



Appendix 1

Bartlett (2017)

Reporting Element 1 - Staff and Financial Resources, Jan 2017 - Dec 2017

	Program (if applicable):	Dollars:
Capital Improvements:	Facility Plan Update	\$ 150,000.00
Operations & Maintenance:		
Feasibility Studies or Permit Required Projects not already listed:	Devon Excess Flow Feasibility Study and Phosphorus Discharge Optimization Plan for WWTP Under Special Conditions & Phosphorus Feasibility Study for WWTP	\$ 330,000.00
Staff (No. of staff hours in the year or FTEs & approx. \$ value) working on nutrient related matters:	150 hours of Staff Time	\$ 8,000.00
Other Resources Invested:		



Appendix 1

Bartlett (2017)

Reporting Element 2 - Outreach and Communication Activities, Jan 2017 - Dec 2017

	No. of Events	No. of Attendants	Description:	Partnerships:
Presentations, Conferences & Workshops:	1	30	Village Board Presentation by Engineering Enterprises, Inc.	
Print or Media:	1	N/A	Letters and Flyers to residents for SSES	
Other Activities:				



Appendix 1 Bartlett (2017)

Reporting Element 3: Facility Nutrient Tracking - Jan 2017 - December 2017

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
Bittersweet WWTP (B01)	IL0027618	None	3.7	2017	2.5	37,960	22,630	3.00	251,120	190,165	25.00	DuPage River Salt Creek Workgroup (DRSCW)	\$150,000 Facility Plan Update, \$31,095 DRSCW Dues
Devon Excess Flow Facility	IL0027618-002	None	N/A	2017	0.4	3	1	N/A	23	2	N/A	DRSCW	The flow represent one event for the entire year. Revision of IGA with MWRD, \$150,000 Engineering



Appendix 1

Bloomington Normal Water Reclamation District (2017)

Reporting Element 1 - Staff and Financial Resources, Jan 2017 - Dec 2017

	Program (if applicable):	Dollars:
Capital Improvements:		
Operations & Maintenance:		
Feasibility Studies or Permit Required Projects not already listed:	Nutrient Studies at West and SE Plants (Jan - June 2018)	\$ 51,507.00
Staff (No. of staff hours in the year or FTEs & approx. \$ value) working on nutrient related matters:		
Other Resources Invested:		



Appendix 1

Bloomington Normal Water Reclamation District (2017)

Reporting Element 2 - Outreach and Communication Activities, Jan 2017 - Dec 2017

	No. of Events	No. of Attendants	Description:	Partnerships:
Presentations, Conferences & Workshops:				
Print or Media:				
Other Activities:				



Appendix 1

Bloomington Normal Water Reclamation District (2017)

Reporting Element 3: Facility Nutrient Tracking - Jan 2017 - June 2018

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
Facility No. 1	IL0027731	None	22.5	2017	15.1	177,755	101,470	2.49	-	819,790	18.90	No	Design Engineering \$102,003
	IL0027731	None	22.5	2018	17.6	88,147	51,647	2.25	-	443,840	21.29	No	**Data Represents Jan-June 2018**
Facility No. 2	IL0073504	None	7.5	2017	3.8	60,955	43,263	3.74		257,957	22.30	No	Design Engineering \$92,731 Upgrade \$1080
	IL0073505	None	7.5	2018	4.2	30,641	20,292	3.46		132,644	21.36	No	**Data represents Jan-June 2018**



Appendix 1

Downers Grove Sanitary District (2017)

Reporting Element 1 - Staff and Financial Resources, Jan 2017 - Dec 2017

	Program (if applicable):	Dollars:
Capital Improvements:	Anaerobic tank mixer installation (\$25,000 in parts plus 700 hours of labor at \$45 with overhead per hour)	\$ 56,500.00
Operations & Maintenance:		
Feasibility Studies or Permit Required Projects not already listed:	P Feasibility Study (Engineering fees to prepare PDOP and Feasibility Study)	\$ 26,000.00
Staff (No. of staff hours in the year or FTEs & approx. \$ value) working on nutrient related matters:	General Management (~ 20% of General Manager's time, including labor & overhead)	\$ 45,000.00
Other Resources Invested:		



Appendix 1

Downers Grove Sanitary District (2017)

Reporting Element 2 - Outreach and Communication Activities, Jan 2017 - Dec 2017

	No. of Events	No. of Attendants	Description:	Partnerships:
Presentations, Conferences & Workshops:	1	1	Attended Regional Nutrient Network Planning Workshop at Northwestern University	
	1	1	Hosted Danish Consulate WTA workshop	
Print or Media:				
Other Activities:	1	1	Stakeholder in EPA development national Nutrient Removal and Secondary Treatment Survey/Study	



Appendix 1 Downers Grove Sanitary District (2017)

Reporting Element 3: Facility Nutrient Tracking - Jan 2017 - December 2017

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
Wastewater Treatment Center	IL0028380	None	11.0	2017	10.3	165,880	85,650	2.99	1,141,660	480,990	16.04	DuPage River Salt Creek Workgroup	PDOP - attempting BNR Spent \$24,000 on tank mixing equipment



Appendix 1

Glenbard Wastewater Authority (2017)

Reporting Element 1 - Staff and Financial Resources, Jan 2017 - Dec 2017

	Program (if applicable):	Dollars:
Capital Improvements:	Biological Phosphorus Removal Detailed Feasibility Study & Preliminary Design	\$ 95,000.00
Operations & Maintenance:		
Feasibility Studies or Permit Required Projects not already listed:	Phosphorus Feasibility Study Report; Phosphorus Discharge Optimization Report	\$ 14,125.00
Staff (No. of staff hours in the year or FTEs & approx. \$ value) working on nutrient related matters:	0.125	\$ 12,250.00
Other Resources Invested:		



Appendix 1

Glenbard Wastewater Authority (2017)

Reporting Element 2 - Outreach and Communication Activities, Jan 2017 - Dec 2017

	No. of Events	No. of Attendants	Description:	Partnerships:
Presentations, Conferences & Workshops:				
Print or Media:				
Other Activities:				



Appendix 1 Glenbard Wastewater Authority (2017)

Reporting Element 3: Facility Nutrient Tracking - Jan 2017 - December 2017

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
Facility No. 1	IL0021547	None	16.0	2017	12.7	227,223	104,308	2.92	1,180,609	919,548	25.67	DuPage River Salt Creek Workgroup	N/A
Facility No. 2	IL0022471	None	N/A	2017	276.9	N/A	1,338	0.60					Flow represents total annual flow and concentration is average on discharge days. Wet weather facility only - limited monitoring



Appendix 1

Lake County Public Works (2017)

Reporting Element 1 - Staff and Financial Resources, Jan 2017 - Dec 2017

	Program (if applicable):	Dollars:
Capital Improvements:	Des Plaines River WTP - Facility upgrade to BNR	\$ 3,600,000.00
	New Century Town WWTP - Facility upgrade to BNR	\$ 5,000,000.00
Operations & Maintenance:		
Feasibility Studies or Permit Required Projects not already listed:		
Staff (No. of staff hours in the year or FTEs & approx. \$ value) working on nutrient related matters:		
Other Resources Invested:		



Appendix 1

Lake County Public Works (2017)

Reporting Element 2 - Outreach and Communication Activities, Jan 2017 - Dec 2017

	No. of Events	No. of Attendants	Description:	Partnerships:
Presentations, Conferences & Workshops:	1	approx. 50	eBNR Challenges After Construction.	IAWA
Print or Media:				
Other Activities:	2	30	eBNR Process	LCPW Staff



Appendix 1 Lake County Public Works (2017)

Reporting Element 3: Facility Nutrient Tracking - Jan 2017 - December 2017

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
Des Plaines River WTP	IL0022055	BIO-P	16.0	2017	9.7	13,368	12,449	1.60	86,890	42,649	11.10	Des Plaines River Watershed	\$ 3.6 Million plant upgrade to BNR. Project will extent thru 2019
New Century Town WWTP	IL0022071	BIO-P & BIO-N	6.0	2017	3.0	7,701	2,230	0.47	51,831	19,261	7.30	Des Plaines River Watershed	\$ 5 Million plant upgrade to BNR
Mill Creek WWTP	IL0071366	BIO-P	2.1	2017	0.9	1,474	181	0.12	7,008	3,876	11.02	Des Plaines River Watershed	



Appendix 1

Metropolitan Water Reclamation District of Greater Chicago (2017)

Reporting Element 1 - Staff and Financial Resources, Jan 2017 - Dec 2017

	Program (if applicable):	Dollars:
Capital Improvements:	11-195-AP, Phosphorus Recovery Facility, SWRP (recovery of phosphorus utilizing Ostara technology) (in construction, reactors in operation)	\$ 3,517,600.08
	15-120-3P, Conversion of old GCTs to WASSTRIP Process, SWRP (WASSTRIP process will allow increased P recovery by the recovery facility)(in construction)	\$ 4,362,138.05
	15-122-3P, Aeration Tanks Air Valve Automation in Batteries A, B, C and D, SWRP (will allow in-line fermentation in our an anaerobic zones, enhancing the performance of EBPR treatment process) (in construction)	\$ 5,757,749.34
	15-124-3P, Conversion of Two Gravity Concentration Tanks to Primary Sludge Fermenters, SWRP (produce additional carbon to be introduced to the aeration batteries for use in stabilizing EBPR treatment process) (recently awarded, contractor in mobilization, no funds spent as yet)	\$ -



Appendix 1

Metropolitan Water Reclamation District of Greater Chicago (2017)

Reporting Element 1 - Staff and Financial Resources, Jan 2017 - Dec 2017

	16-272-3P, Conversion of Primary Tanks to High Strength Waste Receiving and Distribution - Design and Evaluation of Alternatives, CWRP (to allow us to receive a carbon source to be introduced to the aeration batteries to allow EBPR to occur as this plant is carbon limited) (in design by consultant)	\$	150,000.00
Capital Improvements Cont.:			
Operations & Maintenance:	M&O Dept - Ostara P removal - chemicals	\$	504,474.00
	M&O Dept - Ostara P removal - Parts & supplies	\$	180,000.00
Feasibility Studies or Permit Required Projects not already listed:	M&R Dept. - Feasibility Study and Optimization Plan for Kirie WRP	\$	43,325.59
	M&R Dept. - Feasibility Study and Optimization Plan for Egan WRP	\$	43,325.59
	M&R Dept. - Feasibility Study and Optimization Plan for Hanover Park WRP	\$	96,092.22
	M&R Dept. - Feasibility Study and Optimization Plan for Lemont WRP	\$	92,489.68
	M&R Dept. - Research supplies and consumables at WRPs	\$	9,000.00
	M&R Dept. - Research and Demonstration and collaboration with ag sector at Fulton County site	\$	50,000.00
Staff (No. of staff hours in the year or FTEs & approx. \$ value) working on nutrient related matters:	Engineering Dept. - Post award engineering, consultant oversight and construction oversight (~6 FTEs)	\$	750,000.00



Appendix 1

Metropolitan Water Reclamation District of Greater Chicago (2017)

Reporting Element 1 - Staff and Financial Resources, Jan 2017 - Dec 2017

Staff Cont.:	M&R Dept. - Research and technical oversight at 6 WRPs (~2.0 FTEs)	\$ 253,000.00
	M&R Dept. - Technical oversight on design and feasibility studies (~1.7 FTEs)	\$ 191,000.00
	M&R Dept. - Research and Demonstration at Fulton County site and other collaboration with ag sector (~1.3 FTEs)	\$ 200,000.00
	M&R Dept. - Research and pilot scale testing for algae nutrient removal (~1.4 FTEs)	\$ 220,000.00
Other Resources Invested:	M&R Dept. - Research supplies and consumables at WRPs	\$ 9,000.00
	M&R Dept. - Research and Demonstration and collaboration with ag sector at Fulton County site	\$ 50,000.00



Appendix 1

Metropolitan Water Reclamation District of Greater Chicago (2017)

Reporting Element 2 - Outreach and Communication Activities, Jan 2017 - Dec 2017

	No. of Events	No. of Attendants	Description:	Partnerships:
Presentations, Conferences & Workshops:	3	50	<ol style="list-style-type: none">1. The Sustainability Summit held on October 23, 2017, offered partnering municipalities and environmental advocates the opportunity to learn about the latest trends in resource recovery and stormwater management.2. On July 12, 2017, hosted IFB Board for collaboration workshop and field visit at th Fulton County Research and Demonstration site.3. Fulton County Field Day was held on November 17, 2017, on District property to provide the agricultural community with an opportunity to visit a demonstration field, and presentations discuss how cover crops improve soil health, reduce corn fertilizer needs and save money.	Illinois Farm Bureau, Illinois Central College
Print or Media: Press Release	18	NA	Public Affairs issued 18 press releases in 2017 that address practices for reducing nutrient discharge. These press releases were also posted on Facebook, LinkedIn, and most recently we added Instagram. Links are tweeted.	



Appendix 1

Metropolitan Water Reclamation District of Greater Chicago (2017)

Reporting Element 2 - Outreach and Communication Activities, Jan 2017 - Dec 2017

	No. of Events	No. of Attendants	Description:	Partnerships:
Brochure	1	NA	Brochure which describes actions the public can take to minimize the risk of water contamination: "A Healthy Waterway Begins with You: A Guide to Water Wellness" www.mwrd.org/irj/go/km/docs/documents/MWRD/internet/Public%20Affairs/Education/Resources/pdf/HealthyWaterwayBeginsWithYou.pdf	
Publications	1	NA	September 2017. Water & Wastes Digest, "Phosphorus Partnerships." https://www.wwdmag.com/pollution-control/phosphorus-partnerships BY ALLISON FORE & PATRICK THOMAS	
TV media	1	NA	February 23, 2017. WTTW, Chicago Tonight. "Chicago River Cleanup Efforts Bolstered Phosphorus Agreement." http://chicagotonight.wttw.com/2017/02/23/chicago-river-cleanup-efforts-bolstered-phosphorus-agreement	
Other Activities				
Tours	79		Tours that featured our phosphorus recovery facility at the Stickney Water Reclamation Plant.	



Appendix 1

Metropolitan Water Reclamation District of Greater Chicago (2017)

Reporting Element 2 - Outreach and Communication Activities, Jan 2017 - Dec 2017

	No. of Events	No. of Attendants	Description:	Partnerships:
Partnerships	1		Tours during WEFTEC 2017 visited the phosphorus recovery facility at the Stickney WRP.	Water Environment Federation
Legislation	1	NA	In 2017, the District pursued and received legislative authority to allow the District to participate in a nutrient trading program throughout the State of Illinois to meet water quality standards in the event that nutrient trading becomes available in Illinois.	
Presentations			District staff give a multitude of presentations on nutrient reduction activities throughout the year such as at IWEA	



Appendix 1 Metropolitan Water Reclamation District of Greater Chicago (2017)

Reporting Element 3: Facility Nutrient Tracking - Jan 2017 - December 2017

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
Stickney	IL0028053	Bio-P	1200.0	2017	686.6	21,507,888	1,180,975	0.64	83,444,798	17,024,420	8.68	No	Data was derived through District Maintenance and Operation Dept routine sampling and Analytical Lab Division analysis; all batteries are converted to an anoxic-anaerobic-oxic configuration; Ostara® process installed for P-recovery on post-digester centrate and WASSTRIP® process being implemented in Spring 2018; Primary sludge fermentation for carbon for bio-P and WASSTRIP® scheduled for implementation in late 2018; installing actuators on air-valves for automation in summer 2018; installed temporary receiving station for one battery for high strength carbon material.
Calumet	IL0028061	Bio-P (testing)	354.0	2017	256.7	3,294,693	1,640,887	2.50	14,160,035	5,418,450	7.19	No	Data was derived through District Maintenance and Operation Dept routine sampling and Analytical Lab Division analysis; all batteries are converted to an anoxic-anaerobic-oxic configuration but no carbon supplementation; installed temporary receiving station for one battery for high strength carbon material; installing plant-wide receiving station for high strength carbon material.
Terrence J. O'Brien	IL0028088	Bio-P in one battery	333.0	2017	234.5	2,094,372	920,925	1.30	16,279,836	7,269,229	10.74	No	Data was derived through District Maintenance and Operation Dept routine sampling and Analytical Lab Division analysis; one battery is converted to an anoxic-anaerobic-oxic configuration for testing purposes; Currently doing pilot scale testing of algae for nutrient removal.
James C. Kirie	IL0047741	Bio-P	52.0	2017	38.4	375,953	47,412	0.37	2,689,035	1,041,758	8.17	Lower Des Plaines Watershed Group	Data was derived through District Maintenance and Operation Dept routine sampling and Analytical Lab Division analysis; one of two batteries converted to a quasi-anaerobic-oxic configuration (other plant battery is pass through); 2 of 6 tanks have baffle walls and large bubble mixers installed.
John E. Egan	IL0036340	Nitrogen removal on sidestream	30.0	2017	24.7	408,568	224,663	3.09	2,174,684	1,159,017	15.93	No	Data was derived through District Maintenance and Operation Dept routine sampling and Analytical Lab Division analysis; no bio-P efforts completed thus far; Anita Mox process installed on digester centrate in August 2016 to reduce nitrogen loading at plant headworks.



Appendix 1 Metropolitan Water Reclamation District of Greater Chicago (2017)

Reporting Element 3: Facility Nutrient Tracking - Jan 2017 - December 2017

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
Hanover Park	IL0036137	Bio-P in 1/4 of plant	12.0	2017	10.8	129,432	74,819	2.58	862,608	411,525	14.21	No	Data was derived through District Maintenance and Operation Dept routine sampling and Analytical Lab Division analysis; two tanks converted to an anoxic-anaerobic-oxic configuration for testing purposes; one tank has baffle walls and mechanical mixers installed
Lemont	IL0028070	Bio-P (testing)	2.3	2017	2.6	29,918	16,403	2.33	211,138	138,665	19.24	Lower Des Plaines Watershed Group	Data was derived through District Maintenance and Operation Dept routine sampling and Analytical Lab Division analysis



Appendix 1

North Shore Water Reclamation District (2017)

Reporting Element 1 - Staff and Financial Resources, Jan 2017 - Dec 2017

	Program (if applicable):	Dollars:
Capital Improvements:	Aeration System Improvements at Gurnee Facility	\$ 1,049,798.00
	Aeration System Improvements at Waukegan Facility	\$ 1,115,540.00
	Aeration System Improvements at Clavey Road Facility	\$ 1,170,998.00
	Phosphorus Feasibility Study Report; Phosphorus Discharge Optimization Report	\$ 14,125.00

Operations & Maintenance:

Feasibility Studies or Permit Required Projects not already listed:

Staff (No. of staff hours in the year or FTEs & approx. \$ value) working on nutrient related matters:

Other Resources Invested:



Appendix 1

North Shore Water Reclamation District (2017)

Reporting Element 2 - Outreach and Communication Activities, Jan 2017 - Dec 2017

	No. of Events	No. of Attendants	Description:	Partnerships:
Presentations, Conferences & Workshops:				
Print or Media:				
Other Activities:				



Appendix 1 North Shore Water Reclamation District (2017)

Reporting Element 3: Facility Nutrient Tracking - Jan 2017 - December 2017

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
NSWRD-Clavey Road WRF	IL0030171	None	17.8	2017	14.2	118,000	50,000	1.12	969,000	837,000	17.40	No	Bio-P to begin Feb. 2018 N. Branch Chi. R. Watershed Workgroup in 2018
NSWRD-Gurnee WRF	IL0035092	Bio-P	23.6	2017	15.2	187,000	73,700	1.57	1,390,000	1,020,000	23.30	Des Plaines River Watershed Workgroup	Bio-P started June, 2017
NSWRD-Waukegan WRF	IL0030244	Bio-P	22.0	2017	21.7	180,000	85,400	1.26	1,630,000	1,110,000	16.80	Des Plaines River Watershed Workgroup	Bio-P started Dec., 2017



Appendix 1

Urbana-Champaign Sanitary District (2017)

Reporting Element 1 - Staff and Financial Resources, Jan 2017 - Dec 2017

	Program (if applicable):	Dollars:
Capital Improvements:		
Operations & Maintenance:	Daily Operations estimate: ~1/6 of SWP efforts associated with P limit = ~1/36 of UCSD overall UCSD effort (Operations and Maintenance)	\$ 250,000.00
Feasibility Studies or Permit Required Projects not already listed:	Optimization efforts at NEP: ~1/12 of NEP work for P. Please note that since we are implementing this, these are coming from O&M budgets. There is not a separate study for this work.	\$ 500,000.00
Staff (No. of staff hours in the year or FTEs & approx. \$ value) working on nutrient related matters:	Combination of 1/6 SWP and 1/12 NEP results in 1/12 of Overall UCSD efforts. 1/12 of 47 FTE = 4 FTE	\$ 300,000.00
Other Resources Invested:		



Appendix 1

Urbana-Champaign Sanitary District (2017)

Reporting Element 2 - Outreach and Communication Activities, Jan 2017 - Dec 2017

	No. of Events	No. of Attendants	Description:	Partnerships:
Presentations, Conferences & Workshops:				
Print or Media:				
Other Activities:				



Appendix 1 Urbana-Champaign Sanitary District (2017)

Reporting Element 3: Facility Nutrient Tracking - Jan 2017 - December 2017

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
Northeast	IL0030500	None	17.3	2017	11.8	210,720	72,305	1.84	1,503,757	698,915	17.15	Salt Fork	
Southwest	IL0030526	Bio-P	8.0	2017	6.3	84,315	5,475	0.27	630,539	192,308	9.30	No	



Appendix 1

Wheaton Sanitation District

Reporting Element 1 - Staff and Financial Resources, Jan 2017 - Dec 2017

Program (if applicable):

Dollars:

Capital Improvements:

Operations & Maintenance:

Feasibility Studies or Permit Required Projects not already listed:

Staff (No. of staff hours in the year or FTEs & approx. \$ value) working on nutrient related matters:

Other Resources Invested:



Appendix 1

Wheaton Sanitation District

Reporting Element 2 - Outreach and Communication Activities, Jan 2017 - Dec 2017

	No. of Events	No. of Attendants	Description:	Partnerships:
Presentations, Conferences & Workshops:				
Print or Media:				
Other Activities:			Posted P reduction material on website	



Appendix 1

Wheaton Sanitation District (2017)

Reporting Element 3: Facility Nutrient Tracking - Jan 2017 - December 2017

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
Facility No. 1	IL0031739	None	8.9	2017	7.5	100,455	61,643	2.70			25.00	DuPage River Salt Creek	\$100000-160000 dues to the DRSCW



Appendix 1

Bloomington Normal Water Reclamation District (Jan - June 2018)

Reporting Element 1 - Staff and Financial Resources, Jan 2018 - June 2018

	Program (if applicable):	Dollars:
Capital Improvements:	Facility No. 1 - Design Engineering	\$ 102,000.00
	Facility No. 2 - Design Engineering & upgrade	\$ 93,811.00

Operations & Maintenance:

Feasibility Studies or Permit Required Projects not already listed:

Staff (No. of staff hours in the year or FTEs & approx. \$ value) working on nutrient related matters:

Other Resources Invested:



Appendix 1

Bloomington Normal Water Reclamation District (Jan - June 2018)

Reporting Element 2 - Outreach and Communication Activities, Jan 2018 - June 2018

	No. of Events	No. of Attendants	Description:	Partnerships:
Presentations, Conferences & Workshops:				
Print or Media:				
Other Activities:				





Appendix 1

Sangamon County Water Reclamation District (Jan - June 2018)

Reporting Element 3: Facility Nutrient Tracking - Jan 2018 - June 2018

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
Facility No. 1	IL0027731	None		2017	15.1	177,755	101,470	2.49		819,790	18.90	No	Design Engineering \$102,000
Facility No. 2	IL0073504	None		2017	3.8	60,955	43,263	3.74		140,890	22.30	No	Design Engineering \$92,731 Upgrade \$1080



Appendix 1

Downers Grove Sanitary District (Jan - June 2018)

Reporting Element 1 - Staff and Financial Resources, Jan 2018 - June 2018

	Program (if applicable):	Dollars:
Capital Improvements:	Bio-P pilot - Carbon addition piping	\$ 30,000.00
Operations & Maintenance:	ORP probe purchase, O&M labor taking readings	\$ 3,500.00
Feasibility Studies or Permit Required Projects not already listed:	Engineering support, bio-win modeling	\$ 3,700.00
Staff (No. of staff hours in the year or FTEs & approx. \$ value) working on nutrient related matters:	General Manager time, roughly 10% of hours for period, including labor overhead	\$ 12,000.00
Other Resources Invested:		



Appendix 1

Downers Grove Sanitary District (Jan - June 2018)

Reporting Element 2 - Outreach and Communication Activities, Jan 2018 - June 2018

	No. of Events	No. of Attendants	Description:	Partnerships:
Presentations, Conferences & Workshops:	1	1	Attend INLRS Meeting in Springfield	
Print or Media:				
Other Activities:	2	1	Attend Illinois Nutrient Trading Initiative stakeholder meetings	



Appendix 1

Downers Grove Sanitary District (Jan - June 2018)

Reporting Element 3: Facility Nutrient Tracking - Jan 2017 - December 2017

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
Downers Grove Sanitary District WWTC	IL0028380	Bio-P being piloted under PDOP	11.0	2018	11.8	87,169	40,231	2.29	649,934	303,259	17.59	DuPage River Salt Creek Work Group	Spent \$30,000 on carbon addition piping.



Appendix 1

Glenbard Wastewater Authority (Jan - June 2018)

Reporting Element 1 - Staff and Financial Resources, Jan 2018 - June 2018

	Program (if applicable):	Dollars:
Capital Improvements:		
Operations & Maintenance:		
Feasibility Studies or Permit Required Projects not already listed:	2018 Facility Plan	\$ 5,000.00
Staff (No. of staff hours in the year or FTEs & approx. \$ value) working on nutrient related matters:	0.125 FTE	\$ 12,250.00
Other Resources Invested:		



Appendix 1

Glenbard Wastewater Authority (Jan - June 2018)

Reporting Element 2 - Outreach and Communication Activities, Jan 2018 - June 2018

	No. of Events	No. of Attendants	Description:	Partnerships:
Presentations, Conferences & Workshops:				
Print or Media:				
Other Activities:				





Appendix 1 Glenbard Wastewater Authority (Jan - June 2018)

Reporting Element 3: Facility Nutrient Tracking - Jan 2017 - December 2017

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
Facility No. 1	IL0021547	None	16.0	2017	12.7	227,223	104,308	2.92	1,180,609	919,548	25.67	DuPage River Salt Creek Workgroup	N/A
Facility No. 1	IL0021547	None	16.0	2018	14.6	112,089	51,337					DuPage River Salt Creek Workgroup	N/A
					Total Annual Flow			Average on Discharge Days					
Facility No. 2	IL0022471	None	N/A	2017	276.9	N/A	1,338	0.60				DuPage River Salt Creek Workgroup	Wet weather facility only - limited monitoring
Facility No. 2	IL0022471	None	N/A	2018	270.8	N/A	1,454	0.64				DuPage River Salt Creek Workgroup	Wet weather facility only - limited monitoring



Appendix 1

Greater Peoria Sanitary District (Jan - June 2018)

Reporting Element 1 - Staff and Financial Resources, Jan 2018 - June 2018

	Program (if applicable):	Dollars:
Capital Improvements:	Division 26 Wastewater Treatment Plant Improvements. Construction of EBPR system. (approx. amt.)	\$ 9,000,000.00
Operations & Maintenance:	3 Supervisors, 6 Operators, 3 Lab staff, other maintenance workers. Total O&M budget \$12.5 million per year (includes collection system) - \$588, 000 designated for nutrients	\$ 588,000.00
Feasibility Studies or Permit Required Projects not already listed:		
Staff (No. of staff hours in the year or FTEs & approx. \$ value) working on nutrient related matters:		
Other Resources Invested:		



Appendix 1

Glenbard Wastewater Authority (Jan - June 2018)

Reporting Element 2 - Outreach and Communication Activities, Jan 2018 - June 2018

	No. of Events	No. of Attendants	Description:	Partnerships:
Presentations, Conferences & Workshops:	2	30	Tours for local Civil Engineering students.	
Print or Media:				
Other Activities:				





Appendix 1

Glenbard Wastewater Authority (Jan - June 2018)

Reporting Element 3: Facility Nutrient Tracking - Jan 2017 - December 2017

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
Facility No. 1	IL0021288	Enhanced Biological	37.0	2017	19.5	293,000	103,000	1.57	1,960,000	399,000	6.11	No	EBPR put into operation in September 2017
		Phosphorus Removal		2018				0.71*					*The average Total P for October, November and December of 2017 after implementation of EBPR



Appendix 1

Metropolitan Water Reclamation District of Greater Chicago (Jan - June 2018)

Reporting Element 1 - Staff and Financial Resources, Jan 2018 - June 2018

	Program (if applicable):	Dollars:
Capital Improvements:	Capital Improvements Total	\$ 4,095,696.94
	Contract 11-195-AP, Phosphorus Recovery Facility, SWRP (recovery of phosphorus utilizing Ostara technology) (in construction, reactors in operation)	\$ 1,925,970.14
	Contract 15-120-3P, Conversion of old gravity concentration tanks (GCTs) to WASSTRIP Process, SWRP (WASSTRIP process will allow increased P recovery by the recovery facility)(in construction)	\$ 761,858.66
	Contract 15-122-3P, Aeration Tanks Air Valve Automation in Batteries A, B, C and D, SWRP (will allow in-line fermentation in our an anaerobic zones, enhancing the performance of EBPR treatment process) (in construction)	\$ 639,339.82
	Contract 15-124-3P, Conversion of Two Gravity Concentration Tanks to Primary Sludge Fermenters, SWRP (produce additional carbon to be introduced to the aeration batteries for use in stabilizing EBPR treatment process) (in construction)	\$ 295,534.72



Appendix 1 Metropolitan Water Reclamation District of Greater Chicago (Jan - June 2018)

Reporting Element 1 - Staff and Financial Resources, Jan 2018 - June 2018

	Program (if applicable):	Dollars:
	Contract 16-272-3P, Conversion of Primary Tanks to High Strength Waste Receiving and Distribution - Design and Evaluation of Alternatives, CWRP (to allow us to receive a carbon source to be introduced to the aeration batteries to allow EBPR to occur as this plant is carbon limited) (in design by consultant, monies are that paid to the consultant)	\$ 472,993.60
Capital Improvements Cont.:		
Operations & Maintenance:	Operations and Maintenance Total	\$ 859,818.00
	M&O Dept - Ostara P removal - chemicals	\$ 663,318.00
	M&O Dept - Ostara P removal - Parts & supplies	
	M&O Dept - Frac tank rental to receive high strength organic waste for Bio-P pilot testing at Calumet WRP	\$ 9,000.00
	M&O Dept – Kirie BioP instrumentation - Parts & supplies	\$ 187,500.00
Feasibility Studies or Permit Required Projects not already listed:	Feasibility Studies or Permit Total	\$ 320,480.99
	M&R Dept. - Feasibility Study and Optimization Plan for Kirie WRP	\$ 62,898.11
	M&R Dept. - Feasibility Study and Optimization Plan for Egan WRP	\$ 62,898.11
	M&R Dept. - Feasibility Study and Optimization Plan for Hanover Park WRP	\$ 101,532.98
Feasibility Studies or Permit Required Projects Cont.:	M&R Dept. - Feasibility Study and Optimization Plan for Lemont WRP	\$ 93,151.79



Appendix 1

Metropolitan Water Reclamation District of Greater Chicago (Jan - June 2018)

Reporting Element 1 - Staff and Financial Resources, Jan 2018 - June 2018

	Program (if applicable):	Dollars:
Staff (No. of staff hours in the year or FTEs & approx. \$ value) working on nutrient related matters:	Staff Total	\$ 1,280,740.00
	Engineering Dept. - Post award engineering, consultant oversight and construction oversight (~6 FTEs)	\$ 400,000.00
	M&O Dept – Kirie BioP instrumentation and pilot operation (~0.5 trades and ~0.7 operations staff FTEs)	\$ 61,400.00
	M&R Dept. - Technical oversight on design and feasibility studies (~1.7 FTEs)	\$ 215,500.00
	M&R Dept. - Research and technical oversight at 7 WRPs (~1.0 FTEs)	\$ 253,000.00
	M&R Dept. - Research and Demonstration at the Fulton County site and other collaboration with the agricultural sector (~1.3 FTEs)	\$ 100,000.00
	M&R Dept. - Research and pilot scale testing for algae nutrient removal (~1.4 FTEs)	\$ 110,000.00
	M&R Dept. - Microbiological research and support (~1.2 FTEs)	\$ 90,000.00
Other Resources Invested:	Other Resources Total	\$ 25,420.00
	M&R Dept. - Research supplies and consumables at WRPs	\$ 5,420.00



Appendix 1

Metropolitan Water Reclamation District of Greater Chicago (Jan - June 2018)

Reporting Element 1 - Staff and Financial Resources, Jan 2018 - June 2018

	Program (if applicable):	Dollars:
Other Resources Cont.:	M&R Dept. - Research and Demonstration and collaboration with the agricultural sector at the Fulton County site	\$ 20,000.00



Appendix 1

Metropolitan Water Reclamation District of Greater Chicago (Jan - June 2018)

Reporting Element 2 - Outreach and Communication Activities, Jan 2018 - June 2018

	No. of Events	No. of Attendants	Description:	Partnerships:
Presentations, Conferences & Workshops:	1	80	June 13, 2018, the MWRD hosted IFB Board for field day on District property to provide the agricultural community with an opportunity to visit a demonstration field and give presentations discuss how cover crops improve soil health, reduce corn fertilizer needs and save money.	
	1	500	District staff and commissioners give dozens of presentations throughout Cook County, IL, and either mention nutrients or focus on nutrients	Illinois Farm Bureau, Illinois Central College
Print or Media:	7		These 7 media advisories/press releases were also posted on Facebook, LinkedIn, Twitter and Instagram:	
Press Release	1		June 1, "Infrastructure Week open house tours offer free compost, tree giveaways," www.mwrd.org/irj/go/km/docs/documents/MWRD/internet/News&Media/Newsroom/Media/Press_Releases/2018/18_0601_Open_Houses.pdf	



Appendix 1

Metropolitan Water Reclamation District of Greater Chicago (Jan - June 2018)

Reporting Element 2 - Outreach and Communication Activities, Jan 2018 - June 2018

	No. of Events	No. of Attendants	Description:	Partnerships:
Advisory	1		May 29, "Field Day To Highlight Water Quality Research," www.mwrd.org/irj/go/km/docs/documents/MWRD/internet/News&Media/Newsroom/Media/Press_Releases/2018/18_0529_Fulton_County_Field_Day.pdf	Illinois Farm Bureau, Illinois Central College, Fulton County Farm Bureau
Press Release	1		May 17, "Best management practices for applying road salt discussed at chlorides workshop," www.mwrd.org/irj/go/km/docs/documents/MWRD/internet/News&Media/Newsroom/Media/Press_Releases/2018/18_0517_Chlorides_Workshop.pdf ;	
Advisory	1		May 10, "Water reclamation plant tours offer insight into water transformation," www.mwrd.org/irj/go/km/docs/documents/MWRD/internet/News&Media/Newsroom/Media/Press_Releases/2018/18_0510_Open_Houses.pdf	



Appendix 1

Metropolitan Water Reclamation District of Greater Chicago (Jan - June 2018)

Reporting Element 2 - Outreach and Communication Activities, Jan 2018 - June 2018

	No. of Events	No. of Attendants	Description:	Partnerships:
Advisory	1		April 25, "MWRD workshop convenes road salting experts Protecting the water environment starts with protecting local streets," www.mwrdd.org/irj/go/km/docs/documents/MWRD/internet/News&Media/Newsroom/Media/Press_Releases/2018/18_0425_Chlorides_Workshop.pdf	
Press Release	1		Feb. 7, MWRD research partnership with University of Illinois attracts grant to improve water quality through agricultural innovation, www.mwrdd.org/irj/go/km/docs/documents/MWRD/internet/News&Media/Newsroom/Media/Press_Releases/2018/18_0207_Nutrient_study_grant_Uofl.pdf	
Press Release	1		Feb. 5, "MWRD, Current Launch First Technology Pilot; Microvi's technology aims to boost water treatment efficiency," www.mwrdd.org/irj/go/km/docs/documents/MWRD/internet/News&Media/Newsroom/Media/Press_Releases/2018/18_0205_World_Water_Day.pdf	Current water technology hub



Appendix 1

Metropolitan Water Reclamation District of Greater Chicago (Jan - June 2018)

Reporting Element 2 - Outreach and Communication Activities, Jan 2018 - June 2018

	No. of Events	No. of Attendants	Description:	Partnerships:
Magazine/Newspaper	1		Jan. 9, 2018 "Fighting the war against phosphorus," Medill News Reports http://news.medill.northwestern.edu/chicago/fighting-the-war-against-phosphorous/	
Other Activities				
Tours	32	550	Guests tours of Ostara nutrient recovery facility Stickney Water Reclamation Plant	
Partnerships	4			Illinois Farm Bureau, Illinois Central College, Fulton County Farm Bureau











Appendix 1 Metropolitan Water Reclamation District of Greater Chicago (Jan - June 2018)

Reporting Element 3: Facility Nutrient Tracking - Jan 2017 - December 2017

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
Facility No. 1	IL0021547	None	16.0	2017	12.7	227,223	104,308	2.92	1,180,609	919,548	25.67	DuPage River Salt Creek Workgroup	N/A
Facility No. 2	IL0022471	None	N/A	2017	276.9	N/A	1,338	0.60					Flow represents total annual flow and concentration is average on discharge days. Wet weather facility only - limited monitoring



Appendix 1

Sangamon County Water Reclamation District (Jan - June 2018)

Reporting Element 1 - Staff and Financial Resources, Jan 2018 - June 2018

Program (if applicable):

Dollars:

Capital Improvements:

Operations & Maintenance:

Feasibility Studies or Permit Required Projects not already listed:

Staff (No. of staff hours in the year or FTEs & approx. \$ value) working on nutrient related matters:

Other Resources Invested:



Appendix 1

Sangamon County Water Reclamation District (Jan - June 2018)

Reporting Element 2 - Outreach and Communication Activities, Jan 2018 - June 2018

	No. of Events	No. of Attendants	Description:	Partnerships:
Presentations, Conferences & Workshops:				
Print or Media:				
Other Activities:				





Appendix 1 Sangamon County Water Reclamation District (Jan - June 2018)

Reporting Element 3: Facility Nutrient Tracking - Jan 2018 - June 2018

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
Facility No. 1	IL0021989	Bio-P, Bio N		2017	29.4	289,568	53,012	0.62	1,242,777	837,424	9.60		Upgrade Project completed in 2014 at a cost of \$129M
Spring Creek Plant			32 MGD	2018	37.1	183,274	26,414	0.50	480,710	91,715	10.10		data reflects January to June 2018 data only
Facility No. 2	IL0021971		15 MGD	2017	8.9	78,039	20,577	1.03	385,393	298,696	10.86		Upgrade project completed in 2018 at a cost of \$57M
Sugar Creek Plant		Bio-P, Bio N		2018	10.3	28,688	6,509	0.52	164,565	112,444	7.40		data reflects January to June 2018 data only

*Please note: Influent Total N is only tested 4 times per year So totals are lower. Multiplying by 3x may be more accurate to compare



Appendix 1

Urbana Champaign Sanitary District (Jan - June 2018)

Reporting Element 1 - Staff and Financial Resources, Jan 2018 - June 2018

	Program (if applicable):	Dollars:
Capital Improvements:		
Operations & Maintenance:	Daily Operations estimate: ~1/6 of SWP efforts associated with P limit = ~1/36 of UCSD overall UCSD effort (Operations and Maintenance)	\$ 250,000.00
Feasibility Studies or Permit Required Projects not already listed:	Optimization efforts at NEP: ~1/12 of NEP work for P. Please note that since we are implementing this, these are coming from O&M budgets. There is not a separate study for this work.	\$ 500,000.00
Staff (No. of staff hours in the year or FTEs & approx. \$ value) working on nutrient related matters:	Combination of 1/6 SWP and 1/12 NEP results in 1/12 of Overall UCSD efforts. 1/12 of 47 FTE = 4 FTE	\$ 300,000.00
Other Resources Invested:		



Appendix 1

Urbana Champaign Sanitary District (Jan - June 2018)

Reporting Element 2 - Outreach and Communication Activities, Jan 2018 - June 2018

	No. of Events	No. of Attendants	Description:	Partnerships:
Presentations, Conferences & Workshops:	1	Approx 75	Presentation on the voluntary implementation of bio-P at UCSD's Northeast plant. Comparing the 2011 baseline year to 2015 (immediately before conversion) and 2016 (conversion started in June 2016) and 2017 (the first full year). Pounds of TP discharged was 33% less in 2017 than the baseline year of 2011.	IWPC Annual Conference

Print or Media:

Other Activities:





Appendix 1 Urbana Champaign Sanitary District (Jan - June 2018)

Reporting Element 3: Facility Nutrient Tracking - Jan 2018 - June 2018

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
Northeast	IL0030500	None	17.3	2017	11.8	210,720	72,305	1.84	1,503,757	698,915	17.15	Salt Fork	
				2018 First half	15.6	107,431	34,907	1.64	812,526	458,197	10.80	Salt Fork	
Southwest	IL0030526	Bio-P	8.0	2017	6.3	84,315	5,475	0.27	630,539	192,308	9.30	No	
				2018 First half	8.8	53,499	4,166	0.32	401,593	127,053	10.00	No	



Appendix 1

Bloomington Normal Water Reclamation District (July - Dec 2018)

Reporting Element 1 - Staff and Financial Resources, July 2018 - Dec 2018

	Program (if applicable):	Dollars:
Capital Improvements:		
Operations & Maintenance:		
	Constructed Wetland Maintenance and Data Collection (divert a portion of treated effluent from permitted outfall IL0073504 into wetland cells)	\$ 16,049.00
Feasibility Studies or Permit Required Projects not already listed:		
permitted outfalls IL0073504 and IL0027731	Long Range Assessment	\$ 96,950.00
permitted outfalls IL0073504 and IL0027731	Cost of service study	\$ 30,179.00
Staff (No. of staff hours in the year or FTEs & approx. \$ value) working on nutrient related matters:	7 FTE	\$ 24,290.00
Other Resources Invested:		



Appendix 1

Bloomington Normal Water Reclamation District (July - Dec 2018)

Reporting Element 2 - Outreach and Communication Activities, July 2018 - Dec 2018

	No. of Events	No. of Attendants	Description:	Partnerships:
Presentations, Conferences & Workshops:				
Print or Media:				
Other Activities:				



Appendix 1
 Sangamon County Water Reclamation District (July - Dec 2018)

Reporting Element 3: Facility Nutrient Tracking - July 2018 - Dec 2018

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
Facility No. 1	IL0027731	None	22.5	2017	15.1	177,755	101,470	2.49		819,790	18.90	No	Design Engineering \$102,003 TN concentration is measured 1 day/month as per permit requirements
	IL0027731	None	22.5	2018	15.7	166,331	101,236	2.42		779,275	19.80	No	
Facility No. 2	IL0073504	None	7.5	2017	3.8	60,955	43,263	3.74		257,957	22.30	No	Design Engineering \$92,731 Upgrade \$1080
	IL0073504	None	7.5	2018	4.1	60,910	40,442	3.63		245,645	21.34	No	



Appendix 1

Downers Grove Sanitary District (July - Dec 2018)

Reporting Element 1 - Staff and Financial Resources, July 2018 - Dec 2018

	Program (if applicable):	Dollars:
Capital Improvements:		
Operations & Maintenance:		
Feasibility Studies or Permit Required Projects not already listed:		
Staff (No. of staff hours in the year or FTEs & approx. \$ value) working on nutrient related matters:		
Other Resources Invested:	High strength waste carbon addition experiment operations and evaluation	-



Appendix 1

Downers Grove Sanitary District (July - Dec 2018)

Reporting Element 2 - Outreach and Communication Activities, July 2018 - Dec 2018

	No. of Events	No. of Attendants	Description:	Partnerships:
Presentations, Conferences & Workshops:				
Print or Media:				
Other Activities:				



Appendix 1 Downers Grove Sanitary District (July - Dec 2018)

Reporting Element 3: Facility Nutrient Tracking - July 2018 - Dec 2018

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
Wastewater Treatment Center	IL0028380	None	11.0	2017	10.3	165,880	85,650	2.99	1,141,660	480,990	16.04	DuPage River Salt Creek Workgroup	PDOP - attempting BNR Spent \$24,000 on tank mixing equipment
Downers Grove SD WWTC	IL 28380	Bio-P/N	11.0	2018	11.6	163,500	85,647	2.99	1,018,662	431,130	14.40	DRSCW	Operated sidestream WAS fermentation for BNR. Attempted carbon addition over summer, with no improvement in P removal performance.



Appendix 1

Fox Metro Water Reclamation District (July - Dec 2018)

Reporting Element 1 - Staff and Financial Resources, July 2018 - Dec 2018

	Program (if applicable):	Dollars:
Capital Improvements:		
	South Wastewater Treatment Facility Improvements	\$ 80,527,948.61
	North Wastewater Treatment Facility Improvements	\$ 2,010,971.70
Operations & Maintenance:		
Feasibility Studies or Permit Required Projects not already listed:		
Staff (No. of staff hours in the year or FTEs & approx. \$ value) working on nutrient related matters:		
Other Resources Invested:		



Appendix 1

Fox Metro Water Reclamation District (July - Dec 2018)

Reporting Element 2 - Outreach and Communication Activities, July 2018 - Dec 2018

	No. of Events	No. of Attendants	Description:	Partnerships:
Presentations, Conferences & Workshops:				
Aurora, IL pre-greenfest presentation	1	40	Nutrient removal, permit compliance, environmental benefit	City of Aurora, local environmental NGOs
Aurora, IL Greenfest	1	~1000	Information available on nutrient removal	City of Aurora, local environmental NGOs
Aurora University Presentation	1	20	Discussed eutrophication and nutrient removal	
Montgomery Senior Veterans Presentation	1	60	Nutrient removal, permit compliance, environmental benefit	State Rep. Stephanie Kifowit
Field Operations Public Works Breakfast	1	80	Nutrient removal, permit compliance, environmental benefit	all municipalities within service area
Montgomery Chamber of Commerce	1	12	Nutrient removal, permit compliance, environmental benefit	
Fox River Study Group Annual Meeting	1	60	Nutrient removal, permit compliance, environmental benefit	all FRSG participating agencies
Print or Media:				
Other Activities:				
Tours	1	4	TEDx presentation and plant tour	TEDx Naperville
	1	35	Fox Valley Operators Association plant tour	FVOA
Partnerships	6	3	Effluent jar testing for phosphorus removal study	Salt Creek Water Reclamation District



Appendix 1

Fox Metro Water Reclamation District (July - Dec 2018)

Reporting Element 3: Facility Nutrient Tracking - July 2018 - Dec 2018

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
Fox Metro Water Reclamation	IL0020818	None in 2018	42.0	2018	36.0	365,000	18,500	2.00	2,920,000	1,825,000	20.00	Fox River Study Group	Construction complete by 2020 and achieve 1.0 mg/L TP limit by 2021.



Appendix 1

Fox River Water Reclamation District (July - Dec 2018)

Reporting Element 1 - Staff and Financial Resources, July 2018 - Dec 2018

	Program (if applicable):	Dollars:
Capital Improvements:	Albin D. Pagorski WRF Phosphorus Removal Improvements -Liquid Process Facilities	\$ 496,500.00
	Albin D. Pagorski WRF Phosphorus Removal Improvements -Struvite Facilities	\$ 183,900.00
	North WRF Phosphorus Removal Improvements	\$ 544,200.00
Operations & Maintenance:		
Feasibility Studies or Permit Required Projects not already listed:	4 Workshops for 3 Projects, Weekly Conference Calls	\$ 19,980.00
Staff (No. of staff hours in the year or FTEs & approx. \$ value) working on nutrient related matters:		
Other Resources Invested:		



Appendix 1

Fox River Water Reclamation District (July - Dec 2018)

Reporting Element 2 - Outreach and Communication Activities, July 2018 - Dec 2018

	No. of Events	No. of Attendants	Description:	Partnerships:
Presentations, Conferences & Workshops:				
Print or Media:				
Other Activities:				



Appendix 1 Fox River Water Reclamation District (July - Dec 2018)

Reporting Element 3: Facility Nutrient Tracking - July 2018 - Dec 2018

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
Albin D. Pagorski WRF	IL0028657	None	25.0	2017	17.2	193,000	145,000	3.06	1,315,000	1,236,000	26.10	Fox River Study Group	
				2018	19.1	284,000	171,000	3.20	1,742,000	1,320,000	24.70	Fox River Study Group	
North WRF	IL0028665	None	7.8	2017	5.0	51,000	32,200	2.13	351,000	197,100	13.00	Fox River Study Group	
				2018	4.8	46,000	28,500	1.95	356,000	193,000	13.20	Fox River Study Group	
West WRF	IL0035891	Bio-N, 5-stage Bardenpho	5.0	2017	3.5	44,700	7,740	0.72	360,000	91,700	8.53	Fox River Study Group	
				2018	3.7	51,600	8,920	0.79	589,000	135,000	12.00	Fox River Study Group	



Appendix 1

Glenbard Wastewater Authority (July - Dec 2018)

Reporting Element 1 - Staff and Financial Resources, July 2018 - Dec 2018

	Program (if applicable):	Dollars:
Capital Improvements:		
Operations & Maintenance:		
Feasibility Studies or Permit Required Projects not already listed:		
Staff (No. of staff hours in the year or FTEs & approx. \$ value) working on nutrient related matters:	IAWA and Workgroup Meetings	1 Staff Member
Other Resources Invested:		



Appendix 1

Glenbard Wastewater Authority (July - Dec 2018)

Reporting Element 2 - Outreach and Communication Activities, July 2018 - Dec 2018

	No. of Events	No. of Attendants	Description:	Partnerships:
Presentations, Conferences & Workshops:				
Print or Media:				
Other Activities:	12 Tours	Average of 8	During Facility Tours we educate public participants about upcoming nutrient challenges	N/A



Appendix 1 Glenbard Wastewater Authority (July - Dec 2018)

Reporting Element 3: Facility Nutrient Tracking - July 2018 - Dec 2018

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
Glenbard Wastewater Authority Main Plant	IL0021547	None	16.0	2018	13.0	201,100	101,541	3.00	1,502,099	1,024,140	26.00	DuPage River/Salt Creek Work Group	Data from DMR monitoring requirement
Glenbard Wastewater Authority Combined Sewer Outfall	IL0022471	None	N/A (wet weather plant) 58 Peak	2018	N/A	N/A	1,812	0.65	N/A	N/A	N/A	DuPage River/Salt Creek Work Group	Facility only operated during wet weather conditions. Only required to monitor P out per DMR.



Appendix 1

Kishwaukee Water Reclamation District (July - Dec 2018)

Reporting Element 1 - Staff and Financial Resources, July 2018 - Dec 2018

	Program (if applicable):	Dollars:
Capital Improvements:	Ph. 1B Biological Improvements	\$27 Million

Operations & Maintenance:

Feasibility Studies or Permit Required Projects not already listed:

Staff (No. of staff hours in the year or FTEs & approx. \$ value) working on nutrient related matters:

Other Resources Invested:



Appendix 1

Kishwaukee Water Reclamation District (July - Dec 2018)

Reporting Element 2 - Outreach and Communication Activities, July 2018 - Dec 2018

	No. of Events	No. of Attendants	Description:	Partnerships:
Presentations, Conferences & Workshops:		2 to 3	CSWEA Education Seminar, IAWA Mini-Con, CSWEA Annual Meeting, NACWA Strategic Communications, IAWA Annual Conference, WEFTEC,	CSWEA, IAWA, NACWA, WEF
Print or Media:	2		DeKalb Daily Chronicle articles on current BNR project	
Other Activities:	5		Various tours of WWTF where new BNR project is discussed.	



Appendix 1

Kishwaukee Water Reclamation District (July - Dec 2018)

Reporting Element 3: Facility Nutrient Tracking - July 2018 - Dec 2018

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
KWRD WWTF	IL0023027	None	8.6	2018	6.3	90,520	53,655	2.73	Unknown	Unknown	Unknown	No	Currently under construction of new \$47 Million BNR facility to remove P & N



Appendix 1

Lower Des Plaines Watershed Group (July - Dec 2018)

Reporting Element 1 - Staff and Financial Resources, July 2018 - Dec 2018

	Program (if applicable):	Dollars:
Grants or Loans Received:		
Grants Given:		
Other Resources Invested:		
Year 1 Lower Des Plaines River Bioassessment - 26 sites	LDWG Membership Dues	\$260,000
Seasonal Outreach Campaigns	LDWG Membership Dues	\$3,500
	Program (if applicable):	Number of Staff:
Total Staff working on NLRS activities (in any capacity):		



Appendix 1

Lower Des Plaines Watershed Group (July 2018 - Dec 2018)

Reporting Element 2 - Outreach and Communication Activities, July 2018 - Dec 2018

Name:	Attendance:	Topics Covered:	Partnerships:	Response / Feedback:
Field Days: (Includes learning activities sponsored at other locations)				
Presentations Given:				
Conferences Organized/Sponsored:				
Workshops and Meetings Organized/Sponsored:				
Print and Media:				
Radio and Television:				
Social Media:				



Appendix 1

Lower Des Plaines Watershed Group (July 2018 - Dec 2018)

Reporting Element 2 - Outreach and Communication Activities, July 2018 - Dec 2018

	Name:	Attendance:	Topics Covered:	Partnerships:	Response / Feedback:
Newsletters:	Spring Seasonal Outreach Campaign	LDWG Membership	Provided newsletter articles on use of native plants in home landscaping to minimize fertilizer use, infiltrate water and stabilize soils	With Lower DuPage River Watershed Coalition	
	Summer Seasonal Outreach Campaign	LDWG Membership - focused on Homeowner Associations	Provided newsletter articles and maintenance checklist focused on annual detention basin inspections and maintenance.	With Lower DuPage River Watershed Coalition	
	Fall Seasonal Outreach Campaign	LDWG Membership	Provided newsletter articles on the impacts of leaves on our local streams and tips for proper disposal.	With Lower DuPage River Watershed Coalition	
	Winter Seasonal Outreach Campaign	LDWG Membership	Provided newsletter articles and social media posts focused on smart salting practices.	With Lower DuPage River Watershed Coalition	

Awards/Recognition Activities

Surveys:



Appendix 1

Lower Des Plaines Watershed Group (July 2018 - Dec 2018)

Reporting Element 2 - Outreach and Communication Activities, July 2018 - Dec 2018

	Name:	Attendance:	Topics Covered:	Partnerships:	Response / Feedback:
Additional Activities:	Salt Smart Save More Campaign	LDWG Membership	Kicked-off Saltsmart.org in December 2018 to provide a regional clearing house of information and materials to assist communities implement salt smart BMPs and provide outreach to their residents.	With Lower DuPage River Watershed Coalition	



Appendix 1

Lower DuPage River Watershed Coalition (July - Dec 2018)

Reporting Element 1 - Staff and Financial Resources, July 2018 - Dec 2018

	Program (if applicable):	Dollars:
Grants or Loans Received:		
Grants Given:		
Other Resources Invested:		
Nutrient Trading Program Development in partnership with DRSCW	Special Condition Funding	\$ 28,000.00
Nutrient Trading Program Development & Nutrient Feasibility Study in partnership with DRSCW	Special Condition Funding	\$ 28,000.00
Hammel Woods Dam Modification Feasibility Study	LDRWC Membership Dues	\$ 48,800.00
Lower DuPage River Watershed Bioassessment -third round	LDRWC Membership Dues	\$ 175,000.00
Seasonal Outreach Campaigns	LDRWC Membership Dues	\$ 3,500.00
Total Staff working on NLRS activities (in any capacity):	Program (if applicable):	Number of Staff:
		0.9 FTE



Appendix 1

Lower DuPage River Watershed Coalition (July 2018 - Dec 2018)

Reporting Element 2 - Outreach and Communication Activities, July 2018 - Dec 2018

Name:	Attendance:	Topics Covered:	Partnerships:	Response / Feedback:
Field Days: (Includes learning activities sponsored at other locations)				
Presentations Given:				
Conferences Organized/Sponsored:				
Workshops and Meetings Organized/Sponsored:				
Print and Media:				
Radio and Television:				
Social Media:				



Appendix 1

Lower DuPage River Watershed Coalitoin (July 2018 - Dec 2018)

Reporting Element 2 - Outreach and Communication Activities, July 2018 - Dec 2018

	Name:	Attendance:	Topics Covered:	Partnerships:	Response / Feedback:
Newsletters:	Spring Seasonal Outreach Campaign	LDRWC Membership	Provided newsletter articles on use of native plants in home landscaping to minimize fertiler use, infiltrate water and stabilize soils	With Lower Des Plaines Watershed Group	
	Summer Seasonal Outreach Campaign	LDRWC Membership - focused on Homeowner Associations	Provided newsletter articles and maintenance checklist focused on annual detention basin inspections and maintenance.	With Lower Des Plaines Watershed Group	
	Fall Seasonal Outreach Campaign	LDRWC Membership	Provided newslettter articles on the impacts of leaves on our local streams and tips for proper disposal.	With Lower Des Plaines Watershed Group	
	Winter Seasonal Outreach Campaign	LDWRC Membership	Provided newsletter articles and social media posts focused on smart salting practices.	With Lower Des Plaines Watershed Group	

Awards/Recognition Activities

Surveys:



Appendix 1

Lower DuPage River Watershed Coalition (July 2018 - Dec 2018)

Reporting Element 2 - Outreach and Communication Activities, July 2018 - Dec 2018

	Name:	Attendance:	Topics Covered:	Partnerships:	Response / Feedback:
Additional Activities:	Salt Smart Save More Campaign	LDWRC Membership	Kicked-off Saltsmart.org in December 2018 to provide a regional clearing house of information and materials to assist communities implement salt smart BMPs and provide outreach to their residents.	With Lower Des Plaines Watershed Group	



Appendix 1

Metropolitan Water Reclamation District of Greater Chicago(July - Dec 2018)

Reporting Element 1 - Staff and Financial Resources, July 2018 - Dec 2018

	Program (if applicable):	Dollars:
Capital Improvements:	Capital Improvements Total	\$7,162,015
	Contract 11-195-AP, Phosphorus Recovery Facility, SWRP (recovery of phosphorus utilizing Ostara technology) (in construction, reactors in operation)	\$2,548,822
	Contract 15-120-3P, Conversion of old gravity concentration tanks (GCTs) to WASSTRIP Process, SWRP (WASSTRIP process will allow increased P recovery by the recovery facility)(in construction)	\$652,181
	Contract 15-122-3P, Aeration Tanks Air Valve Automation in Batteries A, B, C and D, SWRP (will allow in-line fermentation in our an anaerobic zones, enhancing the performance of EBPR treatment process) (in construction)	\$645,128
	Contract 15-124-3P, Conversion of Two Gravity Concentration Tanks to Primary Sludge Fermenters, SWRP (produce additional carbon to be introduced to the aeration batteries for use in stabilizing EBPR treatment process) (in construction)	\$2,493,721
Capital Improvements Cont.:	Contract 16-272-3P, Conversion of Primary Tanks to High Strength Waste Receiving and Distribution - Design and Evaluation of Alternatives, CWRP (to allow us to receive a carbon source to be introduced to the aeration batteries to allow EBPR to occur as this plant is carbon limited) (in design by consultant, monies are that paid to the consultant)	\$822,163



Appendix 1 Metropolitan Water Reclamation District of Greater Chicago(July - Dec 2018)

Reporting Element 1 - Staff and Financial Resources, July 2018 - Dec 2018

	Program (if applicable):	Dollars:
Operations & Maintenance:	Operations and Maintenance Total	\$1,386,073
	M&O Dept - Ostara P removal - chemicals	\$1,176,273
	M&O Dept – Kirie BioP instrumentation - Parts & supplies	\$209,800
Feasibility Studies or Permit Required Projects not already listed:	Feasibility Studies or Permit Total	\$1,161,086
	M&R Dept. - Feasibility Study and Optimization Plan for Kirie WRP	\$146,699
	M&R Dept. - Feasibility Study and Optimization Plan for Egan WRP	\$146,699
	M&R Dept. - Feasibility Study and Optimization Plan for Hanover Park WRP	\$112,430
	M&R Dept. - Feasibility Study and Optimization Plan for Lemont WRP	\$125,258
	M&R Dept. - Feasibility Study for Stickney WRP	\$160,000
	M&R Dept. - Feasibility Study for Calumet WRP	\$130,000
	M&R Dept. - Feasibility Study for O'Brien WRP	\$340,000
Feasibility Studies or Permit Required Projects Cont.:		
Staff (No. of staff hours in the year or FTEs & approx. \$ value) working on nutrient related matters:	Staff Total	\$1,938,940
	Engineering Dept. - Design and Post award engineering, consultant oversight and construction oversight (~8 FTEs)	\$1,040,000



Appendix 1

Metropolitan Water Reclamation District of Greater Chicago(July - Dec 2018)

Reporting Element 1 - Staff and Financial Resources, July 2018 - Dec 2018

	Program (if applicable):	Dollars:
	M&O Dept – Kirie BioP instrumentation and pilot operation – Staff time instrument install, repair, sample, filter and perform instrument maintenance (~0.4 trades and ~0.7 operations staff FTEs).	\$94,440
	M&R Dept. - Technical oversight on design and feasibility studies (~1.7 FTEs)	\$215,500
	M&R Dept. - Research and technical oversight at 7 WRPs (~2.5 FTEs)	\$253,000
	M&R Dept. - Research and Demonstration at the Fulton County site and other collaboration with the agricultural sector (~1.5 FTEs)	\$100,000
	M&R Dept. - Research and pilot scale testing for algae nutrient removal (~1.4 FTEs)	\$100,000
	M&R Dept. - Microbiological research and support (~2.0 FTEs)	\$136,000
Other Resources Invested:	Other Resources Total	\$154,920
	M&R Dept. - Research supplies and consumables at WRPs	\$5,420
Other Resources Cont.:	M&R Dept. - Research and Demonstration and collaboration with the agricultural sector at the Fulton County site	\$85,000
	M&R Dept. - Research on Carbon efficient Bio-P at Calumet WRP	\$64,500



Appendix 1

Metropolitan Water Reclamation District of Greater Chicago (July - Dec 2018)

Reporting Element 2 - Outreach and Communication Activities, July 2018 - Dec 2018

	No. of Events	No. of Attendants	Description:	Partnerships:
Presentations, Conferences & Workshops:				
Field Day	1	80	June 13, 2018, the MWRD hosted IFB Board for field day on District property to provide the agricultural community with an opportunity to visit a demonstration field and give presentations discuss how cover crops improve soil health, reduce corn fertilizer needs and save money.	Illinois Farm Bureau, Illinois Central College, Fulton County Farm Bureau, University of Illinois
Workshop	1	70	The Sixth Annual Sustainability Summit held on October 16, offered partnering municipalities and environmental advocates the opportunity to learn about the latest trends in resource recovery and stormwater management	
Presentations		500	District staff and commissioners give dozens of presentations throughout Cook County, IL, and either mention nutrients or focus on nutrients	

Print or Media:



Appendix 1

Metropolitan Water Reclamation District of Greater Chicago (July - Dec 2018)

Reporting Element 2 - Outreach and Communication Activities, July 2018 - Dec 2018

	No. of Events	No. of Attendants	Description:	Partnerships:
	11		These 11 media advisories/press releases were also posted on Facebook, LinkedIn, Twitter and Instagram:	
Press Release	1		June 1, "Infrastructure Week open house tours offer free compost, tree giveaways," www.mwrd.org/irj/go/km/docs/documents/MWRD/internet/News&Media/Newsroom/Media/Press_Releases/2018/18_0601_Open_Houses.pdf	
Advisory	1		May 29, "Field Day To Highlight Water Quality Research," www.mwrd.org/irj/go/km/docs/documents/MWRD/internet/News&Media/Newsroom/Media/Press_Releases/2018/18_0529_Fulton_County_Field_Day.pdf	
Press Release	1		May 17, "Best management practices for applying road salt discussed at chlorides workshop," www.mwrd.org/irj/go/km/docs/documents/MWRD/internet/News&Media/Newsroom/Media/Press_Releases/2018/18_0517_Chlorides_Workshop.pdf ;	



Appendix 1

Metropolitan Water Reclamation District of Greater Chicago (July - Dec 2018)

Reporting Element 2 - Outreach and Communication Activities, July 2018 - Dec 2018

	No. of Events	No. of Attendants	Description:	Partnerships:
Advisory	1		May 10, "Water reclamation plant tours offer insight into water transformation," www.mwrd.org/irj/go/km/docs/documents/MWRD/internet/News&Media/Newsroom/Media/Press_Releases/2018/18_0510_Open_Houses.pdf	
Advisory	1		April 25, "MWRD workshop convenes road salting experts Protecting the water environment starts with protecting local streets," www.mwrd.org/irj/go/km/docs/documents/MWRD/internet/News&Media/Newsroom/Media/Press_Releases/2018/18_0425_Chlorides_Workshop.pdf	
Press Release	1		Feb. 7, MWRD research partnership with University of Illinois attracts grant to improve water quality through agricultural innovation, www.mwrd.org/irj/go/km/docs/documents/MWRD/internet/News&Media/Newsroom/Media/Press_Releases/2018/18_0207_Nutrient_study_grant_Uofl.pdf	



Appendix 1

Metropolitan Water Reclamation District of Greater Chicago (July - Dec 2018)

Reporting Element 2 - Outreach and Communication Activities, July 2018 - Dec 2018

	No. of Events	No. of Attendants	Description:	Partnerships:
Press Release	1		Feb. 5, "MWRD, Current Launch First Technology Pilot; Microvi's technology aims to boost water treatment efficiency," www.mwrd.org/irj/go/km/docs/documents/MWRD/internet/News&Media/Newsroom/Media/Press_Releases/2018/18_0205_World_Water_Day.pdf	
Press Release	1		July 6, "MWRD publishes new educational tool: "A healthy waterway begins with you: A Guide to Water Wellness" www.mwrd.org/irj/go/km/docs/documents/MWRD/internet/News&Media/Newsroom/Media/Press_Releases/2018/18_0706_Water%20Wellness_brochure.pdf	
Press Release	1		September 28, "MWRD's Industrial Waste Division patrols the flow to protect the water environment" www.mwrd.org/irj/go/km/docs/documents/MWRD/internet/News&Media/Newsroom/Media/Press_Releases/2018/18_0928_Kirie_IWD_Environmental_Specialists.pdf	



Appendix 1

Metropolitan Water Reclamation District of Greater Chicago (July - Dec 2018)

Reporting Element 2 - Outreach and Communication Activities, July 2018 - Dec 2018

	No. of Events	No. of Attendants	Description:	Partnerships:
Press Release	1		November 9, "MWRD drug collection takes pharmaceuticals off the street, protects local water environment" www.mwrd.org/irj/go/km/docs/documents/MWRD/internet/News&Media/Newsroom/Media/Press_Releases/2018/18_1109_Drug_take_back.pdf	
Press Release	1		November 14, "New infrastructure at MWRD's Stickney Plant will upgrade energy savings and improve odor control" www.mwrd.org/irj/go/km/docs/documents/MWRD/internet/News&Media/Newsroom/Media/Press_Releases/2018/18_1114_Stickney_tanks_invite.pdf	
Magazine/Newspaper	1		Jan. 9, 2018 "Fighting the war against phosphorus," Medill News Reports http://news.medill.northwestern.edu/chicago/fighting-the-war-against-phosphorous/	
Other Activities:				
Tours	83	1,235	Guests tours of Ostara nutrient recovery facility Stickney Water Reclamation Plant	



Appendix 1

Metropolitan Water Reclamation District of Greater Chicago (July - Dec 2018)

Reporting Element 2 - Outreach and Communication Activities, July 2018 - Dec 2018

	No. of Events	No. of Attendants	Description:	Partnerships:
Partnerships	4			Illinois Farm Bureau, Illinois Central College, Fulton County Farm Bureau, University of Illinois, Illinois Center for Sustainability and Technology



Appendix 1

Metropolitan Water Reclamation District of Greater Chicago (July - Dec 2018)

Reporting Element 3: Facility Nutrient Tracking - July 2018 - Dec 2018

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
Stickney	IL0028053	Bio-P	1200.0	2018	786.3	37,781,403	707,230	0.30	109,106,647	18,142,075	7.69	No	Data was derived through District Maintenance and Operation Dept routine sampling and Analytical Lab Division analysis; all batteries are converted to an anoxic-anaerobic-oxic configuration; Ostara® process operating for P-recovery on post-digester centrate and WASSTRIP® process being implemented with startup in Winter 2019; Primary sludge fermentation for carbon for bio-P and WASSTRIP® scheduled for implementation in Winter 2019; installed actuators on air-valves for automation in summer 2018; currently accepting high strength organic material for carbon supplementation in one battery; received new draft NPDES permit for review in late 2018; P removal feasibility study will be completed in mid 2019.
Calumet	IL0028061	Bio-P (testing)	354.0	2018	246.8	6,446,613	1,990,902	2.65	22,580,569	5,431,782	7.23	No	Data was derived through District Maintenance and Operation Dept routine sampling and Analytical Lab Division analysis; all batteries were converted to an anoxic-anaerobic-oxic configuration, but this practice was discontinued in mid 2018 and batteries reverted to full aerobic conditions; currently accepting high strength organic material for carbon supplementation (this practice is still occurring though no bio P configurations are in place); P removal feasibility study will be completed in mid 2019.
Terrence J. O'Brien	IL0028088	None	333.0	2018	246.7	2,822,658	931,333	1.31	15,436,254	7,406,034	10.32	No	Data was derived through District Maintenance and Operation Dept routine sampling and Analytical Lab Division analysis; 1 of 4 batteries was converted to an quasi-anaerobic-oxic configuration by throttling the air supply to the beginning of the aeration tanks to encourage EBPR. Currently doing pilot scale testing of algae for nutrient removal; P removal feasibility study will be completed in mid 2019.



Appendix 1

Metropolitan Water Reclamation District of Greater Chicago (July - Dec 2018)

Reporting Element 3: Facility Nutrient Tracking - July 2018 - Dec 2018

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
James C. Kirie	IL0047741	Bio-P	52.0	2018	43.1	377,018	40,012	0.30	2,508,178	786,088	5.83	Lower Des Plaines	Data was derived through District Maintenance and Operation Dept routine sampling and Analytical Lab Division analysis; one of two batteries converted to a quasi-anaerobic-oxic configuration (other plant battery is pass through); 2 of 6 tanks have baffle walls and large bubble mixers installed; P removal feasibility study completed in late 2018; recently joined the Lower Des Plaines Watershed Group in late 2018; received new draft NPDES permit for review in late 2018.
John E. Egan	IL0036340	Nitrogen removal on sidestream	30.0	2018	25.7	415,496	209,074	2.97	2,061,154	1,199,727	16.65	Upper Des Plaines	Data was derived through District Maintenance and Operation Dept routine sampling and Analytical Lab Division analysis; no bio-P efforts completed thus far but possible approaches have been developed; Anita Mox process installed on digester centrate in August 2016 to reduce nitrogen loading at plant headworks; P removal feasibility study was completed in late 2018; recently joined the Upper Des Plaines Watershed Group in late 2018.
Hanover Park	IL0036137	None	12.0	2018	10.9	141,350	76,835	2.67	906,828	471,850	16.42	Upper Des Plaines	Data was derived through District Maintenance and Operation Dept routine sampling and Analytical Lab Division analysis; P removal feasibility study was completed in mid 2018; recently joined the Upper Des Plaines Watershed Group in late 2018.
Lemont	IL0028070	None	2.3	2018	2.5	35,768	18,797	2.47	239,875	149,922	19.70	Lower Des Plaines	Data was derived through District Maintenance and Operation Dept routine sampling and Analytical Lab



Appendix 1

North Shore Water Reclamation District (July - Dec 2018)

Reporting Element 1 - Staff and Financial Resources, July 2018 - Dec 2018

	Program (if applicable):	Dollars:
Capital Improvements:	Aeration System Improvements at Gurnee Facility	\$ 829,334.00
	Aeration System Improvements at Waukegan Facility	\$ 256,980.00
	Aeration System Improvements at Clavey Road Facility	\$ 203,188.00

Operations & Maintenance:

Feasibility Studies or Permit Required Projects not already listed:

Staff (No. of staff hours in the year or FTEs & approx. \$ value) working on nutrient related matters:

Other Resources Invested:



Appendix 1

North Shore Water Reclamation District (July - Dec 2018)

Reporting Element 2 - Outreach and Communication Activities, July 2018 - Dec 2018

	No. of Events	No. of Attendants	Description:	Partnerships:
Presentations, Conferences & Workshops:				
Print or Media:				
Other Activities:				



Appendix 1 North Shore Water Reclamation District (July - Dec 2018)

Reporting Element 3: Facility Nutrient Tracking - July 2018 - Dec 2018

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
NSWRD-Clavey Road WRF	IL0030171	None	17.8	2017	14.2	118,000	50,000	1.12	969,000	837,000	17.40	No	
		(Bio-P beginning Feb. 2018)		2018	15.3	135,000	44,400	0.95	1,139,000	794,000	17.70	NBWW	Bio-P Removal optimization studies
NSWRD-Gurnee WRF	IL0035092	(Bio-P started June, 2017)	23.6	2017	15.2	187,000	73,700	1.57	1,390,000	1,020,000	23.30	Des Plaines River	
				2018	15.4	202,000	52,700	1.11	1,760,000	912,000	20.10	Watershed Workgroup	Bio-P Removal optimization studies
NSWRD-Waukegan WRF	IL0030244	(Bio-P started Dec., 2017)	22.0	2017	21.7	180,000	85,400	1.26	1,630,000	1,110,000	16.80	Des Plaines River	
				2018	23.4	250,000	46,300	0.67	1,910,000	1,080,000	16.00	Watershed Workgroup	Bio-P Removal optimization studies



Appendix 1

Sangamon County Water Reclamation District (July - Dec 2018)

Reporting Element 1 - Staff and Financial Resources, July 2018 - Dec 2018

	Program (if applicable):	Dollars:
Capital Improvements:		
Operations & Maintenance:		
Feasibility Studies or Permit Required Projects not already listed:		
Staff (No. of staff hours in the year or FTEs & approx. \$ value) working on nutrient related matters:		
Other Resources Invested:		



Appendix 1

Sangamon County Water Reclamation District (July - Dec 2018)

Reporting Element 2 - Outreach and Communication Activities, July 2018 - Dec 2018

	No. of Events	No. of Attendants	Description:	Partnerships:
Presentations, Conferences & Workshops:				
Print or Media:				
Other Activities:				



Appendix 1

Sangamon County Water Reclamation District (July - Dec 2018)

Reporting Element 3: Facility Nutrient Tracking - July 2018 - Dec 2018

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
Facility No. 1	IL0021989	Bio-P, Bio N		2017	29.4	289,568	53,012	0.62	1,242,777	837,424	9.60		Upgrade Project completed in 2014 at a cost of \$129M
Spring Creek Plant			32 MGD	2018	35.0	325,815	51,704	0.48	1,679,314	1,054,961	10.10		
Facility No. 2	IL0021971		15 MGD	2017	8.9	78,039	20,577	1.03	385,393	298,696	10.86		Upgrade project completed in 2018 at a cost of \$57M
Sugar Creek Plant		Bio-P, Bio N		2018	10.2	58,384	17,145	0.61	430,178	226,617	7.41		

*Please note: Influent Total N is only tested 4 times per year, so totals are lower. Multiplying by 3x may be more accurate to compare.

**The new upgraded Sugar Creek facility went online in May of 2017. Final project completion was March 2018.



Appendix 1

Urbana Champaign Sanitary District (July - Dec 2018)

Reporting Element 1 - Staff and Financial Resources, July 2018 - Dec 2018

	Program (if applicable):	Dollars:
Capital Improvements:		
Operations & Maintenance:		
Feasibility Studies or Permit Required Projects not already listed:		
Staff (No. of staff hours in the year or FTEs & approx. \$ value) working on nutrient related matters:		
Other Resources Invested:		



Appendix 1

Urbana Champaign Sanitary District (July - Dec 2018)

Reporting Element 2 - Outreach and Communication Activities, July 2018 - Dec 2018

	No. of Events	No. of Attendants	Description:	Partnerships:
Presentations, Conferences & Workshops:	1	40	Presentation at IWPC Annual Meeting: Implementing Bio-P in a plant not designed for it and at no cost.	IWPC

Print or Media:

Other Activities:



Appendix 1 Urbana Champaign Sanitary District (July - Dec 2018)

Reporting Element 3: Facility Nutrient Tracking - July 2018 - Dec 2018

Facility	NPDES Number	Nutrient Removal	DAF [MGD]	Year	Daily Avg. Flow [MGD]	Total P In [lb/yr]	Total P Out [lb/yr]	Total P Out Annual Avg. [mg/L]	Total N In [lb/yr]	Total N Out [lb/yr]	Total N Out Annual Avg [lb/yr]	Watershed Group	Comments
UCSD NE STP	IL0031500	None	17.3	2018	13.9	219,000	70,900	1.70	1,701,000	899,000	21.50	Salt Fork W/S Implementation Gp	The data should be accurate. Twice per week 24-hour composite samples were analyzed, averaged, and combined with flow totals to calculate pounds.
UCSD SW STP	IL0031526	Bio-P	8.0	2018	6.9	90,700	6,850	0.33	715,000	208,000	10.10	none	The data should be accurate. Twice per week 24-hour composite samples were analyzed, averaged, and combined with flow totals to calculate pounds.