Information Item: MCES Flow Metering

Kyle Colvin, Manager, Engineering Programs
Ryan Vial, Assistant Manager, Metering and Alarm

Environment Committee: July 23, 2019
Metropolitan Council Environmental Services

WHO WE SERVE
- 7-county Twin Cities Metro Area
- 110 communities
- 2,700,000+ people

OUR FACILITIES
- 9 wastewater treatment plants
- 610 miles of interceptors
- 250 million gallons per day (avg)
- 224 flow meters

OUR ORGANIZATION
- 600+ employees
- $7 billion in valued assets
- $150 million / yr capital program
Why Do We Meter?

• Community flow allocation (billing)
• Treatment plant permit compliance
• Inflow and Infiltration (I/I) identification and monitoring
  o Peak flows for I/I Program
• Evaluating system performance and planning
• Identify issues with Interceptor and community systems
2019 Revenue Sources
$300M

- 77% Municipal Wastewater Charges (MWC)
- 15% Sewer Availability Charge
- 4% Industrial Waste Charges
- 4% Other
Breakers

Strip Heaters

PLC processor

Wireless Gateway Device

Ultrasonic Converter

Battery Backup
Daily Flow Data for Selected Meters

- M641 Calibration
- M641 Corr
- M641 Flowcheck
- M641 Raw

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Examples of Community Assistance Using Regional Meter Data

• Orono

• Shoreview
Daily Flow Data for Selected Meters

L49MDD Corr  L49MDD Raw

THG

Sat 12/29/12  Sat 01/26/13  Sat 02/23/13  Sat 03/23/13

Created: 07/19/2013 16:04
This map is for geographical representation only, for a general location of MH should not be used as a reference for excavation or engineering purposes.

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MH 11Q & MH 7R: 54°F
MH 10Q varied: 38-48°F
M204, MH 4P, & MH 8P: 45°F
City MH near MH 10Q and Rice Creek Regional Trailhead: 38°F
In Summary

- Metering system is one of the most extensive and sophisticated in the Country
- Primary basis for regional flow allocation to communities (billing)
- Requires unique technical knowledge
- Metering type based on specific conditions
- Continuing advances in technology
- Used to identify local community system events
Questions

Kyle Colvin
Manager, Engineering Programs
(612) 602-1151
kyle.colvin@metc.state.mn.us

Ryan Vial
Assistant Manager, Metering and Alarm
(612) 602-4534
ryan.vial@metc.state.mn.us