

**Table A.7 (Estuary) - Baseline Point Source Flows and Loads - Draft, 7/19/2016**

Note: TP Load based on permitted or average measured TP concentration.

Facility Name	Permit Number	Permit Type	Outfall Number	Reach	Month	Flow (MGD)	Flow (cfs)	TP Conc (mg/L)	TP Load (lbs/month)	TSS Conc (mg/L)	TSS Load (lbs/month)	Fecal Coliform Conc (cfu/100mL)	Fecal Coliform Load (billion cells/month)	Notes
Aldrich Chemical Co Inc Emmer	0044938	NCCW	001	Estuary	All	9.00E-03	0.01	0.53	1.21	0	0	0	0	
Discovery World at Pier Wisconsin	0044938	NCCW	001	Estuary	All	2.44	3.77	0	0	0	0	0	0	Water supply is surface water per WDNR.
Miller Compressing Mainyard Recycle AP	0044938	NCCW	003	Estuary	All	3.00E-03	4.64E-03	0.82	0.62	0	0	0	0	
Milwaukee Art Museum	0044938	NCCW	001	Estuary	All	1.44	2.23	0	0	0	0	0	0	Water supply is surface water per WDNR.
Milwaukee Metropolitan Sewerage District - Jones Island	0036820	Individual	002	Estuary	All	123	190	0.66	2.06E+04	30	9.36E+05	400	5.66E+04	Water supply is surface water per WDNR. Flow is based on highest 7-day averages from 1/2006 through 5/2011 and phosphorus values from 8/2011 thru 8/2012.
	0036820	Individual	003	Estuary	All	2.40	3.71	0	0	0	0	0	0	
We Energies Valley Power Plant	0000931	Individual	001	Estuary	All	79.20	123	0	0	0	0	0	0	Process wastewater discharged to MMSD for treatment. Water supply for remainder of discharge is surface water per DNR.
	0000931	Individual	002	Estuary	All	54.90	84.93	0	0	0	0	0	0	Water supply is surface water per WDNR.

**Table A.16 (Estuary) - Daily Total Phosphorus Wasteload Allocation by Permitted Point Source - Draft, 7/19/2016**

**Note:** For implementation purposes, the individual allocations for NCCW facilities covered under the general permit will be lumped by watershed and tracked through effluent monitoring. Actual permit limits may differ by facility when compared to corresponding individual mass allocations listed for each facility provided the watershed allocation is still met.

Facility Name	Permit Number	Permit Type	Outfall Number	Reach	Daily TP Load (lbs/day)												Annual Load Allocation (lbs/year)	
					Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Aldrich Chemical Co Inc Emmber	0044938	NCCW	001	Estuary	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	14.52
Discovery World at Pier Wisconsin	0044938	NCCW	001	Estuary	#	#	#	#	#	#	#	#	#	#	#	#	#	#
Miller Compressing Mainyard Recycle AP	0044938	NCCW	003	Estuary	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	7.49
Milwaukee Art Museum	0044938	NCCW	001	Estuary	#	#	#	#	#	#	#	#	#	#	#	#	#	#
Milwaukee Metropolitan Sewerage District - Jones Island	0036820	Individual	002	Estuary	677	677	677	677	677	677	677	677	677	677	677	677	677	247,118
	0036820	Individual	003	Estuary	#	#	#	#	#	#	#	#	#	#	#	#	#	#
We Energies Valley Power Plant	0000931	Individual	001	Estuary	#	#	#	#	#	#	#	#	#	#	#	#	#	#
	0000931	Individual	002	Estuary	#	#	#	#	#	#	#	#	#	#	#	#	#	#

# Background P is present in effluent from source water. Point source is not contributing P beyond that which is present in the intake. For these reasons, no P reductions are necessary to meet TMDL targets.

**Table A.17 (Estuary) - Monthly Total Phosphorus Wasteload Allocation by Permitted Point Source - Draft, 7/19/2016**

**Note:** For implementation purposes, the individual allocations for NCCW facilities covered under the general permit will be lumped by watershed and tracked through effluent monitoring. Actual permit limits may differ by facility when compared to corresponding individual mass allocations listed for each facility provided the watershed allocation is still met.

Facility Name	Permit Number	Permit Type	Outfall Number	Reach	Monthly TP Load (lbs/month)												Annual Load Allocation (lbs/year)
					Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Aldrich Chemical Co Inc Emmer	0044938	NCCW	001	Estuary	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	14.52
Discovery World at Pier Wisconsin	0044938	NCCW	001	Estuary	#	#	#	#	#	#	#	#	#	#	#	#	#
Miller Compressing Mainyard Recycle AP	0044938	NCCW	003	Estuary	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	7.49
Milwaukee Art Museum	0044938	NCCW	001	Estuary	#	#	#	#	#	#	#	#	#	#	#	#	#
Milwaukee Metropolitan Sewerage District - Jones Island	0036820	Individual	002	Estuary	20,593	20,593	20,593	20,593	20,593	20,593	20,593	20,593	20,593	20,593	20,593	20,593	247,118
	0036820	Individual	003	Estuary	#	#	#	#	#	#	#	#	#	#	#	#	#
We Energies Valley Power Plant	0000931	Individual	001	Estuary	#	#	#	#	#	#	#	#	#	#	#	#	#
	0000931	Individual	002	Estuary	#	#	#	#	#	#	#	#	#	#	#	#	#

# Background P is present in effluent from source water. Point source is not contributing P beyond that which is present in the intake. For these reasons, no P reductions are necessary to meet TMDL targets.

**Table A.18 (Estuary) - Daily Total Suspended Solids Wasteload Allocation by Permitted Point Source - Draft, 7/19/2016**

Facility Name	Permit Number	Permit Type	Outfall Number	Reach	Daily TSS Load (lbs/day)												Annual Load Allocation (lbs/year)
					Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Milwaukee Metropolitan Sewerage District - Jones Island	0036820	Individual	002	Estuary	30,791	30,791	30,791	30,791	30,791	30,791	30,791	30,791	30,791	30,791	30,791	30,791	11,232,627
	0036820	Individual	003	Estuary	#	#	#	#	#	#	#	#	#	#	#	#	#
We Energies Valley Power Plant	0000931	Individual	001	Estuary	#	#	#	#	#	#	#	#	#	#	#	#	#
	0000931	Individual	002	Estuary	#	#	#	#	#	#	#	#	#	#	#	#	#

# Background TSS is present in effluent from source water. Point source is not contributing TSS beyond that which is present in the intake. For these reasons, no TSS reductions are necessary to meet TMDL targets.

**Table A.19 (Estuary) - Monthly Total Suspended Solids Wasteload Allocation by Permitted Point Source - Draft, 7/19/2016**

Facility Name	Permit Number	Permit Type	Outfall Number	Reach	Monthly TSS Load (lbs/month)												Annual Load Allocation (lbs/year)
					Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Milwaukee Metropolitan Sewerage District - Jones Island	0036820	Individual	002	Estuary	936,052	936,052	936,052	936,052	936,052	936,052	936,052	936,052	936,052	936,052	936,052	936,052	11,232,627
	0036820	Individual	003	Estuary	#	#	#	#	#	#	#	#	#	#	#	#	#
We Energies Valley Power Plant	0000931	Individual	001	Estuary	#	#	#	#	#	#	#	#	#	#	#	#	#
	0000931	Individual	002	Estuary	#	#	#	#	#	#	#	#	#	#	#	#	#

# Background TSS is present in effluent from source water. Point source is not contributing TSS beyond that which is present in the intake. For these reasons, no TSS reductions are necessary to meet TMDL targets.

Table A.20 (Estuary) - Daily Fecal Coliform Wasteload Allocation by Permitted Point Source - Draft, 7/19/2016

Facility Name	Permit Number	Permit Type	Outfall Number	Reach	Daily Fecal Coliform Load (billion cells/day)												Annual Load Allocation (billion cells/year)
					Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Milwaukee Metropolitan Sewerage District - Jones Island	0036820	Individual	002	Estuary	1,862	1,862	1,862	1,862	1,862	1,862	1,862	1,862	1,862	1,862	1,862	1,862	679,338
Milwaukee Metropolitan Sewerage District - Jones Island #	0036820	Individual	003	Estuary	0	0	0	0	0	0	0	0	0	0	0	0	0
We Energies Valley Power Plant #	0000931	Individual	001	Estuary	0	0	0	0	0	0	0	0	0	0	0	0	0
We Energies Valley Power Plant #	0000931	Individual	002	Estuary	0	0	0	0	0	0	0	0	0	0	0	0	0

# Fecal coliform WLA = 0 because the discharge is industrial wastewater only (no sanitary waste). No discharge of bacteria is expected.

**Table A.21 (Estuary) - Monthly Fecal Coliform Wasteload Allocations by Permitted Point Source - Draft, 7/19/2016**

Facility Name	Permit Number	Permit Type	Outfall Number	Reach	Monthly Fecal Coliform Load (billion cells/month)												Annual Load Allocation (billion cells/year)
					Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Milwaukee Metropolitan Sewerage District - Jones Island	0036820	Individual	002	Estuary	56,611	56,611	56,611	56,611	56,611	56,611	56,611	56,611	56,611	56,611	56,611	56,611	679,338
Milwaukee Metropolitan Sewerage District - Jones Island #	0036820	Individual	003	Estuary	0	0	0	0	0	0	0	0	0	0	0	0	0
We Energies Valley Power Plant #	0000931	Individual	001	Estuary	0	0	0	0	0	0	0	0	0	0	0	0	0
We Energies Valley Power Plant #	0000931	Individual	002	Estuary	0	0	0	0	0	0	0	0	0	0	0	0	0

# Fecal coliform WLA = 0 because the discharge is industrial wastewater only (no sanitary waste). No discharge of bacteria is expected.

Table A.A (Estuary) - Growing Season Median Total Phosphorus Concentrations Based on TMDL Loads and Simulated Flows for 1988 - 1997 - Draft, 7/19/2016

Assessment Point	TP Water Quality Target (mg/L)	Growing Season (May-October) Median Instream TP Concentration (mg/L)										Median TP Concentration 1988 - 1997 (mg/L)
		1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
LM-1	0.1	0.10	0.07	0.07	0.07	0.05	0.10	0.10	0.10	0.10	0.10	0.10
LM-2	0.1	0.08	0.09	0.09	0.08	0.07	0.09	0.07	0.09	0.09	0.09	0.09
LM-3	0.1	0.08	0.08	0.08	0.07	0.06	0.09	0.07	0.09	0.08	0.09	0.08
LM-4	0.1	0.08	0.08	0.08	0.07	0.06	0.09	0.07	0.09	0.09	0.09	0.08
LM-5	0.1	0.06	0.07	0.06	0.06	0.05	0.07	0.05	0.06	0.06	0.07	0.06
LM-6	0.1	0.06	0.06	0.06	0.05	0.05	0.07	0.05	0.06	0.06	0.06	0.06
LM-7	0.1	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.05	0.05
LM-8	0.1	0.03	0.04	0.04	0.05	0.04	0.05	0.04	0.04	0.05	0.05	0.04
LM-9	0.1	0.02	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.04	0.03	0.03
LM-10	0.1	0.04	0.05	0.04	0.04	0.04	0.05	0.04	0.05	0.05	0.05	0.04

Table A.B (Estuary) - Growing Season Median Total Suspended Solids Concentrations Based on TMDL Loads and Simulated Flows for 1988 - 1997 - Draft, 7/19/2016

Assessment Point	TSS Water Quality Target (mg/L)	Growing Season (May-October) Median Instream TSS Concentration (mg/L)										Median TSS Concentration 1988 - 1997 (mg/L)
		1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
LM-1	12	11.34	7.88	8.74	8.06	6.42	11.81	11.46	11.65	11.77	11.77	11.40
LM-2	12	6.07	8.52	9.22	7.87	6.97	9.66	6.06	7.89	8.49	9.16	8.19
LM-3	12	5.90	7.84	8.08	6.94	6.21	9.55	5.81	7.74	7.93	9.13	7.79
LM-4	12	6.10	7.76	8.23	7.34	6.17	10.02	6.49	8.12	8.93	9.24	7.94
LM-5	12	3.64	5.20	5.48	4.63	4.02	6.06	3.78	4.38	4.87	5.78	4.75
LM-6	12	4.22	5.87	5.88	5.25	4.63	6.77	4.31	5.46	5.85	6.06	5.66
LM-7	12	3.68	4.39	4.58	4.49	3.97	4.62	4.00	4.31	4.62	4.45	4.42
LM-8	12	3.28	3.87	4.00	4.08	3.56	4.35	3.69	4.03	4.26	4.08	4.01
LM-9	12	2.88	3.48	3.49	3.42	3.04	3.51	3.01	3.24	3.34	3.20	3.29
LM-10	12	3.52	4.11	3.97	3.84	3.70	4.15	3.68	3.99	4.13	4.35	3.98

Table A.C (Estuary) - Recreation Season Geometric Mean Fecal Coliform Concentrations Based on TMDL Loads and Simulated Flows for 1988 - 1997 - Draft, 7/19/2016

Note: Fecal coliform water quality target for Outer Harbor assessment points is translated from the regulatory *E. coli* standard (See Section 5.4).

Assessment Point	Location	30-day Geomean FC Water Quality Target (cfu/100mL) <sup>1</sup>	Recreation Season (May-September) Geomean FC Concentration (cfu/100mL)									
			1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
LM-1	Inner Harbor	200	68	161	194	154	97	215	103	125	204	221
LM-2	Inner Harbor	200	13	49	57	39	26	50	16	23	35	40
LM-3	Inner Harbor	200	7	39	47	29	19	34	8	12	24	30
LM-4	Inner Harbor	200	8	54	73	44	26	51	11	15	38	38
LM-5	Inner Harbor	200	4	11	15	9	6	13	4	5	10	8
LM-6	Outer Harbor	210	11	31	38	24	18	30	10	14	26	21
LM-7	Outer Harbor	210	8	13	16	13	11	15	9	11	14	12
LM-8	Outer Harbor	210	6	10	13	11	8	11	8	8	11	9
LM-9	Outer Harbor	210	4	5	6	5	5	6	4	4	5	5
LM-10	Outer Harbor	210	7	9	10	8	8	9	7	7	12	10