### Appendix 1

**Bartlett (2017)**

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

<table>
<thead>
<tr>
<th>Program (if applicable):</th>
<th>Dollars:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility Plan Update</td>
<td>$150,000.00</td>
</tr>
</tbody>
</table>

#### Capital Improvements:

#### 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

<table>
<thead>
<tr>
<th>Presentation, Conferences &amp; Workshops:</th>
<th>No. of Events</th>
<th>No. of Attendants</th>
<th>Description:</th>
<th>Partnerships:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>30</td>
<td>Village Board Presentation by Engineering Enterprises, Inc.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Print or Media:</th>
<th>No. of Events</th>
<th>No. of Attendants</th>
<th>Description:</th>
<th>Partnerships:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letters and Flyers to residents for SSES</td>
<td>1</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Other Activities:**
### Appendix 1

**Bartlett (2017)**

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

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Bittersweet WWTP (B01)</td>
<td>IL0027618</td>
<td>None</td>
<td>3.7</td>
<td>2017</td>
<td>3.7</td>
<td>37,960</td>
<td>22,830</td>
<td>3.00</td>
<td>251,120</td>
<td>190,165</td>
<td>25.00</td>
<td>DuPage River Salt Creek Workgroup (DRSCW)</td>
<td>$150,000 Facility Plan Update, $31,095 DRSCW Dues</td>
</tr>
<tr>
<td>Devon Excess Flow Facility</td>
<td>IL0027618-002</td>
<td>None</td>
<td>N/A</td>
<td>2017</td>
<td>0.4</td>
<td>3</td>
<td>1</td>
<td>N/A</td>
<td>23</td>
<td>2</td>
<td>N/A</td>
<td>DRSCW</td>
<td>The flow represent one event for the entire year. Revision of IGA with MWRD, $150,000 Engineering</td>
</tr>
</tbody>
</table>
# Appendix 1

**Bloomington Normal Water Reclamation District (2017)**

| Reporting Element 1 - Staff and Financial Resources, Jan 2017 - Dec 2017 |
|---------------------------------------------------------------|----------------------|
| **Capital Improvements:**                                    | Program (if applicable): |
| **Operations & Maintenance:**                                 | Dollars:              |
| **Feasibility Studies or Permit Required Projects not already** | Nutrient Studies at West and SE Plants (Jan - June 2018) | $ 51,507.00 |
| **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 (2017)

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

<table>
<thead>
<tr>
<th>No. of Events</th>
<th>No. of Attendants</th>
<th>Description:</th>
<th>Partnerships:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentations, Conferences &amp; Workshops:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Print or Media:</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Other Activities:</td>
<td></td>
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</tr>
</tbody>
</table>
# Reporting Element 3: Facility Nutrient Tracking - Jan 2017 - June 2018

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Facility No. 1</td>
<td>IL0027731</td>
<td>None</td>
<td>22.5</td>
<td>2017</td>
<td>15.1</td>
<td>177,755</td>
<td>101,470</td>
<td>2.49</td>
<td>-</td>
<td>819,790</td>
<td>18.90</td>
<td>No</td>
<td>Design Engineering $102,003</td>
</tr>
<tr>
<td></td>
<td>IL0027731</td>
<td>None</td>
<td>22.5</td>
<td>2018</td>
<td>17.6</td>
<td>86,147</td>
<td>51,647</td>
<td>2.25</td>
<td>-</td>
<td>443,840</td>
<td>21.29</td>
<td>No</td>
<td><strong>Data Represents Jan-June 2018</strong></td>
</tr>
<tr>
<td>Facility No. 2</td>
<td>IL0073504</td>
<td>None</td>
<td>7.5</td>
<td>2017</td>
<td>3.8</td>
<td>60,955</td>
<td>43,263</td>
<td>3.74</td>
<td>-</td>
<td>257,957</td>
<td>22.30</td>
<td>No</td>
<td>Design Engineering $92,731 Upgrade $1080</td>
</tr>
<tr>
<td></td>
<td>IL0073505</td>
<td>None</td>
<td>7.5</td>
<td>2018</td>
<td>4.2</td>
<td>30,641</td>
<td>20,292</td>
<td>3.46</td>
<td>-</td>
<td>132,844</td>
<td>21.36</td>
<td>No</td>
<td><strong>Data represents Jan-June 2018</strong></td>
</tr>
</tbody>
</table>
## Appendix 1

### Downers Grove Sanitary District (2017)

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

<table>
<thead>
<tr>
<th></th>
<th>Program (if applicable):</th>
<th>Dollars:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Improvements:</td>
<td>Anaerobic tank mixer installation ($25,000 in parts plus 700 hours of labor at $45 with overhead per hour)</td>
<td>$ 56,500.00</td>
</tr>
<tr>
<td></td>
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<tr>
<td>Operations &amp; Maintenance:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feasibility Studies or Permit Required Projects not already listed:</td>
<td>P Feasibility Study (Engineering fees to prepare PDOP and Feasibility Study)</td>
<td>$ 26,000.00</td>
</tr>
<tr>
<td>Staff (No. of staff hours in the year or FTEs &amp; approx. $ value) working on nutrient related matters:</td>
<td>General Management (~ 20% of General Manager's time, including labor &amp; overhead)</td>
<td>$ 45,000.00</td>
</tr>
<tr>
<td>Other Resources Invested:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Appendix 1
### Downers Grove Sanitary District (2017)

| Reporting Element 2 - Outreach and Communication Activities, Jan 2017 - Dec 2017 |
|---|---|---|---|
| **Presentations, Conferences & Workshops:** | **No. of Events** | **No. of Attendants** | **Description:** |
| | 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 |
|-----------------------------|--------------|------------------|-----------|------|-----------------------|-------------------|-------------------|-------------------------------|-------------------|-------------------|-------------------------------|-----------------|--------------------------------------------|
| Wastewater Treatment Center | IL0028380    | None             | 11.0      | 2017 | 10.3                  | 165,680           | 85,650            | 2.99                          | 1,141,660         | 480,990           | 16.04                          | DuPage River Salt Creek Workgroup | PDGP - 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 |
|-------------------------------------------------|-----------------|
| **Capital Improvements:**                       | **Program (if applicable):**                  | **Dollars:** |
|                                                 | Biological Phosphorus Removal Detailed Feasibility Study & Preliminary Design | $ 95,000.00  |
| **Operations & Maintenance:**                   | **Feasibility Studies or Permit Required Projects not already listed:** | **$ 14,125.00** |
|                                                 | Phosphorus Feasibility Study Report; Phosphorus Discharge Optimization Report | |
| **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:**                  | **Glenbard Wastewater Authority (2017)**      |              |

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

<table>
<thead>
<tr>
<th>Presentations, Conferences &amp; Workshops:</th>
<th>No. of Events</th>
<th>No. of Attendants</th>
<th>Description:</th>
<th>Partnerships:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print or Media:</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Other Activities:</td>
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</tbody>
</table>
## Glenbard Wastewater Authority (2017)

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

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<tr>
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</thead>
<tbody>
<tr>
<td>Facility No. 1</td>
<td>IL0021547</td>
<td>None</td>
<td>16.0</td>
<td>2017</td>
<td>12.1</td>
<td>227,223</td>
<td>104,308</td>
<td>2.94</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DuPage River Salt Creek Workgroup: N/A, Flow represents total annual flow and concentration is average on discharge days. Wet weather facility only - limited monitoring</td>
</tr>
<tr>
<td>Facility No. 2</td>
<td>IL0022471</td>
<td>None</td>
<td>N/A</td>
<td>2017</td>
<td>276.9</td>
<td>N/A</td>
<td>1,338</td>
<td>0.60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/A, Wet weather facility only - limited monitoring</td>
</tr>
</tbody>
</table>
### Lake County Public Works (2017)

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

<table>
<thead>
<tr>
<th>Program (if applicable)</th>
<th>Dollars:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Des Plaines River WTTP - Facility upgrade to BNR</td>
<td>$ 3,600,000.00</td>
</tr>
<tr>
<td>New Century Town WWTP - Facility upgrade to BNR</td>
<td>$ 5,000,000.00</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Presentations, Conferences &amp; Workshops:</th>
<th>No. of Events</th>
<th>No. of Attendants</th>
<th>Description:</th>
<th>Partnerships:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>approx. 50</td>
<td>eBNR Challenges After Construction.</td>
<td>IAWA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Print or Media:</th>
<th></th>
<th></th>
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<tbody>
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</tbody>
</table>

| 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

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Des Plaines River WWTP</td>
<td>IL0022055</td>
<td>BIO-P</td>
<td>16.0</td>
<td>2017</td>
<td>9.7</td>
<td>13,368</td>
<td>12,449</td>
<td>1.80</td>
<td>86,890</td>
<td>42,649</td>
<td>11.10</td>
<td>Des Plaines River Watershed</td>
<td>$ 3.6 Million plant upgrade to BNR. Project will extent thru 2019</td>
</tr>
<tr>
<td>New Century Town WWTP</td>
<td>IL0022071</td>
<td>BIO-P &amp; BIO-N</td>
<td>6.0</td>
<td>2017</td>
<td>3.0</td>
<td>7,701</td>
<td>2,230</td>
<td>0.47</td>
<td>51,831</td>
<td>19,261</td>
<td>7.30</td>
<td>Des Plaines River Watershed</td>
<td>$ 5 Million plant upgrade to BNR</td>
</tr>
<tr>
<td>Mill Creek WWTP</td>
<td>IL0071366</td>
<td>BIO-P</td>
<td>2.1</td>
<td>2017</td>
<td>0.9</td>
<td>1,474</td>
<td>181</td>
<td>0.12</td>
<td>7,008</td>
<td>3,876</td>
<td>11.02</td>
<td>Des Plaines River Watershed</td>
<td></td>
</tr>
</tbody>
</table>
## Appendix 1
Metropolitan Water Reclamation District of Greater Chicago (2017)

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

<table>
<thead>
<tr>
<th>Program (if applicable):</th>
<th>Dollars:</th>
</tr>
</thead>
<tbody>
<tr>
<td>11-195-AP, Phosphorus Recovery Facility, SWRP (recovery of phosphorus utilizing Ostara technology) (in construction, reactors in operation)</td>
<td>$ 3,517,600.08</td>
</tr>
<tr>
<td>15-120-3P, Conversion of old GCTs to WASSTRIP Process, SWRP (WASSTRIP process will allow increased P recovery by the recovery facility) (in construction)</td>
<td>$ 4,362,138.05</td>
</tr>
<tr>
<td>15-122-3P, Aeration Tanks Air Valve Automation in Batteries A, B, C and D, SWRP (will allow in-line fermentation in our anaerobic zones, enhancing the performance of EBPR treatment process) (in construction)</td>
<td>$ 5,757,749.34</td>
</tr>
<tr>
<td>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)</td>
<td>$ -</td>
</tr>
</tbody>
</table>
### Appendix 1
**Metropolitan Water Reclamation District of Greater Chicago (2017)**

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

<table>
<thead>
<tr>
<th>Capital Improvements Cont.:</th>
<th>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)</th>
</tr>
</thead>
</table>
| 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 |
## Reporting Element 2 - Outreach and Communication Activities, Jan 2017 - Dec 2017

<table>
<thead>
<tr>
<th>Presentations, Conferences &amp; Workshops:</th>
<th>No. of Events</th>
<th>No. of Attendants</th>
<th>Description:</th>
<th>Partnerships:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>50</td>
<td>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 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.</td>
<td>Illinois Farm Bureau, Illinois Central College</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Print or Media:</th>
<th>No. of Events</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Press Release</td>
<td>18</td>
<td>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.</td>
</tr>
<tr>
<td>Description:</td>
<td>Partnerships:</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>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”</td>
<td></td>
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<tr>
<td>Publications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BY ALLISON FORE &amp; PATRICK THOMAS</td>
<td></td>
<td></td>
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<tr>
<td>TV media</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tours</td>
<td>Tours that featured our phosphorus recovery facility at the Stickney Water Reclamation Plant.</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 1  
Metropolitan Water Reclamation District of Greater Chicago (2017)

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

<table>
<thead>
<tr>
<th>No. of Events</th>
<th>No. of Attendants</th>
<th>Description:</th>
<th>Partnerships:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partnerships</td>
<td>1</td>
<td>Tours during WEFTEC 2017 visited the phosphorus recovery facility at the Stickney WRP.</td>
<td>Water Environment Federation</td>
</tr>
<tr>
<td>Legislation</td>
<td>1</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>Presentations</td>
<td></td>
<td>District staff give a multitude of presentations on nutrient reduction activities throughout the year such as at IWEA</td>
<td></td>
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</tbody>
</table>

## Metropolitan Water Reclamation District of Greater Chicago (2017)

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

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</tr>
</thead>
<tbody>
<tr>
<td>Stickney</td>
<td>IL0028053</td>
<td>Bio-P</td>
<td>1200.0</td>
<td>2017</td>
<td>686.6</td>
<td>21,507,888</td>
<td>1,180,975</td>
<td>0.64</td>
<td>80,444,798</td>
<td>17,024,420</td>
<td>8.68</td>
<td>No</td>
<td>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-ate; 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.</td>
</tr>
<tr>
<td>Calumet</td>
<td>IL0028061</td>
<td>Bio-P (testing)</td>
<td>354.0</td>
<td>2017</td>
<td>256.7</td>
<td>3,294,693</td>
<td>1,640,887</td>
<td>2.50</td>
<td>14,160,035</td>
<td>5,418,450</td>
<td>7.19</td>
<td>No</td>
<td>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.</td>
</tr>
<tr>
<td>Terrence J. O'Brien</td>
<td>IL0028088</td>
<td>Bio-P in one battery</td>
<td>333.0</td>
<td>2017</td>
<td>234.5</td>
<td>2,094,372</td>
<td>920,925</td>
<td>1.30</td>
<td>16,279,836</td>
<td>7,269,229</td>
<td>10.74</td>
<td>No</td>
<td>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.</td>
</tr>
<tr>
<td>James C. Kirle</td>
<td>IL0047741</td>
<td>Bio-P</td>
<td>52.0</td>
<td>2017</td>
<td>38.4</td>
<td>375,953</td>
<td>47,412</td>
<td>0.37</td>
<td>2,689,035</td>
<td>1,041,758</td>
<td>8.17</td>
<td>Lower Des Plaines Watershed Group</td>
<td>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.</td>
</tr>
<tr>
<td>John E. Egan</td>
<td>IL0036340</td>
<td>Nitrogen removal on sidestream</td>
<td>30.0</td>
<td>2017</td>
<td>24.7</td>
<td>408,568</td>
<td>224,663</td>
<td>3.09</td>
<td>2,174,684</td>
<td>1,159,017</td>
<td>15.93</td>
<td>No</td>
<td>Data was derived through District Maintenance and Operation Dept routine sampling and Analytical Lab Division analysis; no bio-P efforts completed thus far; Anita Mux process installed on digester centrate in August 2016 to reduce nitrogen loading at plant headworks.</td>
</tr>
</tbody>
</table>
### Metropolitan Water Reclamation District of Greater Chicago (2017)

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

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</tr>
</thead>
<tbody>
<tr>
<td>Hanover Park</td>
<td>IL0036137</td>
<td>Bio-P in 1/4 of plant</td>
<td>12.0</td>
<td>2017</td>
<td>10.8</td>
<td>129,432</td>
<td>74,819</td>
<td>2.58</td>
<td>862,608</td>
<td>411,525</td>
<td>14.21</td>
<td>No</td>
<td>Data was derived through District Maintenance and Operation Dept routine sampling and Analytical Lab Division analysis; two tanks converted to an anoxic-anoxic configuration for testing purposes; one tank has baffle walls and mechanical mixers installed</td>
</tr>
<tr>
<td>Lemont</td>
<td>IL0028070</td>
<td>Bio-P (testing)</td>
<td>2.3</td>
<td>2017</td>
<td>2.6</td>
<td>29,918</td>
<td>16,403</td>
<td>2.33</td>
<td>211,138</td>
<td>138,665</td>
<td>19.24</td>
<td>Lower Des Plaines Watershed Group</td>
<td>Data was derived through District Maintenance and Operation Dept routine sampling and Analytical Lab Division analysis</td>
</tr>
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</table>
## Reporting Element 1 - Staff and Financial Resources, Jan 2017 - Dec 2017

<table>
<thead>
<tr>
<th>Program (if applicable)</th>
<th>Dollars:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Improvements:</td>
<td></td>
</tr>
<tr>
<td>Aeration System Improvements at Gurnee Facility</td>
<td>$1,049,798.00</td>
</tr>
<tr>
<td>Aeration System Improvements at Waukegan Facility</td>
<td>$1,115,540.00</td>
</tr>
<tr>
<td>Aeration System Improvements at Clavey Road Facility</td>
<td>$1,170,998.00</td>
</tr>
<tr>
<td>Phosphorus Feasibility Study Report; Phosphorus Discharge Optimization Report</td>
<td>$14,125.00</td>
</tr>
</tbody>
</table>

### 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)

<table>
<thead>
<tr>
<th>Reporting Element 2 - Outreach and Communication Activities, Jan 2017 - Dec 2017</th>
<th>No. of Events</th>
<th>No. of Attendants</th>
<th>Description:</th>
<th>Partnerships:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentations, Conferences &amp; Workshops:</td>
<td></td>
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<tr>
<td>Print or Media:</td>
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<tr>
<td>Other Activities:</td>
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</tbody>
</table>
### North Shore Water Reclamation District (2017)

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

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</tr>
</thead>
<tbody>
<tr>
<td>NSWRD-Clavey Road WRF</td>
<td>IL0030171</td>
<td>None</td>
<td>17.8</td>
<td>2017</td>
<td>14.2</td>
<td>118,000</td>
<td>50,000</td>
<td>1.12</td>
<td>969,000</td>
<td>837,000</td>
<td>17.40</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>NSWRD-Gurnee WRF</td>
<td>IL0035092</td>
<td>Bio-P</td>
<td>23.6</td>
<td>2017</td>
<td>15.2</td>
<td>187,000</td>
<td>73,700</td>
<td>1.57</td>
<td>1,390,000</td>
<td>1,020,000</td>
<td>23.30</td>
<td></td>
<td>Des Plaines River Watershed Workgroup</td>
</tr>
<tr>
<td>NSWRD-Waukegan WRF</td>
<td>IL0030244</td>
<td>Bio-P</td>
<td>22.0</td>
<td>2017</td>
<td>21.7</td>
<td>180,000</td>
<td>85,400</td>
<td>1.26</td>
<td>1,630,000</td>
<td>1,110,000</td>
<td>16.80</td>
<td></td>
<td>Des Plaines River Watershed Workgroup</td>
</tr>
</tbody>
</table>

### Appendix 1

**Urbana-Champaign Sanitary District (2017)**

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

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

**Other Resources Invested:**
### Appendix 1

**Urbana-Champaign Sanitary District (2017)**

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

<table>
<thead>
<tr>
<th>Presentations, Conferences &amp; Workshops:</th>
<th>No. of Events</th>
<th>No. of Attendants</th>
<th>Description:</th>
<th>Partnerships:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print or Media:</td>
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<tr>
<td>Other Activities:</td>
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</tr>
<tr>
<td>Northeast</td>
<td>IL0030500</td>
<td>None</td>
<td>17.3</td>
<td>2017</td>
</tr>
<tr>
<td>Southwest</td>
<td>IL0030526</td>
<td>Bio-P</td>
<td>8.0</td>
<td>2017</td>
</tr>
</tbody>
</table>
## Wheaton Sanitation District

### Appendix 1

| 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:                        |                 |
# Wheaton Sanitation District

## Appendix 1

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

<table>
<thead>
<tr>
<th>品</th>
<th>No. of Events</th>
<th>No. of Attendants</th>
<th>Description:</th>
<th>Partnerships:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Presentations, Conferences &amp; Workshops:</strong></td>
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<tr>
<td><strong>Print or Media:</strong></td>
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<tr>
<td><strong>Other Activities:</strong></td>
<td></td>
<td></td>
<td>Posted P reduction material on website</td>
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</table>
## Wheaton Sanitation District (2017)

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

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</thead>
<tbody>
<tr>
<td>Facility No. 1</td>
<td>IL0031739</td>
<td>None</td>
<td>8.9</td>
<td>2017</td>
<td>7.5</td>
<td>100,455</td>
<td>61,643</td>
<td>2.70</td>
<td>25.00</td>
<td>DuPage River Salt Creek</td>
<td>$100000-160000 dues to the DRSCW Creek</td>
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</tr>
</tbody>
</table>
### Reporting Element 1 - Staff and Financial Resources, Jan 2018 - June 2018

<table>
<thead>
<tr>
<th>Program (if applicable):</th>
<th>Dollars:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility No. 1 - Design Engineering</td>
<td>$ 102,000.00</td>
</tr>
<tr>
<td>Facility No. 2 - Design Engineering &amp; upgrade</td>
<td>$ 93,811.00</td>
</tr>
</tbody>
</table>

**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
Bloomington Normal Water Reclamation District (Jan - June 2018)

<table>
<thead>
<tr>
<th>Reporting Element 2 - Outreach and Communication Activities, Jan 2018 - June 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Presentations, Conferences &amp; Workshops:</strong></td>
</tr>
<tr>
<td><strong>Print or Media:</strong></td>
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<tr>
<td><strong>Other Activities:</strong></td>
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</tbody>
</table>
## Sangamon County Water Reclamation District (Jan - June 2018)

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

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</thead>
<tbody>
<tr>
<td>Facility No. 1</td>
<td>IL0027731</td>
<td>None</td>
<td></td>
<td>2017</td>
<td>15.1</td>
<td>177,755</td>
<td>101,470</td>
<td>2.49</td>
<td></td>
<td>819,790</td>
<td>18.90</td>
<td>No</td>
<td>Design Engineering</td>
</tr>
<tr>
<td>Facility No. 2</td>
<td>IL0073504</td>
<td>None</td>
<td></td>
<td>2017</td>
<td>3.8</td>
<td>60,955</td>
<td>43,263</td>
<td>3.74</td>
<td></td>
<td>140,890</td>
<td>22.30</td>
<td>No</td>
<td>Design Engineering</td>
</tr>
</tbody>
</table>
### Reporting Element 1 - Staff and Financial Resources, Jan 2018 - June 2018

<table>
<thead>
<tr>
<th>Program (if applicable):</th>
<th>Dollars:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio-P pilot - Carbon addition piping</td>
<td>$30,000.00</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Operations &amp; Maintenance:</th>
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</tr>
</thead>
<tbody>
<tr>
<td>ORP probe purchase, O&amp;M labor taking readings</td>
<td>$3,500.00</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Feasibility Studies or Permit Required Projects not already listed:</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Engineering support, bio-win modeling</td>
<td>$3,700.00</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Staff (No. of staff hours in the year or FTEs &amp; approx. $ value) working on nutrient related matters:</th>
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<tbody>
<tr>
<td>General Manager time, roughly 10% of hours for period, including labor overhead</td>
<td>$12,000.00</td>
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<thead>
<tr>
<th>Other Resources Invested:</th>
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</thead>
<tbody>
<tr>
<td>Downers Grove Sanitary District (Jan - June 2018)</td>
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</table>
# Appendix 1
## Downers Grove Sanitary District (Jan - June 2018)

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

<table>
<thead>
<tr>
<th>Activity Type</th>
<th>No. of Events</th>
<th>No. of Attendants</th>
<th>Description</th>
<th>Partnerships</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentations, Conferences &amp; Workshops</td>
<td>1</td>
<td>1</td>
<td>Attend INLRS Meeting in Springfield</td>
<td></td>
</tr>
<tr>
<td>Print or Media:</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Other Activities:</td>
<td>2</td>
<td>1</td>
<td>Attend Illinois Nutrient Trading Initiative stakeholder meetings</td>
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<td>----------------------------------------------</td>
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</tr>
<tr>
<td>Downers Grove Sanitary District WWTC</td>
<td>IL0028380</td>
<td>Bio-P being piloted under PDOP</td>
<td>11.0</td>
<td>2018</td>
</tr>
</tbody>
</table>
## Appendix 1
### Glenbard Wastewater Authority (Jan - June 2018)

<table>
<thead>
<tr>
<th>Reporting Element 1 - Staff and Financial Resources, Jan 2018 - June 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capital Improvements:</strong></td>
</tr>
<tr>
<td><strong>Dollars:</strong></td>
</tr>
<tr>
<td><strong>Operations &amp; Maintenance:</strong></td>
</tr>
<tr>
<td><strong>Program (if applicable):</strong></td>
</tr>
<tr>
<td><strong>Dollars:</strong></td>
</tr>
</tbody>
</table>

**Feasibility Studies or Permit Required Projects not already listed:**
- Program: 2018 Facility Plan
- Dollars: $5,000.00

**Staff (No. of staff hours in the year or FTEs & approx. $ value) working on nutrient related matters:**
- FTE: 0.125
- Dollars: $12,250.00

**Other Resources Invested:**
- **Glenbard Wastewater Authority (Jan - June 2018)**

Appendix 1
Glenbard Wastewater Authority (Jan - June 2018)

<table>
<thead>
<tr>
<th>Reporting Element 2 - Outreach and Communication Activities, Jan 2018 - June 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Events</td>
</tr>
</tbody>
</table>

Presentations, Conferences & Workshops:

Print or Media:

Other Activities:
## Glenbard Wastewater Authority (Jan - June 2018)

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

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</tr>
</thead>
<tbody>
<tr>
<td>Facility No. 1</td>
<td>IL0021547</td>
<td>None</td>
<td>16.0</td>
<td>2017</td>
<td>12.7</td>
<td>227,223</td>
<td>104,308</td>
<td>2.92</td>
<td>1,180,609</td>
<td>919,548</td>
<td>25.67</td>
<td>DuPage River Salt Creek Workgroup</td>
<td>N/A</td>
</tr>
<tr>
<td>Facility No. 1</td>
<td>IL0021547</td>
<td>None</td>
<td>16.0</td>
<td>2018</td>
<td>14.6</td>
<td>112,089</td>
<td>51,337</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DuPage River Salt Creek Workgroup</td>
<td>N/A</td>
</tr>
<tr>
<td>Facility No. 2</td>
<td>IL0022471</td>
<td>None</td>
<td>N/A</td>
<td>2017</td>
<td>276.9</td>
<td>N/A</td>
<td>1,338</td>
<td>0.60</td>
<td></td>
<td></td>
<td></td>
<td>DuPage River Salt Creek Workgroup</td>
<td>Wet weather facility only - limited monitoring</td>
</tr>
<tr>
<td>Facility No. 2</td>
<td>IL0022471</td>
<td>None</td>
<td>N/A</td>
<td>2018</td>
<td>270.8</td>
<td>N/A</td>
<td>1,454</td>
<td>0.64</td>
<td></td>
<td></td>
<td></td>
<td>DuPage River Salt Creek Workgroup</td>
<td>Wet weather facility only - limited monitoring</td>
</tr>
</tbody>
</table>
## Appendix 1

Greater Peoria Sanitary District (Jan - June 2018)

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

<table>
<thead>
<tr>
<th>Program (if applicable):</th>
<th>Dollars:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Improvements:</td>
<td></td>
</tr>
<tr>
<td>Division 26 Wastewater Treatment Plant Improvements. Construction of EBPR system. (approx. amt.)</td>
<td>$ 9,000,000.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program (if applicable):</th>
<th>Dollars:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations &amp; Maintenance:</td>
<td></td>
</tr>
<tr>
<td>3 Supervisors, 6 Operators, 3 Lab staff, other maintenance workers. Total O&amp;M budget $12.5 million per year (includes collection system) - $588, 000 designated for nutrients</td>
<td>$ 588,000.00</td>
</tr>
</tbody>
</table>

### 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)

<p>| Reporting Element 2 - Outreach and Communication Activities, Jan 2018 - June 2018 |</p>
<table>
<thead>
<tr>
<th>No. of Events</th>
<th>No. of Attendants</th>
<th>Description:</th>
<th>Partnerships:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentations, Conferences &amp; Workshops:</td>
<td>2</td>
<td>30</td>
<td>Tours for local Civil Engineering students.</td>
</tr>
<tr>
<td>Print or Media:</td>
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<tr>
<td>Other Activities:</td>
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</table>
### Glenard Wastewater Authority (Jan - June 2018)

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

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</tr>
</thead>
<tbody>
<tr>
<td>Facility No. 1</td>
<td>IL0021288</td>
<td>Enhanced Biological</td>
<td>37.0</td>
<td>2017</td>
<td>19.5</td>
<td>293,000</td>
<td>103,000</td>
<td>1.57</td>
<td>1,960,000</td>
<td>399,000</td>
<td>6.11</td>
<td>No</td>
<td>EBPR put into operation in September 2017</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phosphorus Removal</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

*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

<table>
<thead>
<tr>
<th>Capital Improvements:</th>
<th>Program (if applicable):</th>
<th>Dollars:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capital Improvements Total</strong></td>
<td>Contract 11-195-AP, Phosphorus Recovery Facility, SWRP (recovery of phosphorus utilizing Ostara technology) (in construction, reactors in operation)</td>
<td>$4,095,696.94</td>
</tr>
<tr>
<td></td>
<td>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)</td>
<td>$1,925,970.14</td>
</tr>
<tr>
<td></td>
<td>Contract 15-122-3P, Aeration Tanks Air Valve Automation in Batteries A, B, C and D, SWRP (will allow in-line fermentation in our anaerobic zones, enhancing the performance of EBPR treatment process) (in construction)</td>
<td>$761,858.66</td>
</tr>
<tr>
<td></td>
<td>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)</td>
<td>$639,339.82</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$295,534.72</td>
</tr>
</tbody>
</table>
# 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):
- 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)

### Dollars:
- $472,993.60

### Capital Improvements Cont.:

#### Operations & Maintenance:
- **Operations and Maintenance Total**
  - 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 Total**
  - 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
  - M&R Dept. - Feasibility Study and Optimization Plan for Lemont WRP
    - $93,151.79
### Reporting Element 1 - Staff and Financial Resources, Jan 2018 - June 2018

<table>
<thead>
<tr>
<th>Program (if applicable):</th>
<th>Dollars:</th>
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</thead>
<tbody>
<tr>
<td><strong>Staff Total</strong></td>
<td><strong>$ 1,280,740.00</strong></td>
</tr>
<tr>
<td>Engineering Dept. - Post award engineering, consultant oversight and construction oversight (~6 FTEs)</td>
<td><strong>$ 400,000.00</strong></td>
</tr>
<tr>
<td>M&amp;O Dept – Kirie BioP instrumentation and pilot operation (~0.5 trades and ~0.7 operations staff FTEs)</td>
<td><strong>$ 61,400.00</strong></td>
</tr>
<tr>
<td>M&amp;R Dept. - Technical oversight on design and feasibility studies (~1.7 FTEs)</td>
<td><strong>$ 215,500.00</strong></td>
</tr>
<tr>
<td>M&amp;R Dept. - Research and technical oversight at 7 WRPs (~1.0 FTEs)</td>
<td><strong>$ 253,000.00</strong></td>
</tr>
<tr>
<td>M&amp;R Dept. - Research and Demonstration at the Fulton County site and other collaboration with the agricultural sector (~1.3 FTEs)</td>
<td><strong>$ 100,000.00</strong></td>
</tr>
<tr>
<td>M&amp;R Dept. - Research and pilot scale testing for algae nutrient removal (~1.4 FTEs)</td>
<td><strong>$ 110,000.00</strong></td>
</tr>
<tr>
<td>M&amp;R Dept. - Microbiological research and support (~1.2 FTEs)</td>
<td><strong>$ 90,000.00</strong></td>
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</table>

**Other Resources Invested:**

<table>
<thead>
<tr>
<th>Other Resources Total</th>
<th>$ 25,420.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>M&amp;R Dept. - Research supplies and consumables at WRPs</td>
<td>$ 5,420.00</td>
</tr>
</tbody>
</table>
# Appendix 1

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

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

<table>
<thead>
<tr>
<th>Program (if applicable):</th>
<th>Dollars:</th>
</tr>
</thead>
<tbody>
<tr>
<td>M&amp;R Dept. - Research and Demonstration and collaboration with the agricultural sector at the Fulton County site</td>
<td>$20,000.00</td>
</tr>
</tbody>
</table>

**Other Resources Cont.:**
## Reporting Element 2 - Outreach and Communication Activities, Jan 2018 - June 2018

<table>
<thead>
<tr>
<th>Partnerships:</th>
<th>Print or Media:</th>
</tr>
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<tbody>
<tr>
<td>Metropolitan Water Reclamation District of Greater Chicago (Jan - June 2018)</td>
<td>Print or Media:</td>
</tr>
<tr>
<td><strong>Presentations, Conferences &amp; Workshops:</strong></td>
<td>These 7 media advisories/press releases were also posted on Facebook, LinkedIn, Twitter and Instagram:</td>
</tr>
<tr>
<td>No. of Events</td>
<td>No. of Attendants</td>
</tr>
<tr>
<td>1</td>
<td>80</td>
</tr>
<tr>
<td>1</td>
<td>500</td>
</tr>
<tr>
<td><strong>Print or Media:</strong></td>
<td></td>
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<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td><strong>Press Release</strong></td>
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### Appendix 1
**Metropolitan Water Reclamation District of Greater Chicago (Jan - June 2018)**

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

<table>
<thead>
<tr>
<th>Advisory</th>
<th>No. of Events</th>
<th>No. of Attendants</th>
<th>Description:</th>
<th>Partnerships:</th>
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# Appendix 1
Metropolitan Water Reclamation District of Greater Chicago (Jan - June 2018)

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

<table>
<thead>
<tr>
<th>No. of Events</th>
<th>No. of Attendants</th>
<th>Description:</th>
<th>Partnerships:</th>
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</table>
## Appendix 1
Metropolitan Water Reclamation District of Greater Chicago (Jan - June 2018)

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

<table>
<thead>
<tr>
<th>Magazine/Newspaper</th>
<th>No. of Events</th>
<th>No. of Attendants</th>
<th>Description:</th>
<th>Partnerships:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td></td>
<td>Jan. 9, 2018 &quot;Fighting the war against phosphorus,&quot; Medill News Reports <a href="http://news.medill.northwestern.edu/chicago/fighting-the-war-against-phosphorous/">http://news.medill.northwestern.edu/chicago/fighting-the-war-against-phosphorous/</a></td>
<td></td>
</tr>
</tbody>
</table>

### Other Activities

<table>
<thead>
<tr>
<th>Tourism</th>
<th>No. of Events</th>
<th>No. of Attendants</th>
<th>Description:</th>
<th>Partnerships:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tours</td>
<td>32</td>
<td>550</td>
<td>Guests tours of Ostara nutrient recovery facility Stickney Water Reclamation Plant</td>
<td>Illinois Farm Bureau, Illinois Central College, Fulton County Farm Bureau</td>
</tr>
</tbody>
</table>

| Partnerships       | 4             |                   |              |              |
### Reporting Element 3: Facility Nutrient Tracking - Jan 2017 - December 2017

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility No. 1</td>
<td>IL0021547</td>
<td>None</td>
<td>16.0</td>
<td>2017</td>
<td>12.7</td>
<td>227,223</td>
<td>104,308</td>
<td>2.92</td>
<td>1,180,609</td>
<td>919,548</td>
<td>25.67</td>
<td></td>
<td>DuPage River Salt Creek Workgroup</td>
</tr>
<tr>
<td>Facility No. 2</td>
<td>IL0022471</td>
<td>None</td>
<td>N/A</td>
<td>2017</td>
<td>276.9</td>
<td>N/A</td>
<td>1,338</td>
<td>0.60</td>
<td>N/A</td>
<td></td>
<td></td>
<td>N/A</td>
<td>Flow represents total annual flow and concentration is average on discharge days. Wet weather facility only - limited monitoring</td>
</tr>
</tbody>
</table>
## Reporting Element 1 - Staff and Financial Resources, Jan 2018 - June 2018

<table>
<thead>
<tr>
<th>Program (if applicable):</th>
<th>Dollars:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Improvements:</td>
<td></td>
</tr>
<tr>
<td>Operations &amp; Maintenance:</td>
<td></td>
</tr>
<tr>
<td>Feasibility Studies or Permit Required Projects not already listed:</td>
<td></td>
</tr>
<tr>
<td>Staff (No. of staff hours in the year or FTEs &amp; approx. $ value) working on nutrient related matters:</td>
<td></td>
</tr>
<tr>
<td>Other Resources Invested:</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix 1
Sangamon County Water Reclamation District (Jan - June 2018)

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

<table>
<thead>
<tr>
<th>Presentations, Conferences &amp; Workshops:</th>
<th>No. of Events</th>
<th>No. of Attendants</th>
<th>Description:</th>
<th>Partnerships:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print or Media:</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Other Activities:</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
### Sangamon County Water Reclamation District (Jan - June 2018)

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

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring Creek Plant</td>
<td>32 MGD</td>
<td>2018</td>
<td>37.1</td>
<td>183,274</td>
<td>26,414</td>
<td>0.50</td>
<td>480,710</td>
<td>91,715</td>
<td>10.10</td>
<td>data reflects January to June 2018 data only</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facility No. 2</td>
<td>IL021971</td>
<td>Bio-P, Bio N</td>
<td>15 MGD</td>
<td>2017</td>
<td>8.9</td>
<td>78,039</td>
<td>20,577</td>
<td>1.03</td>
<td>385,393</td>
<td>298,696</td>
<td>10.86</td>
<td>Bio-P, Bio N</td>
<td>Upgrade project completed in 2018 at a cost of $57M data reflects January to June 2018 data only</td>
</tr>
<tr>
<td>Sugar Creek Plant</td>
<td></td>
<td>2018</td>
<td>10.3</td>
<td>28,688</td>
<td>6,509</td>
<td>0.52</td>
<td>164,565</td>
<td>112,444</td>
<td>7.40</td>
<td>*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</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Upgrade Project completed in 2014 at a cost of $129M

*Data reflects January to June 2018 data only

*Upgrade project completed in 2018 at a cost of $57M 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

<table>
<thead>
<tr>
<th>Program (if applicable):</th>
<th>Dollars:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Improvements:</td>
<td></td>
</tr>
<tr>
<td>Operations &amp; Maintenance:</td>
<td></td>
</tr>
<tr>
<td>Feasibility Studies or Permit Required Projects not already listed:</td>
<td></td>
</tr>
<tr>
<td>Staff (No. of staff hours in the year or FTEs &amp; approx. $ value) working on nutrient related matters:</td>
<td></td>
</tr>
<tr>
<td>Other Resources Invested:</td>
<td></td>
</tr>
</tbody>
</table>

**Capital Improvements:**

- Daily Operations estimate: ~1/6 of SWP efforts associated with P limit = ~1/36 of UCSD overall UCSD effort (Operations and Maintenance)

**Operations & Maintenance:**

- 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.

**Feasibility Studies or Permit Required Projects not already listed:**

- Combination of 1/6 SWP and 1/12 NEP results in 1/12 of Overall UCSD efforts. 1/12 of 47 FTE = 4 FTE

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

<table>
<thead>
<tr>
<th>Program (if applicable):</th>
<th>Dollars:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>250,000.00</td>
</tr>
<tr>
<td></td>
<td>500,000.00</td>
</tr>
<tr>
<td></td>
<td>300,000.00</td>
</tr>
</tbody>
</table>
### Appendix 1

Urbana Champaign Sanitary District (Jan - June 2018)

<table>
<thead>
<tr>
<th>Reporting Element 2 - Outreach and Communication Activities, Jan 2018 - June 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Presentations, Conferences &amp; Workshops:</strong></td>
</tr>
<tr>
<td><strong>No. of Events</strong></td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>**Partnerships:**IWPC Annual Conference</td>
</tr>
</tbody>
</table>

**Print or Media:**

**Other Activities:**
### Reporting Element 3: Facility Nutrient Tracking - Jan 2018 - June 2018

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast</td>
<td>IL0030500</td>
<td>None</td>
<td>17.3</td>
<td>2017</td>
<td>11.8</td>
<td>210,720</td>
<td>72,305</td>
<td>1.84</td>
<td>1,503,757</td>
<td>698,915</td>
<td>17.15</td>
<td>Salt Fork</td>
<td>First half</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>15.6</td>
<td>2018</td>
<td>15.6</td>
<td>107,431</td>
<td>34,907</td>
<td>1.64</td>
<td>612,526</td>
<td>458,197</td>
<td>10.80</td>
<td>Salt Fork</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>First half</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southwest</td>
<td>IL0030526</td>
<td>Bio-P</td>
<td>8.0</td>
<td>2017</td>
<td>6.3</td>
<td>84,315</td>
<td>5,475</td>
<td>0.27</td>
<td>630,539</td>
<td>192,308</td>
<td>9.30</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8.8</td>
<td>2018</td>
<td>8.8</td>
<td>53,499</td>
<td>4,166</td>
<td>0.32</td>
<td>401,593</td>
<td>127,053</td>
<td>10.00</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>First half</td>
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</table>

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

**Bloomington Normal Water Reclamation District (July - Dec 2018)**

<table>
<thead>
<tr>
<th><strong>Reporting Element 1 - Staff and Financial Resources, July 2018 - Dec 2018</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capital Improvements:</strong></td>
</tr>
<tr>
<td><strong>Program (if applicable):</strong></td>
</tr>
<tr>
<td>Constructed Wetland Maintenance and Data Collection (divert a portion of treated effluent from permitted outfall IL0073504 into wetland cells)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Operations &amp; Maintenance:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Feasibility Studies or Permit Required Projects not already listed:</strong></td>
</tr>
<tr>
<td>permitted outfalls IL0073504 and IL0027731</td>
</tr>
<tr>
<td>permitted outfalls IL0073504 and IL0027731</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Staff (No. of staff hours in the year or FTEs &amp; approx. $ value) working on nutrient related matters:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>7 FTE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Other Resources Invested:</strong></th>
</tr>
</thead>
</table>

Appendix 1
Bloomington Normal Water Reclamation District (July - Dec 2018)

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

<table>
<thead>
<tr>
<th>Partnerships:</th>
<th>Presentations, Conferences &amp; Workshops:</th>
<th>Print or Media:</th>
<th>Other Activities:</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Events</td>
<td>No. of Attendants</td>
<td>Description:</td>
<td>Partnerships:</td>
</tr>
</tbody>
</table>

APPENDIX 1

## Sangamon County Water Reclamation District (July - Dec 2018)

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

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Facility No. 1</td>
<td>IL0027731</td>
<td>None</td>
<td>22.5</td>
<td>2017</td>
<td>15.1</td>
<td>177,755</td>
<td>101,470</td>
<td>2.49</td>
<td>819,790</td>
<td>18.90</td>
<td>No</td>
<td>Design Engineering $102,003</td>
<td></td>
</tr>
<tr>
<td>Facility No. 2</td>
<td>IL0073504</td>
<td>None</td>
<td>7.5</td>
<td>2017</td>
<td>3.8</td>
<td>60,955</td>
<td>43,263</td>
<td>3.74</td>
<td>257,957</td>
<td>22.30</td>
<td>No</td>
<td>Design Engineering $92,731 Upgrade $1080</td>
<td></td>
</tr>
</tbody>
</table>

TN concentration is measured 1 day/month as per permit requirements.
Appendix 1
Downers Grove Sanitary District (July - Dec 2018)

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

<table>
<thead>
<tr>
<th>Program (if applicable):</th>
<th>Dollars:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Improvements:</td>
<td></td>
</tr>
<tr>
<td>Operations &amp; Maintenance:</td>
<td></td>
</tr>
<tr>
<td>Feasibility Studies or Permit Required Projects not already listed:</td>
<td></td>
</tr>
<tr>
<td>Staff (No. of staff hours in the year or FTEs &amp; approx. $ value) working on nutrient related matters:</td>
<td></td>
</tr>
<tr>
<td>Other Resources Invested:</td>
<td></td>
</tr>
<tr>
<td>High strength waste carbon addition experiment operations and evaluation</td>
<td>-</td>
</tr>
</tbody>
</table>
Appendix 1
Downers Grove Sanitary District (July - Dec 2018)

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

<table>
<thead>
<tr>
<th>No. of Events</th>
<th>No. of Attendants</th>
<th>Description:</th>
<th>Partnerships:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentations, Conferences &amp; Workshops:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Print or Media:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Activities:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Appendix 1
### Downers Grove Sanitary District (July - Dec 2018)

<table>
<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wastewater Treatment Center</td>
<td>IL0028380</td>
<td>None</td>
<td>11.0</td>
<td>2017</td>
<td>10.3</td>
<td>165,880</td>
<td>85,650</td>
<td>2.99</td>
<td>1,141,660</td>
<td>480,990</td>
<td>16.04</td>
<td>DuPage River Salt Creek Workgroup</td>
<td>PDOP - attempting BNR. Spent $24,000 on tank mixing equipment</td>
</tr>
<tr>
<td>Downers Grove SD WWTC</td>
<td>IL 28380</td>
<td>Bio-P/N</td>
<td>11.0</td>
<td>2018</td>
<td>11.6</td>
<td>163,500</td>
<td>85,647</td>
<td>2.99</td>
<td>1,018,662</td>
<td>431,130</td>
<td>14.40</td>
<td>DRSCW</td>
<td>Operated sidestream WAS fermentation for BNR. Attempted carbon addition over summer, no improvement in P removal performance.</td>
</tr>
</tbody>
</table>
## Reporting Element 1 - Staff and Financial Resources, July 2018 - Dec 2018

<table>
<thead>
<tr>
<th>Capital Improvements:</th>
<th>Program (if applicable):</th>
<th>Dollars:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>South Wastewater Treatment Facility Improvements</td>
<td>$80,527,948.61</td>
</tr>
<tr>
<td></td>
<td>North Wastewater Treatment Facility Improvements</td>
<td>$2,010,971.70</td>
</tr>
</tbody>
</table>

**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

<table>
<thead>
<tr>
<th>Presentations, Conferences &amp; Workshops:</th>
<th>No. of Events</th>
<th>No. of Attendants</th>
<th>Description:</th>
<th>Partnerships:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aurora, IL pre-greenfest presentation</td>
<td>1</td>
<td>40</td>
<td>Nutrient removal, permit compliance, environmental benefit</td>
<td>City of Aurora, local environmental NGOs</td>
</tr>
<tr>
<td>Aurora, IL Greenfest</td>
<td>1</td>
<td>~1000</td>
<td>Information available on nutrient removal</td>
<td>City of Aurora, local environmental NGOs</td>
</tr>
<tr>
<td>Aurora University Presentation</td>
<td>1</td>
<td>20</td>
<td>Discussed eutrophication and nutrient removal</td>
<td></td>
</tr>
<tr>
<td>Montgomery Senior Veterans Presentation</td>
<td>1</td>
<td>60</td>
<td>Nutrient removal, permit compliance, environmental benefit</td>
<td>State Rep. Stephanie Kifowit</td>
</tr>
<tr>
<td>Field Operations Public Works Breakfast</td>
<td>1</td>
<td>80</td>
<td>Nutrient removal, permit compliance, environmental benefit</td>
<td>all municipalities within service area</td>
</tr>
<tr>
<td>Montgomery Chamber of Commerce</td>
<td>1</td>
<td>12</td>
<td>Nutrient removal, permit compliance, environmental benefit</td>
<td></td>
</tr>
<tr>
<td>Fox River Study Group Annual Meeting</td>
<td>1</td>
<td>60</td>
<td>Nutrient removal, permit compliance, environmental benefit</td>
<td>all FRSG participating agencies</td>
</tr>
</tbody>
</table>

**Print or Media:**

**Other Activities:**

<table>
<thead>
<tr>
<th>Tours</th>
<th>1</th>
<th>4</th>
<th>TEDx presentation and plant tour</th>
<th>TEDx Naperville</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>35</td>
<td>Fox Valley Operators Association plant tour</td>
<td>FVOA</td>
</tr>
<tr>
<td>Partnerships</td>
<td>6</td>
<td>3</td>
<td>Effluent jar testing for phosphorus removal study</td>
<td>Salt Creek Water Reclamation District</td>
</tr>
<tr>
<td>----------</td>
<td>--------------</td>
<td>------------------</td>
<td>-----------</td>
<td>------</td>
</tr>
<tr>
<td>Fox Metro Water Reclamation</td>
<td>IL0020818</td>
<td>None in 2018</td>
<td>42.0</td>
<td>2018</td>
</tr>
</tbody>
</table>
## Appendix 1
Fox River Water Reclamation District (July - Dec 2018)

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

<table>
<thead>
<tr>
<th>Program (if applicable)</th>
<th>Dollars:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albin D. Pagorski WRF Phosphorus Removal Improvements -Liquid Process Facilities</td>
<td>$496,500.00</td>
</tr>
<tr>
<td>Albin D. Pagorski WRF Phosphorus Removal Improvements -Struvite Facilities</td>
<td>$183,900.00</td>
</tr>
<tr>
<td>North WRF Phosphorus Removal Improvements</td>
<td>$544,200.00</td>
</tr>
</tbody>
</table>

### 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**

<table>
<thead>
<tr>
<th>No. of Events</th>
<th>No. of Attendants</th>
<th>Description:</th>
<th>Partnerships:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentations, Conferences &amp; Workshops:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Print or Media:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Activities:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Reporting Element 3: Facility Nutrient Tracking - July 2018 - Dec 2018

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
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<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Albin D. Pagorski WRF</td>
<td>IL0028657</td>
<td>None</td>
<td>25.0</td>
<td>2017</td>
<td>17.2</td>
<td>193,000</td>
<td>145,000</td>
<td>3.06</td>
<td>1,315,000</td>
<td>1,236,000</td>
<td>26.10</td>
<td>Fox River Study Group</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2018</td>
<td>19.1</td>
<td>284,000</td>
<td>171,000</td>
<td>3.20</td>
<td>1,742,000</td>
<td>1,320,000</td>
<td>24.70</td>
<td>Fox River Study Group</td>
<td></td>
</tr>
<tr>
<td>North WRF</td>
<td>IL0028665</td>
<td>None</td>
<td>7.8</td>
<td>2017</td>
<td>5.0</td>
<td>51,000</td>
<td>32,200</td>
<td>2.13</td>
<td>351,000</td>
<td>197,100</td>
<td>13.00</td>
<td>Fox River Study Group</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2018</td>
<td>4.8</td>
<td>46,000</td>
<td>28,500</td>
<td>1.95</td>
<td>356,000</td>
<td>193,000</td>
<td>13.20</td>
<td>Fox River Study Group</td>
<td></td>
</tr>
<tr>
<td>West WRF</td>
<td>IL0035891</td>
<td>Bio-N, 5-stage Bardenpho</td>
<td>5.0</td>
<td>2017</td>
<td>3.5</td>
<td>44,700</td>
<td>7,740</td>
<td>0.72</td>
<td>360,000</td>
<td>91,700</td>
<td>8.53</td>
<td>Fox River Study Group</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2018</td>
<td>3.7</td>
<td>51,600</td>
<td>8,920</td>
<td>0.79</td>
<td>589,000</td>
<td>135,000</td>
<td>12.00</td>
<td>Fox River Study Group</td>
<td></td>
</tr>
</tbody>
</table>
## Appendix 1

### Glenbard Wastewater Authority (July - Dec 2018)

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

<table>
<thead>
<tr>
<th>Program (if applicable):</th>
<th>Dollars:</th>
</tr>
</thead>
<tbody>
<tr>
<td>IAWA and Workgroup Meetings</td>
<td>1 Staff Member</td>
</tr>
</tbody>
</table>

### 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:**
### Glenbard Wastewater Authority (July - Dec 2018)

#### Appendix 1

<table>
<thead>
<tr>
<th>Presentations, Conferences &amp; Workshops:</th>
<th>Description:</th>
<th>Partnerships:</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Events</td>
<td>No. of Attendants</td>
<td>N/A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Print or Media:</th>
<th>Description:</th>
<th>Partnerships:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Activities:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Tours</td>
<td>Average of 8</td>
<td>N/A</td>
</tr>
<tr>
<td>During Facility Tours we educate public participants about upcoming nutrient challenges</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Glenbard Wastewater Authority (July - Dec 2018)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Glenbard Wastewater Authority Main Plant</td>
<td>IL0021547</td>
<td>None</td>
<td>2018</td>
<td>13.0</td>
<td>201,100</td>
<td>101,541</td>
<td>3.00</td>
<td>1,502,099</td>
<td>1,024,140</td>
<td>26.00</td>
<td>DuPage River/Salt Creek Work Group</td>
<td>Data from DMR monitoring requirement</td>
</tr>
<tr>
<td>Glenbard Wastewater Authority Combined Sewer Outfall</td>
<td>IL0022471</td>
<td>None</td>
<td>2018</td>
<td>N/A (wet weather plant)</td>
<td>N/A</td>
<td>1,812</td>
<td>0.65</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>DuPage River/Salt Creek Work Group</td>
<td>Facility only operated during wet weather conditions. Only required to monitor P out per DMR.</td>
</tr>
</tbody>
</table>
## Appendix 1
Kishwaukee Water Reclamation District (July - Dec 2018)

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

<table>
<thead>
<tr>
<th>Capital Improvements:</th>
<th>Program (if applicable):</th>
<th>Dollars:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ph. 1B Biological Improvements</td>
<td>$27 Million</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
<th>No. of Events</th>
<th>No. of Attendants</th>
<th>Description:</th>
<th>Partnerships:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentations, Conferences &amp; Workshops:</td>
<td></td>
<td>2 to 3</td>
<td>CSWEA Education Seminar, IAWA Mini-Con, CSWEA Annual Meeting, NACWA Strategic Communications, IAWA Annual Conference, WEFTEC,</td>
<td>CSWEA, IAWA, NACWA, WEF</td>
</tr>
<tr>
<td>Print or Media:</td>
<td>2</td>
<td></td>
<td>DeKalb Daily Chronicle articles on current BNR project</td>
<td></td>
</tr>
<tr>
<td>Other Activities:</td>
<td>5</td>
<td></td>
<td>Various tours of WWTF where new BNR project is discussed.</td>
<td></td>
</tr>
</tbody>
</table>
### Kishwaukee Water Reclamation District (July - Dec 2018)

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>KWRD WWTF</td>
<td>IL0023027</td>
<td>None</td>
<td>8.6</td>
<td>2018</td>
<td>6.3</td>
<td>90,520</td>
<td>53,655</td>
<td>2.73</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
<td>No</td>
<td>Currently under construction of new $47 Million BNR facility to remove P &amp; N</td>
</tr>
</tbody>
</table>

Appendix 1

Illinois NLRS Biennial Report | 2019
## Lower Des Plaines Watershed Group (July - Dec 2018)

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

<table>
<thead>
<tr>
<th>Program (if applicable):</th>
<th>Dollars:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grants or Loans Received:</td>
<td></td>
</tr>
<tr>
<td>Grants Given:</td>
<td></td>
</tr>
<tr>
<td>Other Resources Invested:</td>
<td></td>
</tr>
<tr>
<td>Year 1 Lower Des Plaines River Bioassessment - 26 sites</td>
<td>LDWG Membership Dues</td>
</tr>
<tr>
<td>Seasonal Outreach Campaigns</td>
<td>LDWG Membership Dues</td>
</tr>
</tbody>
</table>

### Total Staff working on NLRS activities (in any capacity): | Number of Staff: |
|------------------|------------------|
## Appendix 1

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

| Reporting Element 2 - Outreach and Communication Activities, July 2018 - Dec 2018 |
|---|---|---|---|---|
| **Field Days:** (Includes learning activities sponsored at other locations) | **Attendance:** | **Topics Covered:** | **Partnerships:** | **Response / Feedback:** |
| **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**

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

### Awards/Recognition Activities

### Surveys:
### Lower Des Plaines Watershed Group (July 2018 - Dec 2018)

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

| Additional Activities | Name: Salt Smart Save More Campaign | Attendance: LDWG Membership | Topics Covered: 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. | Partnerships: With Lower DuPage River Watershed Coalition | Response / Feedback: |

Appendix 1
### Appendix 1

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

<table>
<thead>
<tr>
<th>Grants or Loans Received:</th>
<th>Program (if applicable):</th>
<th>Dollars:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grants Given:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Resources Invested:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrient Trading Program Development in partnership with DRSCW</td>
</tr>
<tr>
<td>Nutrient Trading Program Development &amp; Nutrient Feasibility Study in partnership with DRSCW</td>
</tr>
<tr>
<td>Hammel Woods Dam Modification Feasibility Study</td>
</tr>
<tr>
<td>Lower DuPage River Watershed Bioassessment -third round</td>
</tr>
<tr>
<td>Seasonal Outreach Campaigns</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program (if applicable):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Staff working on NLRS activities (in any capacity):</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.9 FTE</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Name:</th>
<th>Attendance:</th>
<th>Topics Covered:</th>
<th>Partnerships:</th>
<th>Response / Feedback:</th>
</tr>
</thead>
</table>

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 Coalition (July 2018 - Dec 2018)

| Reporting Element 2 - Outreach and Communication Activities, July 2018 - Dec 2018 |
|---|---|---|---|---|
| **Newsletters:** | **Name:** | **Attendance:** | **Topics Covered:** | **Partnerships:** |
| | Spring Seasonal Outreach Campaign | LDRWC Membership | Provided newsletter articles on use of native plants in home landscaping to minimize fertilizer 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 newsletter 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:** |
| **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 |

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

<table>
<thead>
<tr>
<th>Capital Improvements:</th>
<th>Program (if applicable):</th>
<th>Dollars:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Capital Improvements Total</td>
<td>$7,162,015</td>
</tr>
<tr>
<td>Contract 11-195-AP, Phosphorus Recovery Facility, SWRP (recovery of phosphorus utilizing Ostara technology) (in construction, reactors in operation)</td>
<td></td>
<td>$2,548,822</td>
</tr>
<tr>
<td>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)</td>
<td></td>
<td>$652,181</td>
</tr>
<tr>
<td>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)</td>
<td></td>
<td>$645,128</td>
</tr>
<tr>
<td>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 stabalizing EBPR treatment process) (in construction)</td>
<td></td>
<td>$2,493,721</td>
</tr>
<tr>
<td>Capital Improvements Cont.:</td>
<td>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)</td>
<td>$822,163</td>
</tr>
</tbody>
</table>
### Appendix 1
Metropolitan Water Reclamation District of Greater Chicago (July - Dec 2018)

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

<table>
<thead>
<tr>
<th>Program (if applicable):</th>
<th>Dollars:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations and Maintenance Total</td>
<td>$1,386,073</td>
</tr>
<tr>
<td>M&amp;O Dept - Ostara P removal - chemicals</td>
<td>$1,176,273</td>
</tr>
<tr>
<td>M&amp;O Dept – Kirie BioP instrumentation - Parts &amp; supplies</td>
<td>$209,800</td>
</tr>
</tbody>
</table>

#### Operations & Maintenance:

- **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

#### Feasibility Studies or Permit Required Projects Cont.:

- M&R Dept. - Feasibility Study for O’Brien WRP: $340,000

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

<table>
<thead>
<tr>
<th>Program (if applicable):</th>
<th>Dollars:</th>
</tr>
</thead>
<tbody>
<tr>
<td>M&amp;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).</td>
<td>$94,440</td>
</tr>
<tr>
<td>M&amp;R Dept. - Technical oversight on design and feasibility studies (~1.7 FTEs)</td>
<td>$215,500</td>
</tr>
<tr>
<td>M&amp;R Dept. - Research and technical oversight at 7 WRPs (~2.5 FTEs)</td>
<td>$253,000</td>
</tr>
<tr>
<td>M&amp;R Dept. - Research and Demonstration at the Fulton County site and other collaboration with the agricultural sector (~1.5 FTEs)</td>
<td>$100,000</td>
</tr>
<tr>
<td>M&amp;R Dept. - Research and pilot scale testing for algae nutrient removal (~1.4 FTEs)</td>
<td>$100,000</td>
</tr>
<tr>
<td>M&amp;R Dept. - Microbiological research and support (~2.0 FTEs)</td>
<td>$136,000</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Presentations, Conferences &amp; Workshops:</th>
<th>No. of Events</th>
<th>No. of Attendants</th>
<th>Description:</th>
<th>Partnerships:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Day</td>
<td>1</td>
<td>80</td>
<td>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.</td>
<td>Illinois Farm Bureau, Illinois Central College, Fulton County Farm Bureau, University of Illinois</td>
</tr>
<tr>
<td>Workshop</td>
<td>1</td>
<td>70</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>Presentations</td>
<td></td>
<td>500</td>
<td>District staff and commissioners give dozens of presentations throughout Cook County, IL, and either mention nutrients or focus on nutrients</td>
<td></td>
</tr>
</tbody>
</table>

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

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td></td>
<td>These 11 media advisories/press releases were also posted on Facebook, LinkedIn, Twitter and Instagram:</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>June 1, &quot;Infrastructure Week open house tours offer free compost, tree giveaways.&quot;</td>
<td></td>
</tr>
<tr>
<td>Press Release</td>
<td>1</td>
<td>May 29, &quot;Field Day To Highlight Water Quality Research,&quot;</td>
<td></td>
</tr>
<tr>
<td>Press Release</td>
<td>1</td>
<td>May 17, &quot;Best management practices for applying road salt discussed at chlorides workshop,&quot;</td>
<td></td>
</tr>
</tbody>
</table>
# Metropolitan Water Reclamation District of Greater Chicago (July - Dec 2018)

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

<table>
<thead>
<tr>
<th>No. of Events</th>
<th>No. of Attendants</th>
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<th>Partnerships:</th>
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Metropolitan Water Reclamation District of Greater Chicago (July - Dec 2018)

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

<table>
<thead>
<tr>
<th>Type</th>
<th>No. of Events</th>
<th>No. of Attendants</th>
<th>Description</th>
<th>Partnerships</th>
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</thead>
</table>
## Appendix 1
Metropolitan Water Reclamation District of Greater Chicago (July - Dec 2018)

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

<table>
<thead>
<tr>
<th>Description:</th>
<th>Partnerships:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Press Release</strong></td>
<td></td>
</tr>
<tr>
<td>November 9, &quot;MWRD drug collection takes pharmaceuticals off the street, protects local water environment&quot;</td>
<td></td>
</tr>
<tr>
<td><strong>Press Release</strong></td>
<td></td>
</tr>
<tr>
<td>November 14, &quot;New infrastructure at MWRD’s Stickney Plant will upgrade energy savings and improve odor control&quot;</td>
<td></td>
</tr>
<tr>
<td><strong>Magazine/Newspaper</strong></td>
<td></td>
</tr>
<tr>
<td>Jan. 9, 2018 &quot;Fighting the war against phosphorus,&quot; Medill News Reports</td>
<td></td>
</tr>
<tr>
<td><a href="http://news.medill.northwestern.edu/chicago/fighting-the-war-against-phosphorous/">http://news.medill.northwestern.edu/chicago/fighting-the-war-against-phosphorous/</a></td>
<td></td>
</tr>
<tr>
<td><strong>Other Activities:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Tours</strong></td>
<td></td>
</tr>
<tr>
<td>83</td>
<td>1,235</td>
</tr>
<tr>
<td>Guests tours of Ostara nutrient recovery facility Stickney Water Reclamation Plant</td>
<td></td>
</tr>
</tbody>
</table>
# Reporting Element 2 - Outreach and Communication Activities, July 2018 - Dec 2018

<table>
<thead>
<tr>
<th>Partnerships</th>
<th>No. of Events</th>
<th>No. of Attendants</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partnerships</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Partnerships:**
- Illinois Farm Bureau,
- Illinois Central College,
- Fulton County Farm Bureau,
- University of Illinois,
- Illinois Center for Sustainability and Technology
### Metropolitan Water Reclamation District of Greater Chicago (July - Dec 2018)

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

<table>
<thead>
<tr>
<th>Facility</th>
<th>NPDES Number</th>
<th>Nutrient Removal</th>
<th>DAF (MGD)</th>
<th>Year</th>
<th>Daily Avg. Flow (MGD)</th>
<th>Total P In (lb/yr)</th>
<th>Total P Out (lb/yr)</th>
<th>Total P Out Annual Avg. (mg/L)</th>
<th>Total N In (lb/yr)</th>
<th>Total N Out (lb/yr)</th>
<th>Total N Out Annual Avg (lb/yr)</th>
<th>Watershed Group</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stickney</td>
<td>IL0028063</td>
<td>Bio-P</td>
<td>1200.0</td>
<td>2018</td>
<td>786.3</td>
<td>37,761,403</td>
<td>707,230</td>
<td>0.30</td>
<td>109,106,647</td>
<td>18,142,075</td>
<td>7.69</td>
<td>No</td>
<td>Data was derived through District Maintenance and Operation Dept routine sampling and Analytical Lab Division analysis; all batteries are converted to an anoxic-anerobic-oxic configuration; Ostara® process operating for P-recovery on post-digester centrate and WASSTRIP-ate; 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; Primary sludge fermentation for carbon for bio-P and WASSTRIP® scheduled for implementation in Winter 2019.</td>
</tr>
<tr>
<td>Calumet</td>
<td>IL0028061</td>
<td>Bio-P (testing)</td>
<td>354.0</td>
<td>2018</td>
<td>246.8</td>
<td>6,446,613</td>
<td>1,990,902</td>
<td>2.65</td>
<td>22,580,569</td>
<td>5,431,782</td>
<td>7.23</td>
<td>No</td>
<td>Data was derived through District Maintenance and Operation Dept routine sampling and Analytical Lab Division analysis; all batteries were converted to an anoxic-anerobic-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.</td>
</tr>
<tr>
<td>Terrence J. O'Brien</td>
<td>IL0028098</td>
<td>None</td>
<td>333.0</td>
<td>2018</td>
<td>246.7</td>
<td>2,822,658</td>
<td>931,333</td>
<td>1.31</td>
<td>15,436,254</td>
<td>7,406,034</td>
<td>10.32</td>
<td>No</td>
<td>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-anerobic-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.</td>
</tr>
</tbody>
</table>
# Metropolitan Water Reclamation District of Greater Chicago (July - Dec 2018)

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

<table>
<thead>
<tr>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>James C. Kirie</td>
<td>IL0047741</td>
<td>Bio-P</td>
<td>52.0</td>
<td>2018</td>
<td>43.1</td>
<td>377,018</td>
<td>40,012</td>
<td>0.30</td>
<td>2,508,178</td>
<td>768,088</td>
<td>5.83</td>
<td>Lower Des Plaines</td>
<td>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.</td>
</tr>
<tr>
<td>John E. Egan</td>
<td>IL0036340</td>
<td>Nitrogen removal on sidestream</td>
<td>30.0</td>
<td>2018</td>
<td>25.7</td>
<td>415,496</td>
<td>209,074</td>
<td>2.97</td>
<td>2,061,154</td>
<td>1,199,727</td>
<td>16.65</td>
<td>Upper Des Plaines</td>
<td>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.</td>
</tr>
<tr>
<td>Hanover Park</td>
<td>IL0036137</td>
<td>None</td>
<td>12.0</td>
<td>2018</td>
<td>10.9</td>
<td>141,350</td>
<td>76,835</td>
<td>2.67</td>
<td>906,828</td>
<td>471,850</td>
<td>16.42</td>
<td>Upper Des Plaines</td>
<td>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.</td>
</tr>
<tr>
<td>Lemont</td>
<td>IL0028070</td>
<td>None</td>
<td>2.3</td>
<td>2018</td>
<td>2.5</td>
<td>35,768</td>
<td>18,797</td>
<td>2.47</td>
<td>239,875</td>
<td>149,922</td>
<td>19.70</td>
<td>Lower Des Plaines</td>
<td>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 Lower Des Plaines Watershed Group in late 2018.</td>
</tr>
</tbody>
</table>
Appendix 1
North Shore Water Reclamation District (July - Dec 2018)

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

<table>
<thead>
<tr>
<th>Program (if applicable):</th>
<th>Dollars:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aeration System Improvements at Gurnee Facility</td>
<td>$ 829,334.00</td>
</tr>
<tr>
<td>Aeration System Improvements at Waukegan Facility</td>
<td>$ 256,980.00</td>
</tr>
<tr>
<td>Aeration System Improvements at Clavey Road Facility</td>
<td>$ 203,188.00</td>
</tr>
</tbody>
</table>

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)

<table>
<thead>
<tr>
<th>Reporting Element 2 - Outreach and Communication Activities, July 2018 - Dec 2018</th>
<th>No. of Events</th>
<th>No. of Attendants</th>
<th>Description:</th>
<th>Partnerships:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentations, Conferences &amp; Workshops:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Print or Media:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Activities:</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
### North Shore Water Reclamation District (July - Dec 2018)

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

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NSWRD-Clavey Road WRF</td>
<td>IL0030171</td>
<td>None</td>
<td>17.8</td>
<td>2017</td>
<td>14.2</td>
<td>118,000</td>
<td>50,000</td>
<td>1.12</td>
<td>969,000</td>
<td>837,000</td>
<td>17.40</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Bio-P beginning Feb. 2018)</td>
<td>2018</td>
<td>15.3</td>
<td>135,000</td>
<td>44,400</td>
<td>0.95</td>
<td>1,139,000</td>
<td>794,000</td>
<td>17.70</td>
<td>NBWW</td>
<td>Bio-P Removal optimization studies</td>
<td></td>
</tr>
<tr>
<td>NSWRD-Gurnee WRF</td>
<td>IL0035092</td>
<td>(Bio-P started June, 2017)</td>
<td>23.6</td>
<td>2017</td>
<td>15.2</td>
<td>187,000</td>
<td>73,700</td>
<td>1.57</td>
<td>1,390,000</td>
<td>1,020,000</td>
<td>23.30</td>
<td>Des Plaines River</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2018</td>
<td>15.4</td>
<td>202,000</td>
<td>52,700</td>
<td>1.11</td>
<td>1,760,000</td>
<td>912,000</td>
<td>20.10</td>
<td>Watershed Workgroup</td>
<td>Bio-P Removal optimization studies</td>
<td></td>
</tr>
<tr>
<td>NSWRD-Waukegan WRF</td>
<td>IL0030244</td>
<td>(Bio-P started Dec., 2017)</td>
<td>22.0</td>
<td>2017</td>
<td>21.7</td>
<td>180,000</td>
<td>85,400</td>
<td>1.26</td>
<td>1,630,000</td>
<td>1,110,000</td>
<td>16.80</td>
<td>Des Plaines River</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2018</td>
<td>23.4</td>
<td>250,000</td>
<td>46,300</td>
<td>0.67</td>
<td>1,910,000</td>
<td>1,080,000</td>
<td>16.00</td>
<td>Watershed Workgroup</td>
<td>Bio-P Removal optimization studies</td>
<td></td>
</tr>
</tbody>
</table>

Appendix 1

Illinois NLRS Biennial Report | 2019
### Reporting Element 1 - Staff and Financial Resources, July 2018 - Dec 2018

<table>
<thead>
<tr>
<th>Program (if applicable):</th>
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<td>Capital Improvements:</td>
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</tr>
<tr>
<td>Operations &amp; Maintenance:</td>
<td></td>
</tr>
<tr>
<td>Feasibility Studies or Permit Required Projects not already listed:</td>
<td></td>
</tr>
<tr>
<td>Staff (No. of staff hours in the year or FTEs &amp; approx. $ value) working on nutrient related matters:</td>
<td></td>
</tr>
<tr>
<td>Other Resources Invested:</td>
<td></td>
</tr>
</tbody>
</table>

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

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

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

<table>
<thead>
<tr>
<th>Presentations, Conferences &amp; Workshops:</th>
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<th>No. of Attendants</th>
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<th>Partnerships:</th>
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<tbody>
<tr>
<td>Print or Media:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Activities:</td>
<td></td>
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</tbody>
</table>

Appendix 1

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

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Facility No. 1</td>
<td>IL0021989</td>
<td>Bio-P, Bio N</td>
<td>32</td>
<td>2017</td>
<td>10.2</td>
<td>289,568</td>
<td>53,012</td>
<td>0.62</td>
<td>1,242,777</td>
<td>837,424</td>
<td>9.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring Creek Plant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>325,815</td>
<td>51,704</td>
<td>0.48</td>
<td>1,679,314</td>
<td>1,054,961</td>
<td>10.10</td>
<td></td>
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</tr>
<tr>
<td>Facility No. 2</td>
<td>IL0021971</td>
<td></td>
<td>15</td>
<td>2017</td>
<td>8.9</td>
<td>78,039</td>
<td>20,577</td>
<td>1.03</td>
<td>385,393</td>
<td>298,696</td>
<td>10.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sugar Creek Plant</td>
<td></td>
<td></td>
<td></td>
<td>2018</td>
<td>10.2</td>
<td>58,384</td>
<td>17,145</td>
<td>0.61</td>
<td>430,178</td>
<td>226,617</td>
<td>7.41</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*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 |
|-------------------------------------------------|------------------|
| 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:                      |                  |

Program (if applicable):                  |

Dollars:                  |
# Appendix 1

## Urbana Champaign Sanitary District (July - Dec 2018)

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

<table>
<thead>
<tr>
<th>Presentations, Conferences &amp; Workshops:</th>
<th>No. of Events</th>
<th>No. of Attendants</th>
<th>Description:</th>
<th>Partnerships:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>40</td>
<td>Presentation at IWPC Annual Meeting: Implementing Bio-P in a plant not designed for it and at no cost.</td>
<td>IWPC</td>
</tr>
</tbody>
</table>

**Print or Media:**

**Other Activities:**
## Appendix 1
### Urbana Champaign Sanitary District (July - Dec 2018)

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>UCSD NE STP</td>
<td>IL0031500</td>
<td>None</td>
<td>1.73</td>
<td>2018</td>
<td>13.9</td>
<td>219,000</td>
<td>70,900</td>
<td>1.70</td>
<td>1,701,000</td>
<td>899,000</td>
<td>21.50</td>
<td>Salt Fork W/S Implementation Gp</td>
<td>The data should be accurate. Twice per week 24-hour composite samples were analyzed, averaged, and combined with flow totals to calculate pounds.</td>
</tr>
<tr>
<td>UCSD SW STP</td>
<td>IL0031526</td>
<td>Bio-P</td>
<td>0.33</td>
<td>2018</td>
<td>6.9</td>
<td>90,700</td>
<td>6,850</td>
<td>0.33</td>
<td>715,000</td>
<td>208,000</td>
<td>10.10</td>
<td>none</td>
<td>The data should be accurate. Twice per week 24-hour composite samples were analyzed, averaged, and combined with flow totals to calculate pounds.</td>
</tr>
</tbody>
</table>