turtle Creek (Sharlow) ^	14a, 3a, 6	\$302,325	\$9,160	Ottawa SWCD	GLRI via U.S. EPA & LEPF	Funded (8/21)	12/23
HTC-2.0	Headwaters Tenmile Creek Stream & Riparian Restoration **	6, 14a, 3a	\$560,523	-	Lucas SWCD	GLRI via U.S. EPA	Funded (8/21)	6/24
AOC-2.0	Fish and Benthos Improvements with Urban Chloride Reductions (Phase 1)	6, 3a	\$311,000		Univ. of Toledo	GLRI via U.S. EPA passthru OEPA	Funded (9/21)	6/25
SiC-3.0	Restoration of the Ottawa River within Jermain Park*	3a, 6, 14a	\$650,353		City of Toledo	IA to NOAA/GLC	Funded	7/23
					(TES) City of Toledo	Partnership IA to NOAA/GLC	(9/21) Funded	
OC-5.0	Collins Park Municipal Golf Course Stream Restoration (Part 1-FS)	14a, 3a, 6	\$175,500		(Parks)	Partnership GLRI via	(9/21) Funded	7/23
CeC-6.0	Dry Creek Ecological Stream and Riparian Project	14a, 6, 3a	\$580,000	-	Wood Co. Engineers	U.S. EPA	(9/21)	11/24
PC-2.0	Packer Creek Stream Restoration near Genoa-State Route 163*	14a	\$3,444,000	-	Ottawa SWCD	GLRI via U.S. EPA	Funded (9/21)	12/24
BD-2.0	Stream Restoration at Oregon Recreational Complex*	14a, 6	\$1,344,000		City of Oregon	GLRI via U.S. EPA	Funded (7/21)	12/24
HDOR-9.0	Hill Ditch Restoration at Toledo Natural Science Technology Center*	6, 14a	\$250,000		Toledo Public Schools	GLRI via U.S. EPA	Funded (9/21)	7/24
HDOR-13.0	Hill Ditch Restoration at Paisley Park (Bandore)	6	\$130,000	\$429,610	City of Toledo (TES)	GLRI via U.S. EPA	Funded (10/21)	12/23
LTC-13.0	Connected Wetland and Fish Passage at Camp Sabroske^ (Part 1-Acquistion)	3a, 6, 14a	\$450,000	_	U.S. FWS	IA GLRI to	Funding	TBD
TuC-18.0	Oxbow Channel Addition & Wetland Enhancement/ Reconnection in the Lacustuary of Turtle	14a, 3a, 6	\$3,300,000	\$82,500	U.S. FWS	U.S. FWS IA GLRI to	Transferred Funding	TBD
	Creek (Minier & Kontz)^					USFWS & H2Ohio GLRI via	Transferred Funded	
PC-6.0	Packer Creek Stream and Riparian Restoration (Gargas) ^	14a	\$278,500		Ottawa SWCD  Partners for Clean	U.S. EPA GLRI via U.S. EPA	(9/22) Funded	12/24
HTC-12.2	Stream Restoration at Lathrop Park*	14a, 6	\$450,000	-	Streams	passthru OEPA GLRI via	(9/22) Funded	3/26
CeC-1.0	Nature Trails Park Riparian Restoration and Wetland Creation*	14a, 6, 3a	\$337,000	-	City of Northwood  City of Toledo	U.S. EPA GLRI via	(9/22) Funded	6/25
DC-2.0	Delaware Creek Park Restoration: Phase II	6, 14a	\$500,000	\$33,784	(TES)	U.S. EPA	(9/22)	12/25
UBC-13.0	Maumee State Forest Blue Creek Stream Restoration (Hight) *	14a	\$668,000	-	The Nature Conservancy	GLRI via U.S. EPA passthru ODNR(Fst)	Funded (7/22)	9/25
LTC-1.0	Schiller Stream and Riparian Improvements*	14a, 3a, 6	\$678,000		U.S. FWS	IA GLRI to U.S. FWS	Funding Transferred	TBD
OC-3.2	Berlin Avenue Floodplain and Stream Improvements <sup>^</sup>	14a, 6, 3a	\$699,510		City of Oregon	GLRI via U.S. EPA	Funded (8/22)	12/25
OC-3.3	Taylor Rd. and Yarrow St. Floodplain and Stream Improvements^*	14a, 6, 3a	\$690,000		City of Oregon	GLRI via U.S. EPA	Funded (8/22)	12/25
LBC-17.1	Blue Creek Restoration at Blue Creek Metropark*	14a	\$550,000		Metroparks Toledo	GLRI via U.S. EPA	Funded (9/22)	9/25
AC-3.0	Neis Ditch Stream Restoration^?	14a, 6, 3a	\$400,000	-	Metroparks Toledo	GLRI via U.S. EPA	Funded (9/22)	9/25
CeC-4.0	Dry Creek Aquatic and Riparian Restoration (WM) <sup>AE</sup> *	14a, 6, 3a	\$500,000	-	Wood Co. Engineers	GLRI via U.S. EPA	Funded (9/22)	9/25
MR-14.1	Audubon State Nature Preserve Islands Restoration*	3a, 14a, 6	\$3,600,000		Metroparks Toledo	GLRI via U.S. EPA	Funded (4/22)	9/25
MR-14.2	Delaware Islands Complex Restoration (Part 1-E&D)*	3a, 14a, 6	\$320,000	-	TLCPA	GLRI via	Funded	6/23
DD-7.0	Detwiler Park Stream Restoration*	6, 3a, 14a	\$1,000,000		City of Toledo	U.S. EPA GLRI via	(8/22) Funded	4/25
CrC-5.0	Crane Creek Lacustuary Wetland Restoration	14a, 3a, 6	\$1,500,000		(TES) U.S. FWS	U.S. EPA IA GLRI to	(9/22) Funding	TBD
OC-5.0	Collins Park Municipal Golf Course Stream Restoration (Part 2-E&D)				City of Toledo	U.S. FWS IA to NOAA/GLC	Transferred Funded	TBD
	<u> </u>	14a, 3a, 6	\$209,000		(TES)	Partnership IA to NOAA/GLC	(9/22) Funded	
HDSC-4.0	UTMC Swan Creek Restoration*	6, 14a	\$570,000 <b>\$24,447,711</b>	\$555,054	University of Toledo	Partnership	(9/22)	TBD
NEEDS FUNI	DNG	Target	Funding	Other	Proposed	Proposed	Funding	Funding
		BUI(s)	Needed	Funding	Implementer	Funding Source	Status	Priority Pending FFY.
MR-14.2	Delaware Islands Complex Restoration (Part 2-Implementation)	3a, 14a, 6	\$5,080,000		TLCPA	GLRI via U.S. EPA	Awaiting Allocation	1
LTC-13.0	Connected Wetland and Fish Passage at Camp Sabroske* (Part 2-E&D/Implementation)	3a, 6, 14a	\$2,924,015		U.S. FWS, DU	IA to NOAA/DU Prtnrshp	Awaiting Allocation	1
OC-5.0	Collins Park Municipal Golf Course Stream Restoration (Part 3-Implementation)	14a, 3a, 6	\$315,500		City of Toledo (TES)	IA to NOAA/GLC Partnership	Awaiting Allocation	1
SiC-13.0	Instream and Riparian Projects in the Lacustuary of Ottawa River	3a, 6, 14a	\$3,000,000		TBD within	TBD	TBD	TBD
(pending - sampling results)		1	\$11,319,515	\$0	1 yr of data		I	
NO GLRI-AO	C (FA1) FUNDING REQUIRED, ALREADY FUNDED	Target	AOC GLRI	Other	Implementer	Funding Source	Complete	Funded
varies	20 already funded Aquatic Biological MAPs	BUI(s) 3, 6, 14a	Funding 	Funding \$12,022,186	varies	varies	14 of 20	all
			\$0	\$12,022,186				
^ = acquistion Estimated Total AOC			\$36,077,226 \$48,654	\$12,577,240	= Estimated <u>Total Nor</u>	-AOC GLRI Funds		
$^{\wedge^{L}}$ = acqusiiton or easement Estima * = concept plan Estimated Fu		ted Total Cost =	348,654	TTUU	i			

Estimated Percentage of Non-AOC Funds Leveraged = 25.9%

## Complete Maumee AOC Management Action Project List for Contaminated Sediments (SedMAPs)

These projects will lead to the direct removal of some BUIs, but other BUIs will require additional management actions as defined in those BUI-specific management action lists. Below is an explaination of the BUI numbering.

Sediment Projects

					AOC GLLA	Non-Federal	Estimated	Anticipated
BUI	Project Site	Lead Agency	Task/Description	Funding Status	Funding	Funding	Total Cost	FFY
1,3,4,6,14	Ottawa River	US ACE (for GLNPO)	Remedy Confirmation Study - Reach 1	Complete (2019)	\$446,723	-	\$446,723	19
	(Reaches 1 - 4 area)	ORD (for GLNPO)	Remedy Effectiveness Study - Reach 2-4	In Progress	\$1,100,000	-	\$1,100,000	20
			Area 4y PCB Delineation/Next Steps	In Progress		\$100,000	\$100,000	22
			Decision document	In Progress	-	-	-	20
3,6,14	Halfway, Silver, Shantee Creeks	Ohio EPA	Field verification of conditions	Complete (11/20)	-	-	-	20
			Decision document	Complete (7/21)	-	-	-	21
6,14	Swan Creek (RM 4-0)	GLNPO	SLERA	Complete (2019)	-	-	-	19
	(Phase 1 & 2 area)		Data Gap Investigation	Complete (8/22)	\$600,000	-	\$600,000	20
			Feasibility Study	In Progress	\$195,000	\$105,000	\$300,000	22
			Remedial Design	Needs Funding	\$325,000	\$175,000	\$500,000	23
			Remedial Action/Construction	Needs Funding	\$12,025,000	\$6,475,000	\$18,500,000	24-25
			Remedy Effectiveness Study	Needs Funding	tbd	tbd	tbd	30
3,6,14	Maumee River - Upstream	US ACE (for GLNPO)	SLERA	Complete (2019)	-	-	-	20
	(Phase 1 area)		Decision document	Complete (10/21)	-	-	-	20
3,6,7,14	Maumee River - Sway Bridge (within Phase 2 area)	US ACE (for GLNPO)	SLERA	Complete (2019)	-	-	-	20
			Data Gap Investigation	Complete (8/22)	\$725,300	-	\$725,300	21
			Feasibility Study	In Progress	\$195,000	\$105,000	\$300,000	22
			Remedial Design	Needs Funding	\$325,000	\$175,000	\$500,000	23
			Remedial Action/Construction	Needs Funding	\$12,512,500	\$6,737,500	\$19,250,000	24-25
			Remedy Effectiveness Study	Needs Funding	tbd	tbd	tbd	30
3,6,14	Maumee River - WWTP	US ACE (for GLNPO)	SLERA	Complete (2019)	-	-	-	20
	(within Phase 2 area)		Data Gap Investigation	Complete (8/22)	\$725,300	-	\$725,300	21
			Feasibility Study	In Progress	\$195,000	\$105,000	\$300,000	22
			Remedial Design	Needs Funding	\$325,000	\$175,000	\$500,000	24
			Remedial Action/Construction	Needs Funding	\$21,612,500	\$11,637,500	\$33,250,000	25
			Remedy Effectiveness Study	Needs Funding	tbd	tbd	tbd	30
3,4,6,11,14	Otter Creek	US ACE (for GLNPO)	Remedial Design	Complete (2020)	\$1,300,000	\$700,000	\$2,000,000	20
			Remedy/Restoration Baseline Study	Complete (2020)	tbd	tbd	tbd	20
			Remedial Action/Construction	Complete (2021)	\$6,500,000	\$3,500,000	\$10,000,000	21
			Remedy Effectiveness Study	In Progress	tbd	tbd	tbd	26
			Restoration Effectiveness Study	In Progress	tbd	tbd	tbd	26
3,4,6,14	Duck Creek	GLNPO	SLERA	Complete (2018)	-	-	-	19
			Decision document (NFA)	Complete (2019)	-	-	-	19
note: Italiized f	unding are rough estimates	\$59,107,323	\$29,990,000	\$89.097.323				

note: Italiized funding are rough estimates

Completed Tasks = \$14,497,323 In Progress/Funded Tasks = \$2,100,000 Needs Funding/Pending Tasks = \$72,500,000

Cost Share Projects

Cost Share Projects									
		Lead Implementer/			AOC GLLA	Non-Federal		Estimated	
Project ID	Project name (Site name)	Partner	Funding Source	Funding Status	Funding	Funding	Added to PA	Complete	
CS-01	Cullen Park Flow Through Wetland (MB-2.0)	Toledo-Lucas Co Port Authority	H2Ohio (SFY20-Phase 1)	Complete (2021)	-	\$203,429	Oct. 2020	June 2021	
CS-02	Grassy Island Flow Through Wetland	Toledo/Lucas Co Port Authority	H2Ohio (SFY20-Phase 1)	Complete (2021)	-	\$531,629	Oct. 2020	June 2021	
CS-03	Maumee Bay State Park (29-17)	TNC	H2Ohio (SFY20-Phase 1)	Complete (2022)	-	\$2,200,000	Oct. 2020	Dec 2022	
CS-4A	Ottawa NWR Nearshore Habitat Restoration (CrC-4.0)	Ottawa SWCD	H2Ohio (SFY20-Phase 1)	In Progress	-	\$650,000	Oct. 2020	TBD	
CS-4B	Turtle Creek Bay (Magee Marsh) Reconnection (TuC-20.0)	Erie SWCD	H2Ohio (SFY20-Phase 1)	Complete (2022)	-	\$600,000	Oct. 2020	June 2022	
CS-13	Oak Openings Preserve Metropark Wetland Expansion	Metroparks Toledo	H2Ohio (SFY20-Phase 1)	Complete (2022)	-	\$867,000	Oct. 2020	May 2022	
CS-25	VanOrder Woodland and Wetland Restoration	ODNR - Forestry	H2Ohio (SFY20-Phase 1)	Complete (2022)	-	\$363,476	Oct. 2020	Spring 2022	
CS-26	Navarre Marsh Wetland Restoration & Reconnection	Ducks Unlimited	H2Ohio (SFY20-Phase 1)	In Progress	-	\$950,000	Oct. 2020	Late 2023	
CS-12	Mallard Club Wildlife Area Wetland Connection	Ducks Unlimited	H2Ohio (SFY20-Phase 2)	In Progress	-	\$767,071	June 2021	June 2024	
CSM-15	Maumee River Shoreline Acquisition	Metroparks Toledo	Metroparks Toledo General Fund	Complete (2021)	-	\$1,833,350	June 2021	Sept 2021	
CSM-16	Oak Openings Preserve Metropark Wetland Expansion (PART 2 of CS-13)	Metroparks Toledo	Clean Ohio Fund District 12 (SFY20)	Complete (2022)	-	\$483,625	June 2021	June 2022	
CSM-17	Oak Openings Corridor Swamp Forest Protection (Reed)	Metroparks Toledo	Clean Ohio Fund District 12 (SFY21)	In Progress	-	\$584,000	June 2021	Late 2023	
CSM-18	Ravine Park Acquisition and Restoration (Garfield Greenway)	Metroparks Toledo	Clean Ohio Fund District 12 (SFY21)	In Progress	-	\$271,368	June 2021	Late 2023	
CSM-19	Swan Creek Preserve Expansion	Metroparks Toledo	Clean Ohio Fund District 12 (SFY21)	In Progress	-	\$162,005	June 2021	June 2023	
CS-34	Clark Island Habitat Restoration Project (E&D only)	Toledo/Lucas Co Port Authority	H2Ohio (SFY21-Phase 3)	In Progress	-	\$620,000	June 2021	June 2023	
CS-36	Duck Creek Wetland and Stream Restoration	Toledo/Lucas Co Port Authority	H2Ohio (SFY21-Phase 3)	In Progress	-	\$1,800,000	June 2021	Dec 2023	
CS-4C	Toussaint Shooting Club Reconnections	Ottawa SWCD	H2Ohio (SFY21-Phase 3)	In Progress	-	\$2,418,000	June 2021	June 2023	
CS-55	Ford Ditch Two-Stage Ditch Restoration	Lucas Co Engineers Office	H2Ohio (SFY21-Phase 5)	In Progress		\$636,345	Oct. 2022	Dec 2023	
CS-86	Univ of Toledo Foundation CADE Wetland and Stream Restoration	UT Foundation	H2Ohio (SFY21-Phase 5)	In Progress		\$2,229,188	Oct. 2022	Oct 2023	
CS-91	Ottawa NWR Expansion - Lickert Tract	TNC	H2Ohio (SFY21-Phase 5)	In Progress		\$1,364,000	Oct. 2022	May 2024	
				•		\$19,534,486	•		

\$19,534,486