

**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	Project Status	Date Complete
<b>COMPLETED</b>								
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	COMPLETE (started 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	COMPLETE (started 4/21)	1/23
MR-14.2	Delaware Islands Complex Restoration (Part 1-E&D)*	3a, 14a, 6	\$320,000	--	TLCPA	GLRI via U.S. EPA	COMPLETE (started 8/22)	6/23
LTC-13.0	Connected Wetland and Fish Passage at Camp Sabroske^ (Part 1-Acquisition)	3a, 6, 14a	\$450,000	--	U.S. FWS	IA GLRI to U.S. FWS	COMPLETE (started 5/21)	10/23
			<b>\$1,080,000</b>	<b>\$0</b>				

<b>FUNDED (In Progress)/FUNDING being PROCESSED</b>		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 & LEPP	Funded (8/21)	9/24
HTC-2.0	Headwaters Tenmile Creek Stream & Riparian Restoration <sup>†</sup>	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	\$769,802	--	City of Toledo (TES)	IA to NOAA/GLC Partnership	Funded (9/21)	7/24
OC-5.0	Collins Park Municipal Golf Course Stream Restoration (Part 1-FS)	14a, 3a, 6	\$175,500	--	City of Toledo (Parks)	IA to NOAA/GLC Partnership	Funded (9/21)	12/23
CeC-6.0	Dry Creek Ecological Stream and Riparian Project	14a, 6, 3a	\$580,000	--	Wood Co. Engineers	GLRI via U.S. EPA	Funded (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	\$85,000	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	\$100,000	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	\$679,610	City of Toledo (TES)	GLRI via U.S. EPA	Funded (10/21)	12/23
TuC-18.0	Oxbow Channel Addition & Wetland Enhancement/ Reconnection in the Lacustuary of Turtle Creek (Minier & Kontz) <sup>†</sup>	14a, 3a, 6	\$3,300,000	\$82,500	U.S. FWS	IA GLRI to USFWS & H2Ohio	Funding Transferred	TBD
PC-6.0	Packer Creek Stream and Riparian Restoration (Gargas) ^	14a	\$278,500	--	Ottawa SWCD	GLRI via U.S. EPA	Funded (9/22)	12/24
HTC-12.2	Stream Restoration at Lathrop Park*	14a, 6	\$450,000	--	Partners for Clean Streams	GLRI via U.S. EPA passthru OEPA	Funded (9/22)	3/26
CeC-1.0	Nature Trails Park Riparian Restoration and Wetland Creation*	14a, 6, 3a	\$337,000	--	City of Northwood	GLRI via U.S. EPA	Funded (9/22)	6/25
DC-2.0	Delaware Creek Park Restoration: Phase II	6, 14a	\$500,000	\$33,784	City of Toledo (TES)	GLRI via U.S. EPA	Funded (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 <sup>†</sup> *	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 <sup>†</sup>	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>†</sup> *	14a, 6, 3a	\$500,000	--	City of Northwood	GLRI via U.S. EPA	Funded (9/22)	9/26
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
DD-7.0	Detwiler Park Stream Restoration*	6, 3a, 14a	\$1,000,000	--	City of Toledo (TES)	GLRI via U.S. EPA	Funded (9/22)	4/25
Crc-5.0	Crane Creek Lacustuary Wetland Restoration	14a, 3a, 6	\$1,500,000	--	U.S. FWS	IA GLRI to U.S. FWS	Funding Transferred	TBD
OC-5.0	Collins Park Municipal Golf Course Stream Restoration (Part 2-E&D)	14a, 3a, 6	\$209,000	--	City of Toledo (TES)	IA to NOAA/GLC Partnership	Funded (9/22)	TBD
HDSC-4.0	UTMC Swan Creek Restoration*	6, 14a	\$570,000	--	University of Toledo	IA to NOAA/GLC Partnership	Funded (9/22)	TBD
MR-14.2	Delaware Islands Complex Restoration (Part 2-Implementation)	3a, 14a, 6	\$5,080,000	--	TLCPA	GLRI via U.S. EPA	Funded (8/23)	4/26
LTC-13.0	Connected Wetland and Fish Passage at Camp Sabroske* (Part 2-E&D)	3a, 6, 14a	\$1,775,000	--	DU	IA to NOAA/DU Ptnrshp	Funding Transferred	TBD
			<b>\$30,652,160</b>	<b>\$990,054</b>				

<b>NEEDS FUNDNG</b>		Target BUI(s)	Funding Needed	Other Funding	Proposed Implementer	Proposed Funding Source	Funding Status	Funding Priority
<i>Pending FFY24</i>								
LTC-13.0	Connected Wetland and Fish Passage at Camp Sabroske* (Part 3-Implementation)	3a, 6, 14a	\$1,149,015	--	U.S. FWS, DU	IA to NOAA/DU Ptnrshp	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 (pending - sampling results)	3a, 6, 14a	\$3,000,000	--	TBD within 1 yr of data	TBD	TBD	TBD
			<b>\$4,464,515</b>	<b>\$0</b>				

<b>NO GLRI-AOC (FA1) FUNDING REQUIRED, ALREADY FUNDED</b>		Target BUI(s)	AOC GLRI Funding	Other Funding	Implementer	Funding Source	Complete	Funded
varies	20 already funded Aquatic Biological MAPs	3, 6, 14a	--	\$12,022,186	varies	varies	17 of 20	all
			<b>\$0</b>	<b>\$12,022,186</b>				

^ = acquisition  
 † = acquisition or easement  
 \* = concept plan  
 Estimated **Total AOC GLRI Funds** = \$36,196,675    \$13,012,240 = Estimated **Total Non-AOC GLRI Funds**  
 Estimated **Total Cost** = \$49,208,915  
 Estimated **Funding Needed** = \$4,464,515  
 Estimated **Percentage of Non-AOC Funds Leveraged** = 26.4%

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

Updated 12/13/23

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
1-16	Magee Marsh State Wildlife Area	1000	\$1,075,000	--	ODNR-Wildlife	COMPLETE (GLRI via U.S. EPA)	6/22
2-16 & 3-16	Toussaint Parcel East and Toussaint Parcel West	242.4	\$2,297,000	--	DU, U.S. FWS	COMPLETE (GLRI via U.S. FWS)	9/22
4-16	Irwin upland site 5 (Griswold)	20.2	\$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)	38	\$261,668	--	ODNR-Forestry	COMPLETE (GLRI via U.S. EPA)	4/21
8-16	Maumee State Forest site 2 (Hight wetland & forest)	69.4	\$99,332	--	ODNR-Forestry, TNC	COMPLETE (GLRI via U.S. EPA)	4/21
9-16	Maumee State Forest site 3 (Hight upland & flatwoods)	92.5	\$95,000	--	ODNR-Forestry, TNC	COMPLETE (GLRI via U.S. EPA)	4/21
10-16	Irwin wet prairie site 3a (Neyland)	9.9	\$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
13-16	Navarre Unit of Ottawa National Wildlife Refuge	732	\$1,300,000	\$1,351,297	US FWS, DU	COMPLETE (GLRI to U.S. FWS, GLFWRA, H2Ohio)	12/23
14-16	Cedar Point National Wildlife Refuge Pool 2 (Gradel)	155	\$850,000	\$96,000	US FWS	COMPLETE (GLRI to U.S. FWS)	7/23
15-16	Oak Savannah Expansion at Secor Metropark	40.6	\$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)	9/19
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
25-17	Howard Marsh Phase 2	214	\$4,272,000	--	Metroparks, DU	COMPLETE (NOAA Partnership)	6/23
27-17	Kitty Todd Expansion	320.1	\$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
		<b>3324.9</b>	<b>\$17,963,259</b>	<b>\$8,080,997</b>			

FUNDED (In Progress)		Project Acreage	AOC GLRI Funding	Other Funding	Implementer	Funding Source	Estimated Complete
28-17	Maumee State Forest Expansion	152	\$1,369,500	--	ODNR-Forestry	Funded (GLRI via U.S. EPA)	5/25
		<b>152.0</b>	<b>\$32,520,718</b>	<b>\$16,161,994</b>			

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

3476.9	= Total Acres of Recommended MAPs
3427.0	= BUI 14b Target Acreage
-49.9	= Remaining Acres that Need to be Identified*

Estimated <b>Total AOC GLRI Funds</b>	=	\$50,483,977	\$24,242,991	= Estimated <b>Total Non-AOC GLRI Funds</b>
Estimated <b>Total Cost</b>	=	\$74,726,968		
Estimated <b>Funding Needed</b>	=	\$0		

Estimated <b>Percentage of Non-AOC Funds Leveraged</b>	=	32.4%
Estimated <b>Cost per Acre to Achieve Target**</b>	=	\$21,805.36

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

Updated 10/12/23

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.

**Sediment Projects**

BUI	Project Site	Lead Agency	Task/Description	Funding Status	AOC GLLA Funding	Non-Federal Funding	Estimated Total Cost	Anticipated FFY Funding
1,3,4,6,14	Ottawa River <i>(Reaches 1 - 4 area)</i>	US ACE (for GLNPO) ORD (for GLNPO)	Remedy Confirmation Study - Reach 1	Complete (2019)	\$446,723	-	\$446,723	19
			Remedy Effectiveness Study - Reach 2-4	In Progress	\$1,100,000	-	\$1,100,000	20
			Area 4y Sampling for Extent of PCBs	Complete (1/23)	-	\$100,000	\$100,000	22
			Area 4y PCB Delineation/Next Steps	In Progress	-	\$150,000	\$150,000	24
			Decision document	In Progress	-	-	-	24
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) <i>(Phase 1 &amp; 2 area)</i>	GLNPO	SLERA	Complete (2019)	-	-	-	19
			Data Gap Investigation	Complete (8/22)	\$600,000	-	\$600,000	20
			Feasibility Study	In Progress	\$195,000	\$105,000	\$300,000	24
			Pre-Design Investigation	In Progress	\$195,000	\$105,000	\$300,000	24
			Remedial Design	Needs Funding	\$325,000	\$175,000	\$500,000	24
			Remedial Action/Construction	Needs Funding	\$12,025,000	\$6,475,000	\$18,500,000	26
3,6,14	Maumee River - Upstream <i>(Phase 1 area)</i>	US ACE (for GLNPO)	SLERA	Complete (2019)	-	-	-	20
			Decision document	Complete (10/21)	-	-	-	20
3,6,7,14	Maumee River - Sway Bridge <i>(within Phase 2 area)</i>	US ACE (for GLNPO)	SLERA	Complete (2019)	-	-	-	20
			Data Gap Investigation	Complete (8/22)	\$725,300	-	\$725,300	21
			Feasibility Study	Complete (10/23)	\$195,000	\$105,000	\$300,000	23
			Pre-Design Investigation	In Progress	\$195,000	\$105,000	\$300,000	24
			Remedial Design	Needs Funding	\$325,000	\$175,000	\$500,000	24
			Remedial Action/Construction	Needs Funding	\$12,512,500	\$6,737,500	\$19,250,000	26
3,6,14	Maumee River - WWTP <i>(within Phase 2 area)</i>	US ACE (for GLNPO)	SLERA	Complete (2019)	-	-	-	20
			Data Gap Investigation	Complete (8/22)	\$725,300	-	\$725,300	21
			Feasibility Study	Complete (10/23)	\$195,000	\$105,000	\$300,000	23
			Pre-Design Investigation	In Progress	\$195,000	\$105,000	\$300,000	24
			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	26
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
			SLERA	Complete (2019)	-	-	-	19
3,4,6,14	Duck Creek	GLNPO	SLERA	Complete (2018)	-	-	-	19
			Decision document (NFA)	Complete (2019)	-	-	-	19

note: Italicized Funding are rough estimates

\$59,692,323 \$30,455,000 \$90,147,323

Completed Tasks = \$15,197,323	In Progress/Funded Tasks = \$2,450,000	Needs Funding/Pending Tasks = \$72,500,000
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**Cost Share Projects**

Project ID	Project name (Site name)	Lead Implementer/ Partner	Funding Source	Funding Status	AOC GLLA Funding	Non-Federal Funding	Added to PA	Estimated 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