All public water systems are required to track and annually document asset management metrics in accordance with Ohio Administrative Code Rule 3745-87-05.

Metrics are performance measures that allow public water systems (PWSs) to gauge the status of their water system. Metrics must be tracked and reported annually to Ohio EPA. PWSs are encouraged to set goals for their metrics to improve operations and reduce costs over time.

Tracking Noncommunity Metrics
All noncommunity PWSs are required to review and document the following metrics:

- **Documentation of instances when the water system’s pressure dropped below 20 psi**
  
  If the water system's pressure drops below 20 psi, it is considered a disruption of service. The PWS must keep a tally of each disruption of service event. Disruption of service is defined in Ohio Administrative Code 3745-83-02 (e.g. Type 2, 3 & 4 events). For example, the power goes out and the water system depressurizes. The power is back on six hours later and pressure is restored. Then, later that same day, the well pump breaks and the system depressurizes again. These would count as two separate events on the same day. There can also be one event over multiple days. For example, if the well pump breaks and is down for three days. That would count as one event. The total number of events for the year is what must be reported.

- **Number of days unable to serve water**
  
  Count each day when the facility is unable to serve water during any portion of regular business hours due to an emergency in the water system (e.g., equipment failure, power outage). The total number of days the system was unable to serve water must be reported. For example, if the well pump breaks and is down for three days, those would count as three days unable to serve water.

  This includes the following:
  - The facility cannot serve water during their regular business hours due to an emergency in the water system. For example, a facility is open 24 hours/day, the power goes out, and the facility does not have a generator. Therefore, the water system depressurizes and cannot serve water. Power is restored 10 hours later that same day. That would count as one day unable to serve water.
  - The facility cannot serve water during part of their regular business hours due to an emergency in the water system. For example, a facility is open from 10 a.m. to 7 p.m., the power goes out at 1 p.m., and the facility does not have a generator. Therefore, the water system depressurizes and cannot serve water. Power is restored the next day at 2 p.m. That would count as two days unable to serve water.
  - For water systems that operate part of their water system during the off-season (e.g., partially-depressurized seasonal systems): They would count any days when they are unable to serve water during the off-season in the section of the system that stays pressurized. For example, if a campground has 10 cabins that stay pressurized in the off-season, and the well pump fails, then the campground would count each day until the well pump is replaced and pressure is restored.

  This **does not** include the following:
  - If the facility shuts down during business hours for planned work on the water system. For example, the water system has an old, corroded pressure tank and decides to replace it before it breaks. The replacement occurs during business hours and the water system is unable to provide water while the work is completed. This **would not** count as a day unable to serve water because it is for planned work on the water system. However, water systems are encouraged to complete work on their system after hours, when possible.
Noncommunity Asset Management Metrics

- Days during the off-season if the facility fully depressurizes the water system during the off-season (i.e., Depressurized Seasonal System).
- Depressurizations that occur after business hours when the facility is closed, as long as pressure is restored before the facility opens. For example, if the facility is open from 10 a.m. to 7 p.m., the well pump breaks at 8 p.m., and is replaced and pressure is restored by 9 a.m. the next day. In that case, the depressurization occurred and was resolved after hours.

• Repair, rehabilitation, or replacement tasks per year (Emergency vs. Planned)

  Track and report the total number of completed water system repair, rehabilitation, and replacement tasks each year. The PWS must track planned tasks and emergency tasks separately.

  ○ Planned = Tasks that were scheduled ahead of time and not in response to an emergency (e.g., rehabilitating pump, replacing cartridge filters, replacing pump tubing).

  ○ Emergency = Tasks completed on an emergency basis (e.g., replacing broken well pump or pressure tank, unexpected repair work). These tasks were not anticipated and will likely be completed in response to equipment failure or malfunction.

• Reserve funds

  Report the amount of reserve funds on hand or available for immediate use by the water system (e.g., reserve fund balance) as of Dec. 31. This could include cash reserves (e.g., savings account), a line-of-credit, etc. It is recommended to have enough on hand to replace the most critical water system asset in the event of failure. If no reserve funds were available, report $0. Ohio EPA has seen many water systems end up in enforcement because they did not have funds available to address water system issues. This metric is intended to encourage water systems to be better prepared financially.

Overall Metrics

<table>
<thead>
<tr>
<th>Examples</th>
<th>Documentation of instances when the water system’s pressure dropped below 20 psi</th>
<th>Number of days unable to serve water</th>
<th>Repair, rehabilitation or replacement tasks (emergency vs. planned)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A facility is open 24 hours/day, the power goes out, and the facility does not have a generator. The water system depressurizes and cannot serve water. Power is restored 10 hours later that same day.</td>
<td>1</td>
<td>1</td>
<td>Emergency = 0 Planned = 0 (No PWS work needed, wait for power to be restored)</td>
</tr>
<tr>
<td>A facility is open from 10 a.m. to 7 p.m., the power goes out at 1 p.m., and the facility does not have a generator. The water system depressurizes and cannot serve water. Power is restored at 2 p.m. the next day.</td>
<td>1</td>
<td>2 (Part of 1st day, part of 2nd day)</td>
<td>Emergency = 0 Planned = 0 (No PWS work needed, wait for power to be restored)</td>
</tr>
<tr>
<td>The water system has an old, corroded pressure tank and decides to replace it before it breaks. The replacement is completed during business hours and the water system is unable to provide water while the work is completed.</td>
<td>1</td>
<td>0 (Do not count planned work)</td>
<td>Emergency = 0 Planned = 1 (Planned replacement of pressure tank)</td>
</tr>
<tr>
<td>A water system is open 9 a.m. to 10 p.m. The well pump fails at 7 p.m. and is replaced two days later at 6 p.m.</td>
<td>1</td>
<td>3 (Part of 1st day, all of 2nd day, part of 3rd day)</td>
<td>Emergency = 1 Planned = 0 (Emergency replacement of well pump)</td>
</tr>
</tbody>
</table>
Noncommunity Asset Management Metrics

Reporting Metrics
Beginning in 2020, metrics must be documented online annually between Aug. 1 and Nov. 15 using the Drinking Water Online Portal (DROP). The metrics data will be reported for the previous year. For example, in 2020, water systems will report their 2019 metrics data.

Each public water system must have a designated person (“Metrics Submitter”) who will be submitting the metrics data. This person must have a valid email address in order to log in. Please contact Ohio EPA if the Metrics Submitter for your water system has changed. Additional instructions for how to access DROP will be provided.

Contact
For more information regarding metrics, visit: https://epa.ohio.gov/ddagw/pws/assetmanagement or contact Ohio EPA’s Central Office at (614) 644-2752.