Appendix 4. Near-Field TMDL Reports in the Maumee Watershed

Within the Maumee Watershed, there are six approved TMDL reports for near-field impairments. The following is a short summary of each TMDL reports' actions regarding total phosphorus. These total phosphorus TMDLs address impairments to near-field (stream) aquatic life use. Following these summaries is a table of the NPDES permitted facilities with phosphorus wasteload allocations included in these TMDL reports.

The Upper Auglaize River Watershed TMDL Report was approved by U.S. EPA on September 23, 2004. The project area includes the Auglaize River mainstem upstream the confluence with the Little Auglaize River and its tributaries, except the Ottawa and Blanchard rivers.

A total of eight total phosphorus TMDLs were calculated, and two facilities covered under NPDES permits were included in the Wasteload allocation of the TMDL calculations. Both point and nonpoint sources of phosphorus contribute to the aquatic life use impairments throughout the watershed. "Nutrient concentrations (phosphorus and nitrogen parameters) in the Upper Auglaize River watershed are excessive in comparison with statewide data from unimpaired streams. Other indicators of nutrient enrichment problems that have been documented in impaired stream segments include: depressed dissolved oxygen levels and wide diel swings, excessive algae, and trophic species shifts."

The Blanchard River Watershed TMDL Report was approved by U.S. EPA on July 2, 2009. The project area includes the Blanchard River mainstem and tributaries. A total of 15 phosphorus TMDLs were calculated, and 24 facilities covered under NPDES permits were included in the wasteload allocation of the TMDL calculations. The majority of total phosphorus loading in the watershed is run-off from row crop agriculture which is by far the dominant land use in the basin. Other notable sources include point sources, such as discharges from schools, highway roadside rest areas, municipal wastewater treatment plants, and failing home sewage treatment systems.

The Maumee River (lower) Tributaries Watershed and Lake Erie Tributaries TMDL Report was approved by U.S. EPA on September 25, 2012. The project area includes tributaries to the lower section of the Maumee River (Grassy Creek, Grassy Creek Diversion, Crooked River, Delaware Creek, and Duck Creek). One phosphorus TMDL was calculated in the portion of the project area that is located within the Maumee River watershed, and five facilities covered under NPDES permits were included in the wasteload allocation of the TMDL calculations. Agricultural and urban runoff were the major sources of phosphorus in the watershed.

The Ottawa River Watershed (Lima area) TMDL Report was approved by the U.S. EPA on April 15, 2014. The project area includes the Ottawa River mainstem and tributaries. A total of seven Phosphorus TMDLs were calculated, and 10 NPDES permits were included in the wasteload allocation of the TMDL calculations. Agriculture, CSOs, and point source discharges were major sources of phosphorus in the watershed. In impacted segments, "the enrichment and excess algal production caused diel high and low dissolved oxygen (DO) fluctuations (and sometimes high pH values) that were exacerbated by chronic low flow conditions."

The Powell Creek Watershed TMDL Report was approved by the U.S. EPA on June 18, 2009. The project area includes the Powell Creek mainstem, and Auglaize River tributary, and tributaries. A total of 11 phosphorus TMDLs were calculated, and two NPDES permits were included in the wasteload allocation of the TMDL calculations. Agricultural fields and operations are major sources of phosphorus in the watershed with cultivated cropland being the dominant land use. Failing home sewage treatment systems (HSTS) also contribute phosphorus.

The Swan Creek Watershed TMDL Report was approved by the U.S. EPA on January 6, 2010. The project area includes the Swan Creek mainstem and tributaries. A total of four phosphorus TMDLs were calculated, and five NPDES permits were included in the wasteload allocation of the TMDL calculations. A variety of sources contribute phosphorus to the Swan Creek watershed, the major sources include agriculture runoff, urban runoff, golf courses, and failing septic systems.

Table Appendix 4.1 List of Individual NPDES Permitted Facilities with Near-Field Total Phosphorus Wasteload Allocations

FACILITY	TMDL Project Area	Permit	Total Phosphorus WLA
Swanton WRRF	Swan Creek	2PB00025	0.47 kg/day
Ada WWTP	Ottawa (Lima)	2PB00050	0.85 kg/d
Bluffton WWTP	Blanchard	2PC00005	119 kg/yr
Findlay WPCF	Blanchard	2PD00008	15,711 kg/yr
Ottawa WWTP	Blanchard	2PD00028	296 kg/yr
Lima WWTP	Ottawa (Lima)	2PE00000	5.33 kg/d
Shawnee No 2 WWTP	Ottawa (Lima)	2PK00002	2.31 kg/d
Cridersville WWTP	Ottawa (Lima)	2PB00048	0.61 kg/d
Columbus Grove WWTP	Ottawa (Lima)	2PC00004	2.16 kg/d
Spencerville WWTP	Upper Auglaize	2PC00000	621.7 kg/yr
Vanlue STP	Blanchard	2PA00016	0.0489 kg/day
Rawson WWTP	Blanchard	2PA00039	0.209 kg/day
Arlington WWTP	Blanchard	2PA00050	22.2 kg/yr
Uniopolis WWTP	Upper Auglaize	2PA00054	55.3 kg/yr
Beaverdam WWTP	Blanchard	2PB00018	3.84 kg/yr
Pandora WWTP	Blanchard	2PB00029	31.1 kg/yr
Forest WWTP	Blanchard	2PB00044	12.0 kg/yr
Continental WWTP	Powell	2PB00049	0.70 kg/d
Dunkirk WWTP	Blanchard	2PB00061	3.82 kg/yr
Mast Estates WWTP	Blanchard	2PG00038	0.213 kg/yr
Country Acres Golf Club	Blanchard	2PG00083	5.31 kg/yr
Putnam Co MRDD Brookhill Ctr	Blanchard	2PG00112	5.31 kg/yr
ODOT Dist 1 Park No 1-26 & 25	Blanchard	2PP00019	1.11 kg/yr
Sycamore Springs Golf Course STU 1	Blanchard	2PR00098	8.12 kg/yr
Camp Berry	Blanchard	2PR00146	12.13 kg/yr

Miller City High Sch WWTP	Blanchard	2PT00025	5.31 kg/yr
Cory Rawson Middle & Sr HS	Blanchard	2PT00031	1.73 kg/yr
Swanton Meadows MHP	Swan Creek	2PY00022	0.066 kg/day
Arrowhead Lake MHP *	Swan Creek	2PY00067	0.07 kg/day
PCS Nitrogen Ohio LP	Ottawa (Lima)	2IF00004	1.25 kg/d
Chemtrade Logistics Inc	Ottawa (Lima)	2IF00008	0.30 kg/d
Lima Refinery	Ottawa (Lima)	2IG00001	1.58 kg/d
PCS Nitrogen Ohio LP	Ottawa (Lima)	2IF00004	1.25 kg/day
Putnam County Landfill	Blanchard	2IN00122	0 kg/yr
National Lime & Stone Co Lima Plant No 1	Ottawa (Lima)	2IJ00013	0.11 kg/d
Shelly Materials Inc - Forest Quarry	Blanchard	2IJ00022	2.66 kg/yr
StoneCo Inc Maumee Quarry	Swan Creek	2IJ00048	6.54 kg/d
StoneCo Inc Maumee Quarry	Swan Creek	2IJ00048	6.54 kg/d
Arlington Municipal WTP	Blanchard	2IZ00000	0 kg/yr