

Maumee AOC Coordinator Report for the Maumee AOC Advisory Committee February 11, 2021

- **WildMAPs** (*BUI 14b: Wildlife Habitat*)
 - We have 5 WildMAPs that are complete. Eight more are scheduled to be completed in 2021.
 - An updated Summary Table of the WildMAPs is below.
 - A detailed narrative tracking of the WildMAPs is available upon request.
- **AquaMAPs** (*BUI 3a, 6, 14a: Fish Pops, Benthic Pops, Fish Habitat*)
 - Funding for 10 Top Tier projects (approx. \$8 million) was requested by Ohio for FFY21-Q2. We have not heard if any funding has been awarded for these projects.
 - Many of those Top Tier project implementers have begun developing their grant applications, so they will be ready as soon as the funding becomes available.
 - An updated Summary Table of the AquaMAPs is below.
 - A narrative tracking of the AquaMAPs is available upon request.
- **SedMAPs** (*BUIs vary by project site, GLLA contaminated sediment*)
 - Ohio continues to work with federal partners to make progress on these projects.
 - Ottawa River: 10-Yr Remedy Effectiveness Study was completed this winter by US EPA-ORD and US ACE-Chicago District. Data is expected in the spring/summer.
 - Otter Creek: Remedy and Restoration Baseline Study was completed this winter. Remediation is expected to begin in March/April, and habitat restoration in the fall.
 - Swan Creek: Data Gap sampling is expected this spring by a GLNPO contractor and US EPA-ORD. The sampling plan is being finalized pending the approval of FFY21-Q2 funding. The Focused Feasibility Study is funded and expected to begin once the data gap sampling results are available.
 - Maumee River-Sway Bridge & WWTP: Data Gap sampling is expected this spring by US ACE and US EPA-ORD. The sampling plan is being finalized pending the approve of FFY21-Q2 funding. The Focused Feasibility Study is being negotiated by Ohio EPA and GLNPO. It is expected to begin once the data gap sampling results are available.
 - Ohio is working to secure non-federal cost-share funding to match future project funding needs (*i.e.*, remedial design, remediation) for these contaminated sediment projects through community partnerships, responsible parties, and cost-share projects (*i.e.*, H2Ohio).
 - An updated Summary Table of the SedMAPs is below.
 - A narrative tracking of the SedMAPs is available upon request.
- **Misc. MAPs** (*BUIs 1, 4, 7, 8, 10, 11*)
 - **BUI 1b: Wildlife Consumption** – Ohio EPA expects to begin drafting this BUI removal document this spring.
 - **BUI 4: Deformities & Tumors** – Ohio EPA expects US FWS to sample the bullhead tumors and fish community this spring/summer after the 2020 sampling delay due to COVID.
 - **BUI 7: Dredging** – Ohio EPA and US EPA are working with ACE to finalize a sampling plan within the navigation channel for this summer.
 - **BUI 10a: Beach Closings (advisories)** – The MAAC recommended waterfowl deterrent project has been APPROVED. Funding for the project was requested by Ohio for FFY21-Q2. We have not heard if any funding has been awarded for this project.

- **BUI 8b: Eutrophication** – Ohio EPA is developing a sampling plan to collect water samples for this BUI in the Maumee River and Bay this summer. This sampling activity is still pending approval by Ohio EPA management due to COVID and potential laboratory capacity issues.
- **BUI 11: Aesthetics** – No recent activity, BUI removal pending Otter Creek GLLA project which is scheduled to being in March/April 2021.
- **AOC Program Updates**
 - The Ohio Lake Erie Commission has established a new website that includes a webpage for the Ohio AOC Program (<https://lakeerie.ohio.gov/wps/portal/gov/lec/programs-and-projects/areas-of-concern>). The previous Ohio EPA page provides a link to the new OLEC webpage. Please update any bookmarks or links you may have to the Ohio AOC program.
 - US AOC Conference has been posted until Sept. 28-30. The details and format have not been finalized. If it is held in person it will be in Muskegon, MI.
 - Congratulations to the Black River AOC for its Aesthetics BUI Removal. It was recognized as the 100th BUI removed in the Great Lakes. We are so excited that this milestone was in an Ohio AOC.

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

Updated 12/31/20

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)						
COMPLETED		Project Acreage	AOC GLRI Funding	Other Funding	Implementer	Funding Source	Complete
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
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	Funded (GLRI via U.S. EPA)	12/20
23a-17	Restoring Coastal Wetlands at Toussaint State Wildlife Area Phase I & II	63	\$600,000	\$888,000	ODNR-Wildlife, TNC, DU	Funded (GLRI via NOAA, GLFWRA, SOGL)	2019
		124.8	\$1,547,300	\$888,000			

FUNDED (In Progress)		Project Acreage	AOC GLRI Funding	Other Funding	Implementer	Funding Source	Estimated Complete
1-16	Magee Marsh State Wildlife Area	1000	\$1,075,000	--	ODNR-Wildlife	Funded (GLRI via U.S. EPA)	6/22
2-16 & 3-16	Toussaint Parcel East and Toussaint Parcel West	203	\$2,297,000	--	DU, U.S. FWS	Funded (GLRI via U.S. FWS)	Fall 2022
7-16	Maumee State Forest site 1 (Carter and Rusin-1 property)	25	\$220,000	--	ODNR-Forestry	Funded (GLRI via U.S. EPA)	4/21
8-16	Maumee State Forest site 2 (Hight wetland & forest property)	75	\$115,000	--	ODNR-Forestry, TNC	Funded (GLRI via U.S. EPA)	4/21
9-16	Maumee State Forest site 3 (Hight upland & flatwoods property)	85	\$95,000	--	ODNR-Forestry, TNC	Funded (GLRI via U.S. EPA)	4/21
13-16	Navarre Unit of Ottawa National Wildlife Refuge	732	\$1,300,000	--	US FWS, DU	Funded (GLRI to U.S. FWS)	2022
14-16	Cedar Point National Wildlife Refuge Pool 2	150	\$850,000	--	US FWS	Funded (GLRI to U.S. FWS)	2021
15-16	Oak Savannah Expansion at Secor Metropark	39.3	\$510,000	--	Metroparks	Funded (GLRI via U.S. EPA)	2022
22-17	Fox Property Restoration Project	35	\$43,840	--	Friends of Ottawa National Wildlife Refuge	Funded (GLRI via U.S. EPA passthru to OEPA)	12/21
23b-17	Restoring Coastal Wetlands at Toussaint State Wildlife Area Phase III	62	\$750,000	--	ODNR-Wildlife, DU	Funded (NOAA Partnership)	Fall 2021
24-17	Penn 7 Wetland Restoration	59	\$2,786,144	--	City of Toledo, GLC	Funded (NOAA Partnership)	2021
25-17	Howard Marsh Phase 2	240	\$4,272,000	--	Metroparks, DU	Funded (NOAA Partnership)	Fall 2022
27-17	Kitty Todd Expansion	310	\$1,400,000	\$3,545,700	TNC	Funded (GLRI via U.S. EPA passthru OEPA, WRRSP)	12/21
28-17	Maumee State Forest Expansion	152	\$1,369,500	--	ODNR-Forestry	Funded (GLRI via U.S. EPA)	7/23
29-17	Maumee Bay State Park Coastal Wetland	137	\$500,000	\$2,000,000	ODNR-Wildlife, Parks	Funded (GLRI via U.S. EPA, H2Ohio)	6/22
		3304.3	\$17,583,484	\$5,545,700			

NEEDS FUNDNG/FUNDING being PROCESSED		Project Acreage	Funding Needed	Other Funding	Proposed Implementer	Funding Status
ALL Projects Funded		0	\$0	\$0		

3429.1 = Total Acres of Recommended MAPs
 3427.0 = BUI 14b Target Acreage
 -2.1 = Remaining Acres that Need to be Identified*

Estimated **Total AOC GLRI Funds** = \$19,130,784 \$6,433,700 = Estimated **Total Non-AOC GLRI Funds**
 Estimated **Total Cost** = \$25,564,484
 Estimated **Funding Needed** = \$0

Estimated **Percentage of Non-AOC Funds Leveraged** = 25.2%
 Estimated **Cost per Acre to Achieve Target**** = \$7,459.73

* 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.

** 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.

Project ID	Project name (Site name)	Target BUI(s)	AOC GLRI Funding	Other Funding	Implementer	Funding Source	Complete	--
COMPLETED								
			\$0	\$0				

FUNDED (In Progress)		Target BUI(s)	AOC GLRI Funding	Other Funding	Implementer	Funding Source	Estimated Complete	--
			\$0	\$0				

NEEDS FUNDING/FUNDING being PROCESSED		Target BUI(s)	Funding Needed	Other Funding	Proposed Implementer	Proposed Source	Funding Status	Funding Priority
Top Tier								
PD-5.0	Prairie Ditch Restoration at Secor Park: North of Visitor's Center	14a, 6	\$150,000	--	Metroparks Toledo	GLRI via U.S. EPA	Awaiting Allocation	top(1)
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	Awaiting Allocation	top(1)
TuC-17.0	Wetland Enhancement in the Riverine of Turtle Creek (Sharlow) ^	14a, 3a, 6	\$302,325	--	Ottawa SWCD	GLRI via U.S. EPA	Awaiting Allocation	top(2)
HTC-2.0	Headwaters Tenmile Creek Stream & Riparian Restoration^*	6, 14a, 3a	\$505,000	--	Lucas SWCD	GLRI via U.S. EPA	Awaiting Allocation	top(3)
AOC-2.0	Fish and Benthos Improvements with Urban Chloride Reductions (Phase 1)	6, 3a	\$264,261	--	TMACOG	GLRI via U.S. EPA*	Awaiting Allocation	top(4)
SiC-3.0	Restoration of the Ottawa River within Jermain Park*	3a, 6, 14a	\$600,000	--	City of Toledo (TES)	NOAA/GLC Partnership	Awaiting Allocation	top
OC-5.0	Collins Park Municipal Golf Course Stream Restoration	14a, 3a, 6	\$700,000	--	City of Toledo (Parks)	NOAA/GLC Partnership	Awaiting Allocation	top
CeC-6.0	Dry Creek Ecological Design and Demonstration Project	14a, 6, 3a	\$580,000	--	Wood Co. Engineers	GLRI via U.S. EPA	Awaiting Allocation	top
PC-2.0	Packer Creek Stream Restoration near Genoa-State Route 163*	14a	\$3,444,000	--	Ottawa SWCD	GLRI via U.S. EPA	Awaiting Allocation	top
BD-2.0	Stream Restoration at Oregon Recreational Complex*	14a, 6	\$1,344,000	--	City of Oregon	GLRI via U.S. EPA	Awaiting Allocation	top
Tier Two								
LTC-13.0	Connected Wetland and Fish Passage at Camp Sabroske^*	3a, 6, 14a	\$3,000,000	--	U.S. FWS, DU	IA and NOAA/DU Partnership	Awaiting Allocation	1
TuC-18.0	Oxbow Channel Addition & Wetland Enhancement/ Reconnection in the Lacustrary of Turtle Creek (Minier)^ *	14a, 3a, 6	\$3,300,000	--	U.S. FWS, TBD	IA and TBD Passthrough	Awaiting Allocation	2
AC-3.0	Neis Ditch Stream Restoration^7	14a, 6, 3a	\$400,000	--	Metroparks Toledo	GLRI via U.S. EPA	Awaiting Allocation	3
HDOR-9.0	Hill Ditch Restoration at Toledo Natural Science Technology Center*	6, 14a	\$250,000	--	Toledo Public Schools	GLRI via U.S. EPA	Awaiting Allocation	4
PC-6.0	Packer Creek Stream and Riparian Restoration^	14a	\$278,500	--	Ottawa SWCD	GLRI via U.S. EPA	Awaiting Allocation	5
TuC-2.0	Turtle Creek North Nissen Road Restoration^E*	14a, 6, 3a	\$787,000	--	Black Swamp Conservancy	TBD Passthrough	Awaiting Allocation	6
HDOR-13.0	Hill Ditch Restoration at Paisley Park	14a, 6	\$130,000	\$130,000	City of Toledo (Eng. Services)	NOAA/GLC Partnership	Awaiting Allocation	7a
DD-7.0	Detwiler Park Municipal Golf Course Stream Restoration	6, 3a, 14a	\$1,000,000	--	City of Toledo (Parks)	NOAA/GLC Partnership	Awaiting Allocation	7b
HTC-12.2	Stream Restoration at Lathrop Park*	14a, 6	\$450,000	--	Village of Berkey	GLRI U.S. EPA or NOAA/GLC	Awaiting Allocation	8
LTC-1.0	Schiller Stream and Riparian Improvements*	14a, 3a, 6	\$678,000	--	U.S. FWS	GLRI to U.S. FWS	Awaiting Allocation	9
CeC-1.0	Nature Trails Park Riparian Restoration and Wetland Creation*	14a, 6, 3a	\$357,000	--	City of Northwood	GLRI via U.S. EPA	Awaiting Allocation	10
UBC-13.0	Maumee State Forest Blue Creek Stream Restoration*	14a	\$668,000	--	ODNR-Forestry	GLRI via U.S. EPA	Awaiting Allocation	11
CeC-4.0	Waste Management Instream and Riparian Restoration^E	14a, 6, 3a	\$500,000	--	Wood Co. Engineers	GLRI via U.S. EPA	Awaiting Allocation	12
Tier Three								
CrC-5.0	Crane Creek Lacustrary Wetland Restoration	14a, 3a, 6	\$1,500,000	--	U.S. FWS	GLRI to U.S. FWS	Awaiting Allocation	13
OC-3.2	Berlin Avenue Floodplain and Stream Improvements^	14a, 6, 3a	\$557,136	--	City of Oregon	GLRI via U.S. EPA	Awaiting Allocation	14a
OC-3.3	Taylor Rd. and Yarrow St. Floodplain and Stream Improvements^A*	14a, 6, 3a	\$690,000	--	City of Oregon	GLRI via U.S. EPA	Awaiting Allocation	14b
LBC-17.1	Blue Creek Restoration at Blue Creek Metropark*	14a	\$550,000	--	Metroparks Toledo	GLRI via U.S. EPA	Awaiting Allocation	15
DC-2.0	Delaware Creek Park Restoration: Phase II	6, 14a	\$500,000	--	City of Toledo (TES)	NOAA/GLC Partnership	Awaiting Allocation	16
HDSC-4.0	UTMC Swan Creek Restoration*	6, 14a	\$508,000	--	University of Toledo	GLRI via U.S. EPA	Awaiting Allocation	17
Pending								
MR-14.0	Restoration Projects in Maumee RMs 15 to 7 (pending - tribal consultation/involvement)	3a, 14a, 6	\$9,000,000	--	TBD	TBD	TBD	TBD
SiC-13.0	Instream and Riparian Projects in the Lacustrary of Ottawa River (pending - sampling results)	3a, 6, 14a	\$3,000,000	--	TBD within 1 yr of data	TBD	TBD	TBD
			\$36,153,222	\$130,000				

NO GLRI-AOC (FA1) FUNDING REQUIRED, ALREADY FUNDED		Target BUI(s)	AOC GLRI Funding	Other Funding	Implementer	Funding Source	Complete	Funded
varies	20 already funded Aquatic Biological MAPs	3, 6, 14a	--	\$16,144,139	varies	varies	6	all
			\$0	\$16,144,139				

^ = acquisition

^E = acquisition or easement

* = concept plan

Estimated **Total AOC GLRI Funds** = \$36,153,222 + \$16,274,139 = Estimated **Total Non-AOC GLRI Funds**

Estimated **Total Cost** = \$52,427,361

Estimated **Funding Needed** = \$36,153,222

Estimated **Percentage of Non-AOC Funds Leveraged** = 31.0%

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

Updated 12/31/20

On 6/11/20 the MAAC approved these projects for recommendation to Ohio EPA. Ohio endorsed these projects on 6/29/20 and US EPA accepted them on 7/29/2020. These projects will address a variety of BUIs as listed with each project. 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 explanation of the BUI numbering.

BUI	Site	Lead Agency	Task/Description	Funding Status	Estimated Total Cost	Anticipated FFY
1,3,4,6,14	Ottawa River <i>(Reaches 1 - 4 area)</i>	US ACE/ORD (for GLNPO)	Remedy Confirmation Study - Reach 1	Complete	\$446,723	19
			Remedy Effectiveness Study - Reach 2-4	Complete	\$1,100,000	20
			Decision document	In Progress	-	20
3,4,6,14	Halfway, Silver, Shantee Creeks	Ohio EPA	Field verification of conditions	Complete	-	20
			Decision document	In Progress	-	21
6,14	Swan Creek (RM 4-0) <i>(Phase 1 & 2 area)</i>	GLNPO	SLERA	Complete	-	19
			Data Gap Investigation	In Progress	\$600,000	20
			Feasibility Study	Funded	\$200,000	21
			Remedial Design	Pending	tbd	22
			Remedial Action/Construction	Pending	\$18,500,000	23
			Remedy Effectiveness Study	Pending	tbd	28
3,4,6,14	Maumee River - Upstream <i>(Phase 1 area)</i>	US ACE (for GLNPO)	SLERA	Complete	-	20
			Decision document	In Progress	-	20
3,4,6,7,14	Maumee River - Sway Bridge <i>(within Phase 2 area)</i>	US ACE (for GLNPO)	SLERA	Complete	-	20
			Data Gap Investigation	In Progress	\$700,000	21
			Feasibility Study	Pending	tbd	22
			Remedial Design	Pending	tbd	23
			Remedial Action/Construction	Pending	\$19,250,000	24
			Remedy Effectiveness Study	Pending	tbd	29
3,4,6,14	Maumee River - WWTP <i>(within Phase 2 area)</i>	US ACE (for GLNPO)	SLERA	Complete	-	20
			Data Gap Investigation	In Progress	\$600,000	21
			Feasibility Study	Pending	tbd	22
			Remedial Design	Pending	tbd	23
			Remedial Action/Construction	Pending	\$33,250,000	24
			Remedy Effectiveness Study	Pending	tbd	29
3,4,6,11,14	Otter Creek	US ACE (for GLNPO)	Remedial Design	Complete	\$2,000,000	20
			Remedy/Restoration Baseline Study	In Progress	tbd	20
			Remedial Action/Construction	In Progress	\$10,000,000	21
			Remedy Effectiveness Study	Pending	tbd	26
			Restoration Effectiveness Study	Pending	tbd	26
3,4,6,14	Duck Creek	GLNPO	SLERA	Complete	-	19
			Decision document (NFA)	Complete	-	19

\$86,646,723

Beneficial Use Impairments

BUI 1:	Restrictions on Fish & Wildlife Consumption
BUI 2:	Tainting of Fish and Wildlife Flavor
BUI 3:	Degradation of Fish & Wildlife Populations
BUI 4:	Fish Tumors or Other Deformities
BUI 5:	Bird or Animal Deformities or Reproductive Problems
BUI 6:	Degradation of Benthos
BUI 7:	Restrictions on Dredging Activities
BUI 8:	Eutrophication or Undesirable Algae
BUI 9:	Restrictions on Drinking Water Consumption or Taste & Odor Problems
BUI 10:	Beach Closings (Recreational Contact)
BUI 11:	Degradation of Aesthetics
BUI 12:	Added Costs to Agriculture or Industry
BUI 13:	Degradation of Phytoplankton and Zooplankton Populations
BUI 14:	Loss of Fish & Wildlife Habitat