Surviving the Storm and Investing in Infrastructure

Our community faced many challenges in 2019. We were hit hard with a large-scale water outage in February and experienced a series of outages and boil advisories following the Memorial Day tornadoes. Our sanitary sewer system also found itself in the path of destruction, requiring the activation of our emergency response plans. Throughout these crises, our team worked hard to repair damage, process 3,759 tons of tornado-related debris, communicate with our customers, and provide bottled water throughout the County. We also waived water, sewer, and solid waste disposal fees for many homeowners who were impacted by the natural disaster. I’m proud of our employees who handled these difficult situations with grace and dedication. Now, as we look to 2020, we are fully committed to continuing our reinvestment in water and sewer infrastructure, and to improving recycling and reuse programs throughout the County.

We have several large infrastructure projects slated for 2020, as you can see on pages 6 and 7. The Sewer Modernization and Replacement Tunnel (SMART) project is our largest capital project in decades. It’s a multi-million-dollar project that will replace a 40-year-old sewer line and pretreatment facility with a new micro-tunnel. This summer, we will begin boring the 1.5-mile tunnel, running from Moraine to West Carrollton. The project is expected to be completed in 2021 and operations will begin in 2022. This project will minimize the risk of potential environmental hazards as well as reduce expensive breaks and repairs, all while lowering our annual maintenance costs.

The new year will also bring some innovative programs at our Solid Waste District. In collaboration with Jefferson Township and the City of Dayton, we will develop and implement a new Pay as You Throw (PAYT) program in Jefferson Township. This volume-based waste disposal program provides an economic incentive for residents to recycle more and generate less trash for our landfills. Similar to utility billing for water or electricity, PAYT will adjust resident’s bills based on the volume of trash they put out each week. The program is scheduled to complete development in 2020 and will be implemented later in the year.

As we reflect on 2019 and learn from the multiple challenges we faced by natural disasters and aging infrastructure, we look forward to seeing the positive impact these projects and programs will have on our community in 2020 and for many years to come.

Sincerely,

Matt Hilliard
Interim Director of Environmental Services

Michael Colbert
County Administrator

Matt Hilliard
Interim Director of Environmental Services

Michael B. Colbert
Montgomery County Administrator
2019 Customer Service Call Totals

<table>
<thead>
<tr>
<th></th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calls Received</td>
<td>6,038</td>
<td>6,783</td>
<td>6,001</td>
<td>6,104</td>
<td>9,246</td>
<td>6,596</td>
<td>7,016</td>
<td>6,723</td>
<td>6,160</td>
<td>4,917</td>
<td>4,671</td>
<td></td>
<td>77,266</td>
</tr>
<tr>
<td>Calls Answered</td>
<td>5,880</td>
<td>6,544</td>
<td>5,864</td>
<td>5,989</td>
<td>8,477</td>
<td>6,237</td>
<td>6,705</td>
<td>6,492</td>
<td>5,954</td>
<td>4,735</td>
<td>4,368</td>
<td></td>
<td>74,087</td>
</tr>
<tr>
<td>% of Calls Answered</td>
<td>&gt;92%</td>
<td>97.38%</td>
<td>96.48%</td>
<td>98.12%</td>
<td>94.86%</td>
<td>94.56%</td>
<td>95.57%</td>
<td>95.59%</td>
<td>96.66%</td>
<td>96.30%</td>
<td>93.51%</td>
<td></td>
<td>96.28%</td>
</tr>
<tr>
<td>Abandon Calls</td>
<td>&lt;8%</td>
<td>0%</td>
<td>4%</td>
<td>2%</td>
<td>5%</td>
<td>5%</td>
<td>4%</td>
<td>2%</td>
<td>3%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td>Average Wait Time</td>
<td>&lt;0:03:00</td>
<td>0:00:39</td>
<td>0:00:34</td>
<td>0:00:37</td>
<td>0:00:33</td>
<td>0:01:17</td>
<td>0:01:01</td>
<td>0:00:48</td>
<td>0:00:54</td>
<td>0:00:49</td>
<td>0:00:49</td>
<td>0:00:51</td>
<td></td>
</tr>
</tbody>
</table>

2019 Water Reclamation Facilities Flows

**Eastern Regional Water Reclamation Facility**
- Average Daily Flow: 9.09 MGD*
- Total Flow Treated in 2019: 3,317,850,000 Gallons

**Western Regional Water Reclamation Facility**
- Average Daily Flow: 15.60 MGD*
- Total Flow Treated in 2019: 5,671,510,000 Gallons

*Million Gallons Per Day

2019 Reports of Water in Basement/Sanitary Sewer Overflow/Sewer Backups
Customer calls represent all calls into dispatch where a customer said a water in basement/sanitary sewer overflow/sewer backup is occurring. A corresponding investigative work order is created for every call. The investigation determines what event actually occurred and which work order is needed to resolve the situation.

<table>
<thead>
<tr>
<th></th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Calls (SR)</td>
<td>25</td>
<td>56</td>
<td>46</td>
<td>27</td>
<td>35</td>
<td>41</td>
<td>23</td>
<td>22</td>
<td>18</td>
<td>22</td>
<td>28</td>
<td>30</td>
<td>373</td>
</tr>
<tr>
<td>Investigation SO’s</td>
<td>26</td>
<td>58</td>
<td>50</td>
<td>26</td>
<td>35</td>
<td>40</td>
<td>23</td>
<td>21</td>
<td>16</td>
<td>23</td>
<td>29</td>
<td>31</td>
<td>378</td>
</tr>
<tr>
<td>Reported SSO’s</td>
<td>8</td>
<td>18</td>
<td>13</td>
<td>8</td>
<td>13</td>
<td>10</td>
<td>5</td>
<td>8</td>
<td>2</td>
<td>3</td>
<td>7</td>
<td>8</td>
<td>103</td>
</tr>
</tbody>
</table>

2019 Water Main Break Report
The info below contains the number of water main breaks by month.

<table>
<thead>
<tr>
<th></th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breaks by Month - 2019</td>
<td>79</td>
<td>69</td>
<td>31</td>
<td>15</td>
<td>14</td>
<td>13</td>
<td>25</td>
<td>18</td>
<td>10</td>
<td>16</td>
<td>33</td>
<td>48</td>
<td>371</td>
</tr>
<tr>
<td>Breaks by Month - 2018</td>
<td>168</td>
<td>42</td>
<td>25</td>
<td>16</td>
<td>8</td>
<td>16</td>
<td>25</td>
<td>14</td>
<td>12</td>
<td>18</td>
<td>39</td>
<td>47</td>
<td>430</td>
</tr>
</tbody>
</table>

*Measured in gallons
2019 Infrastructure Investment

Design $4,080,500
Construction $22,716,567
Total $26,797,067*

Sewer Projects
Water Projects

WMR = Water Main Replacement
ER = Eastern Regional Water Reclamation Facility

*This number represents the total number of dollars spent on design and construction during 2019. Please note, some projects may take multiple years to complete.

For more information visit: www.mcohio.org/departments/water_services/capital_projects_construction.php
2020
ONGOING AND UPCOMING CONSTRUCTION PROJECTS

**Design** $1,947,258
**Construction** $28,715,643
**Total** $32,192,901*

---

**Sewer Projects**

- **1.** ER – Concrete Tank Rehabilitation Phase 1 & 2
  - Total Construction Cost: $197,365.00
  - Start date: 9/16/19

- **2.** ER – Trickling Filter Rehabilitation
  - Total Construction Cost: $4,225,002.00
  - Start date: 7/9/19

- **3.** ER – Secondary Pump Replacement
  - Total Construction Cost: $400,000.00
  - Start date: 6/1/20

- **4.** Environmental Lab
  - Total Construction Cost: $7,500,000.00
  - Start date: 8/1/20

- **5.** erosion control sites 2, 3, and 4
  - Total Construction Cost: $668,708.00
  - Start date: 3/1/20

- **6.** erosion control site 8
  - Total Construction Cost: $662,916.00
  - Start date: 3/1/20

- **7.** wolf creek relief sewer (erosion control site 9)
  - Total Construction Cost: $4,915,000.00
  - Start date: 4/1/20

- **8.** Stillwater Lift Station Replacement
  - Total Construction Cost: $3,200,000.00
  - Start date: 7/1/20

- **9.** Habitat & Summit Med Lift Station
  - Total Construction Cost: $2,300,000.00
  - Start date: 8/1/20

- **10.** Beavercreek Lift Station Replacement
  - Total Construction Cost: $888,064.00
  - Start date: 1/8/19

**Water Projects**

- **11.** Maplecrest Sewer
  - Total Construction Cost: $497,120.00
  - Start date: To Be Determined

- **12.** Brydon WMR
  - Total Construction Cost: $464,232.00
  - Start date: 7/1/20

- **13.** Woodland Hills WMR Phase 4
  - Total Construction Cost: $1,286,000.00
  - Start date: 6/1/20

- **14.** Division & Homestead WMR
  - Total Construction Cost: $7,500,000.00
  - Start date: 8/1/20

- **15.** West Franklin WMR
  - Total Construction Cost: $2,002,300.00
  - Start date: 4/1/20

- **16.** Crown and Victory WMR
  - Total Construction Cost: $911,205.00
  - Start date: 7/1/20

- **17.** Broadview Road WMR
  - Total Construction Cost: $2,300,000.00
  - Start date: 6/1/20

- **18.** Dogwood Reservoir Rehabilitation
  - Total Construction Cost: $305,000.00
  - Start date: 3/6/20

- **19.** Centerville (1) South Tank Rehabilitation
  - Total Construction Cost: $911,205.00
  - Start date: 7/1/20

- **20.** DM-2 Pump Replacement
  - Total Construction Cost: $2,002,300.00
  - Start date: 4/1/20

- **21.** South Metro Tank 2 Construction
  - Total Construction Cost: $3,200,000.00
  - Start date: 8/1/20

- **22.** Centerville (1) South Tank Rehabilitation
  - Total Construction Cost: $3,200,000.00
  - Start date: 4/1/20

- **23.** Arc Flash (water and sewer) – Taking Place at Multiple Locations
  - Total Construction Cost: $600,000.00
  - Start date: 10/1/20

---

*This number represents the total number of dollars that are projected to be spent on design and construction during 2020. Please note, some projects may take multiple years to complete.

For more information visit: www.mcohio.org/departments/water_services/capital_projects_construction.php

---

**2020 Projected Infrastructure Investment**

<table>
<thead>
<tr>
<th>Design</th>
<th>$1,947,258</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>$28,715,643</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$32,192,901</strong></td>
</tr>
</tbody>
</table>

---

**WMR = Water Main Replacement**

**ER = Eastern Regional Water Reclamation Facility**
In 2019, the Montgomery County Solid Waste District provided over $400,000 in grant funding to local communities, businesses, schools, and nonprofit organizations. Funding is used to enhance, increase, and promote recycling, waste reduction, and the end-use market of recycled materials in Montgomery County.

The Buy Recycled Grant provides funding to Montgomery County schools and nonprofit organizations for the purchase of recycled content materials. In 2019, three schools and organizations were selected to receive the available funding. One recipient was the Citywide Neighborhood Development Corporation, which was awarded funding to purchase accessible, recycled-plastic picnic tables. This project improved the visitor experience at Madden Hills Wogaman Park, while also stimulating the market for recycled content materials.

The District Incentive Grant provides funding opportunities to the 28 member communities that make up the Montgomery County Solid Waste District. Funding can be used for projects that create or enhance recycling opportunities within the community. Twenty organizations received a grant in 2019. Of these, the City of Centerville was awarded funding to purchase additional curbside recycling carts to increase participation in the city’s curbside recycling program. Labeling on the carts provides residents with information on proper recycling, in order to minimize contamination of recyclables.

### 2019 District Incentive Grant Awards

<table>
<thead>
<tr>
<th>Organization</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butler Township</td>
<td>$13,508.59</td>
</tr>
<tr>
<td>City of Brookville</td>
<td>$3,629.00</td>
</tr>
<tr>
<td>City of Centerville</td>
<td>$31,790.00</td>
</tr>
<tr>
<td>City of Clayton</td>
<td>$14,920.00</td>
</tr>
<tr>
<td>City of Dayton</td>
<td>$17,500.00</td>
</tr>
<tr>
<td>City of Dayton - Airport</td>
<td>$19,220.60</td>
</tr>
<tr>
<td>City of Englewood</td>
<td>$37,190.66</td>
</tr>
<tr>
<td>City of Germantown</td>
<td>$18,412.42</td>
</tr>
<tr>
<td>City of Huber Heights</td>
<td>$24,973.98</td>
</tr>
<tr>
<td>City of Miamisburg</td>
<td>$11,407.50</td>
</tr>
<tr>
<td>City of Moraine</td>
<td>$9,643.38</td>
</tr>
<tr>
<td>City of Oakwood</td>
<td>$16,720.00</td>
</tr>
<tr>
<td>City of Riverside</td>
<td>$12,477.50</td>
</tr>
<tr>
<td>City of Union</td>
<td>$30,894.76</td>
</tr>
<tr>
<td>Driscoll Elementary</td>
<td>$1,665.13</td>
</tr>
<tr>
<td>Five Rivers Metroparks</td>
<td>$9,520.69</td>
</tr>
<tr>
<td>Harrison Township</td>
<td>$3,539.16</td>
</tr>
<tr>
<td>Historic South Park</td>
<td>$1,631.00</td>
</tr>
<tr>
<td>Jackson Township</td>
<td>$8,874.00</td>
</tr>
<tr>
<td>Washington Township</td>
<td>$10,737.48</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$298,655.85</strong></td>
</tr>
</tbody>
</table>

### 2019 New Service Recycling Grants

The Business New Service Recycling Incentive Grant is available to all commercial businesses and organizations within Montgomery County to enhance, increase, and promote recycling, waste reduction, and composting opportunities. For eligible services, Montgomery County will fund the first year of a three-year, new-service contract. For more information please contact Community Outreach and Education Manager John Minear at MinearJ@mcohio.org or 937-225-4999.

- B & G Cigar Lounge
- Best Mattress and Furniture
- Brookville Grill
- Dayton Metro Library — Southeast Branch
- Dayton Metro Library — Trotwood Branch
- Dayton Metro Library — Wilmington Stroop Branch
- Dunkin Donuts #5406
- Energy Optimizers USA
- Financial South Building
- Food Bazaar
- Front Street Building
- The Hairless Hare
- King Furniture — Springboro Pike
- King Furniture — Siebenthaler
- Kohler Catering
- Popeye’s #6405
- Southpaw Enterprises
- Specialty Machine
- The Stacked Pickle
- Steck Manufacturing

### 2018-2019 Buy Recycled Grant Awards

<table>
<thead>
<tr>
<th>Organization</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chaminade Julienne Catholic High School</td>
<td>$3,550.00</td>
</tr>
<tr>
<td>Citywide Neighborhood Development Corporation</td>
<td>$4,818.36</td>
</tr>
<tr>
<td>YWCA Dayton</td>
<td>$7,670.00</td>
</tr>
</tbody>
</table>

### 2019 Business Incentive Grants

<table>
<thead>
<tr>
<th>Organization</th>
<th>Project Description</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Dayton</td>
<td>Purchase of compost shredder and screen</td>
<td>$22,301.70</td>
</tr>
<tr>
<td>Fuyao Glass America, Inc.</td>
<td>Purchase of vertical balers</td>
<td>$32,734.10</td>
</tr>
</tbody>
</table>
2019 Beautification Grants

Beautification Grants provided $21,464 for 23 projects in 2019 to promote volunteerism and community beautification.

- American Veterans Heritage Center
- Cities of Service Initiative City of Kettering
- Downtown Dayton Partnership
- Dunbar Early College High School
- East End Community Services
- Five Oaks Neighborhood Improvement Association
- Harvest for Hope
- Historic Huffman Neighborhood Association
- Huffman Historic Neighborhood
- K12 Gallery & TEJAS
- Leaf and Blossom Garden Club
- Miami Valley Young Marines
- Miamisburg Community Foundation
- Moraine Foundation
- Mount Olive Baptist Church
- New Lebanon Parks and Recreation
- Nordale Park Community Garden
- Oregon District Business Association
- Patterson Park Civic Association
- Ronald McDonald House Charities of Dayton
- Salem Avenue Business Association
- St. Anne’s Hill Historic Society
- University Row Neighborhood Association

Recycle Right Pilot Program

The City of Centerville was selected as one of six Ohio municipalities to participate in the 2019 “Recycle Right” pilot. With a $2,500 grant from The Recycling Partnership, the Ohio Environmental Protection Agency, Montgomery County Environmental Services, and Rumpke Recycling, this program sought to reduce residential recycling bin contamination through education.

The extensive six-month program included community outreach events and informational mailers gearing up for the “feet on the street” initiative. Employees and volunteers evaluated a sample of bins in randomly-selected neighborhoods. When items did not belong, residents received “oops tags” with specific feedback on how to recycle better next time.

By the end of the program, plastic bags were determined to be the number one contaminant in residential recycling carts. The use of plastic bags significantly decreased throughout the program and total recycling cart contamination decreased from 19% to 10% after six months of programming. This pilot acts as success story for the “Recycle Right” program and will be a resource for other Ohio municipalities that wish to enact their own initiative in the future.

Building to LEED

The Montgomery County Solid Waste District received two Silver Leadership in Energy and Environmental Design (LEED) certifications in 2019. LEED is the most widely-used green building rating system in the world and is a globally-recognized symbol of sustainability achievement.

Montgomery County opened the Operations Center in March 2019 to centralize staff and improve the efficiency of its transfer and recycling stations. On the same campus, the Environmental Learning Center opened its doors in August 2014 to educate children and adults about environmental sustainability and conservation in the County.

Structures seeking LEED certifications are evaluated on nine key areas of green building, including use of recycled materials and resources, location and transportation, and water efficiency. The accreditation process is rigorous and silver is the third highest level.

As LEED facilities, these buildings not only work to save environment’s resources, but also cost less to operate, boost employee productivity and support human health.

Five-Year Plan for 2018-2022

Ohio enacted House Bill 592 in 1988, which directed solid waste districts to reduce reliance on landfills and increase efforts to reduce, reuse, and recycle. The bill also mandated that solid waste districts create a five-year plan to outline operations and educational efforts to reduce waste sent to landfills. The Montgomery County Solid Waste District completed its five-year plan for 2018-2022. The plan completed the ratification process and received 100% approval from all of our local jurisdictions and was approved in April 2019 by the Director of the Ohio Environmental Protection Agency. The District began implementing the five-year plan pursuant to the Director’s approval.

For more information, contact John Minear at 937-225-4999.
### Overall Montgomery County Recycling in 2018*

<table>
<thead>
<tr>
<th>Type of Recyclable</th>
<th>Industrial</th>
<th>Residential &amp; Commercial</th>
<th>Total Tons Recycled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferrous Metals</td>
<td>240,134</td>
<td>4,073</td>
<td>244,207</td>
</tr>
<tr>
<td>Non-Ferrous Metals</td>
<td>33,776</td>
<td>2,251</td>
<td>36,027</td>
</tr>
<tr>
<td>Corrugated Cardboard</td>
<td>30,067</td>
<td>27,052</td>
<td>57,119</td>
</tr>
<tr>
<td>All Other Paper</td>
<td>13,377</td>
<td>43,759</td>
<td>57,116</td>
</tr>
<tr>
<td>Yard Waste</td>
<td>0</td>
<td>43,759</td>
<td>43,759</td>
</tr>
<tr>
<td>Plastics</td>
<td>17,113</td>
<td>10,204</td>
<td>27,317</td>
</tr>
<tr>
<td>Miscellaneous (e.g., reuse, clay)</td>
<td>27,219</td>
<td>743</td>
<td>27,962</td>
</tr>
<tr>
<td>Glass</td>
<td>26</td>
<td>8,557</td>
<td>8,583</td>
</tr>
<tr>
<td>Food</td>
<td>11,405</td>
<td>1,710</td>
<td>13,115</td>
</tr>
<tr>
<td>Scrap Tires</td>
<td>0</td>
<td>6,679</td>
<td>6,679</td>
</tr>
<tr>
<td>Textiles</td>
<td>0</td>
<td>4,743</td>
<td>4,743</td>
</tr>
<tr>
<td>Wood</td>
<td>2,805</td>
<td>4,102</td>
<td>6,907</td>
</tr>
<tr>
<td>Ash (recycled ash only)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Electronics</td>
<td>0</td>
<td>1,112</td>
<td>1,112</td>
</tr>
<tr>
<td>Appliances / “White Goods”</td>
<td>0</td>
<td>495</td>
<td>495</td>
</tr>
<tr>
<td>Household Hazardous Waste</td>
<td>0</td>
<td>439</td>
<td>439</td>
</tr>
<tr>
<td>Used Motor Oil</td>
<td>0</td>
<td>193</td>
<td>193</td>
</tr>
<tr>
<td>Commingled Recyclables</td>
<td>0</td>
<td>112</td>
<td>112</td>
</tr>
<tr>
<td>Batteries</td>
<td>0</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>376,112</strong></td>
<td><strong>171,510</strong></td>
<td><strong>547,632</strong></td>
</tr>
</tbody>
</table>

*Data from the 2018 Annual District Report, prepared for the Ohio EPA in accordance with OAC 3745-27-90.

**All numbers are calculated in tons.
Solid Waste & Recycling Services
1001 Encrete Lane
Moraine, Ohio 45439
www.mcswd.org

Drinking Water & Water Reclamation Services
1850 Spaulding Road
Kettering, Ohio 45432
www.mcohio.org/water