

Operational Sustainability: A Holistic Approach to Water Management



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Overview: Hillsboro Water

- Sources: Tualatin River; Barney Reservoir and Hagg Lake (summer)
- Over 25,000 metered connection
- 300 miles of distribution pipes
- Service population: 90,000 residents
- Residential GPCD: 63 gal
- ADD: 17 MGD
- PDD: 30 MGD



A Look To The Future

- 2070 Projected Demand: 53 MG ADD and 91 MG PDD
- Large Areas of Residential and Industrial Growth
- Willamette Water Supply



Meeting
Increasing
Demands –
Portfolio of
Strategies

Large
Capital
Investment

- Willamette Water Supply
- Water Rights
- JWC WTP Expansion

Operational

- Active Leak Detection
- Automatic Meter Reading
- Efficiencies and Conservation
- Asset Management

Active Leak Detection Program

- Entire city distribution system checked annually
- Acoustic listening technology – Sewerin's Aqua 200
- 3 Part Process: Loggers, Correlators, Audio Listening



Active Leak Detection Program

Benefits

- Identify Leaky Valves and Hydrants
- Detects Customer Leaks
- Homeowner Inquiries
- Coordination w/ storm water team



Automatic Meter Readings (AMR)

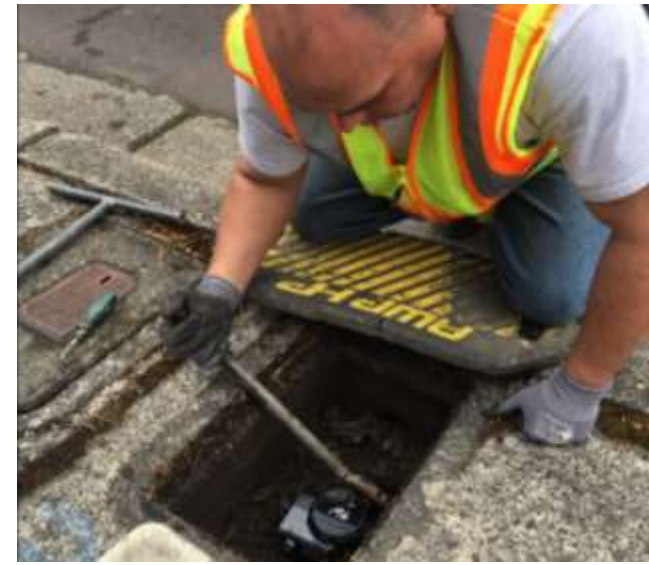
- 10 year project to replace 25,000 meters
- Customer use data logging
- 96 days of hourly usage data



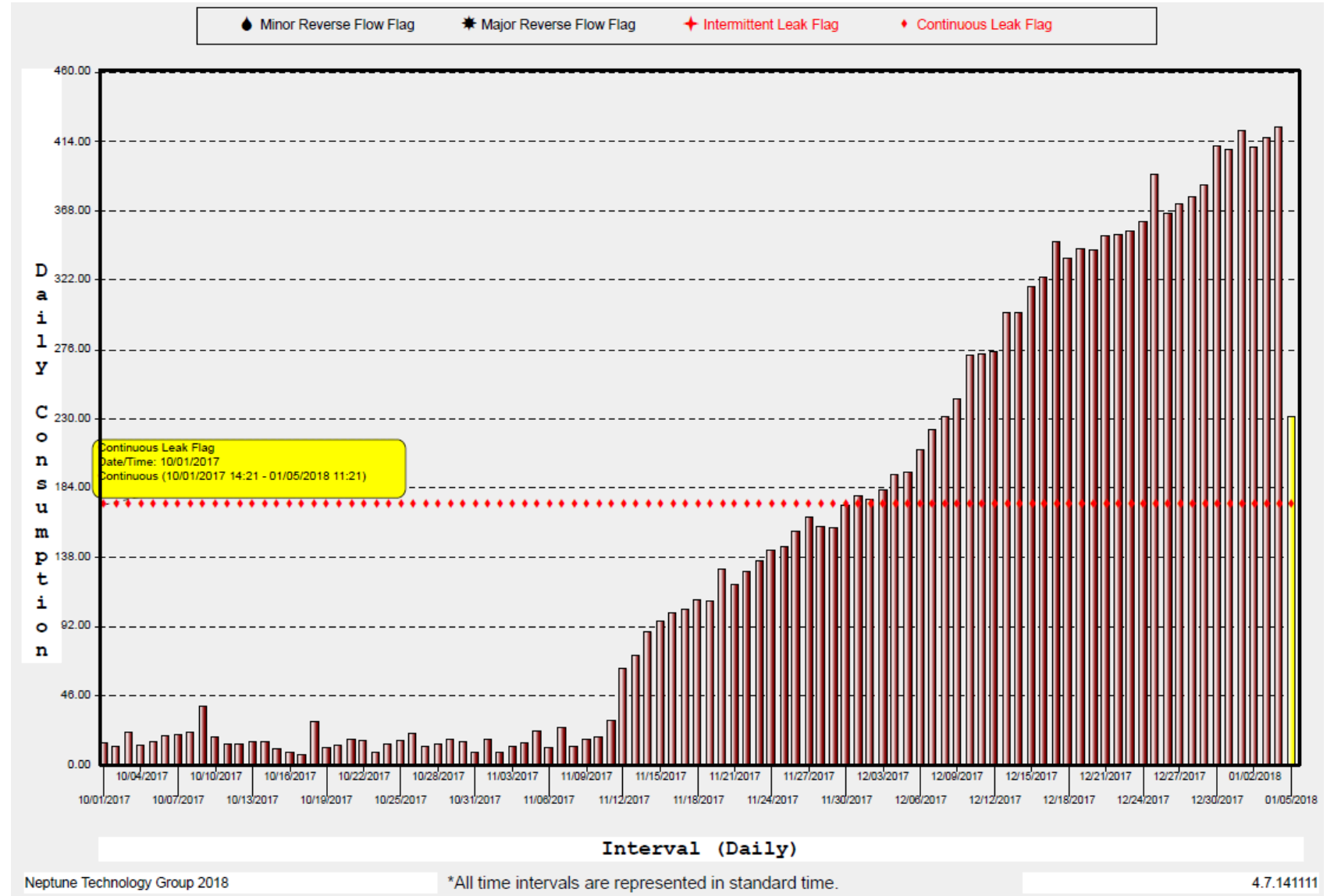
Automatic Meter Readings (AMR)

Benefits

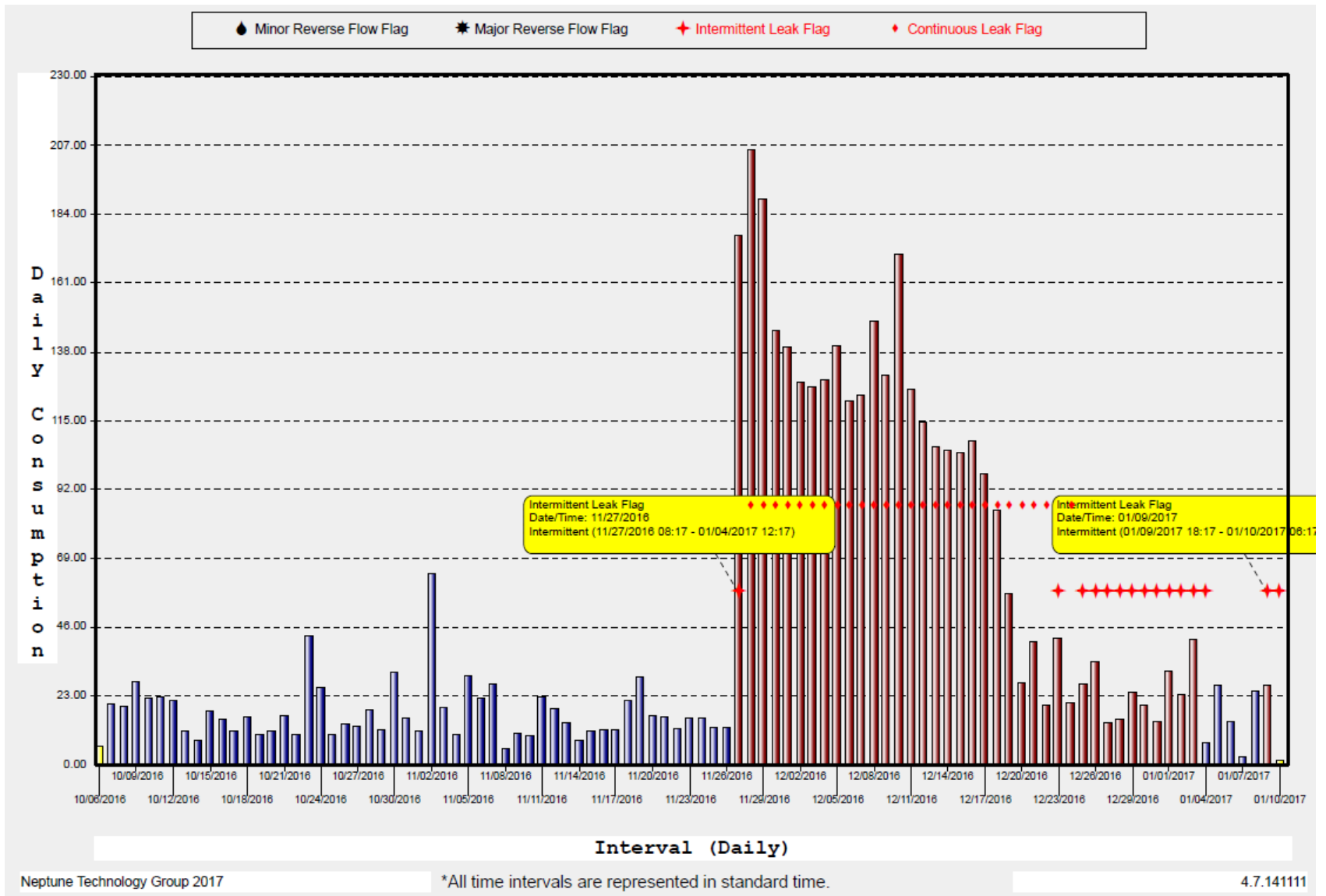
- Customer service – leak disputes solved using data logging
- Bi-Monthly to Monthly Billing Cycle – faster leak detection
- Reduction in staff time
- System Development Charges (SDC) tracking for large users – peak day



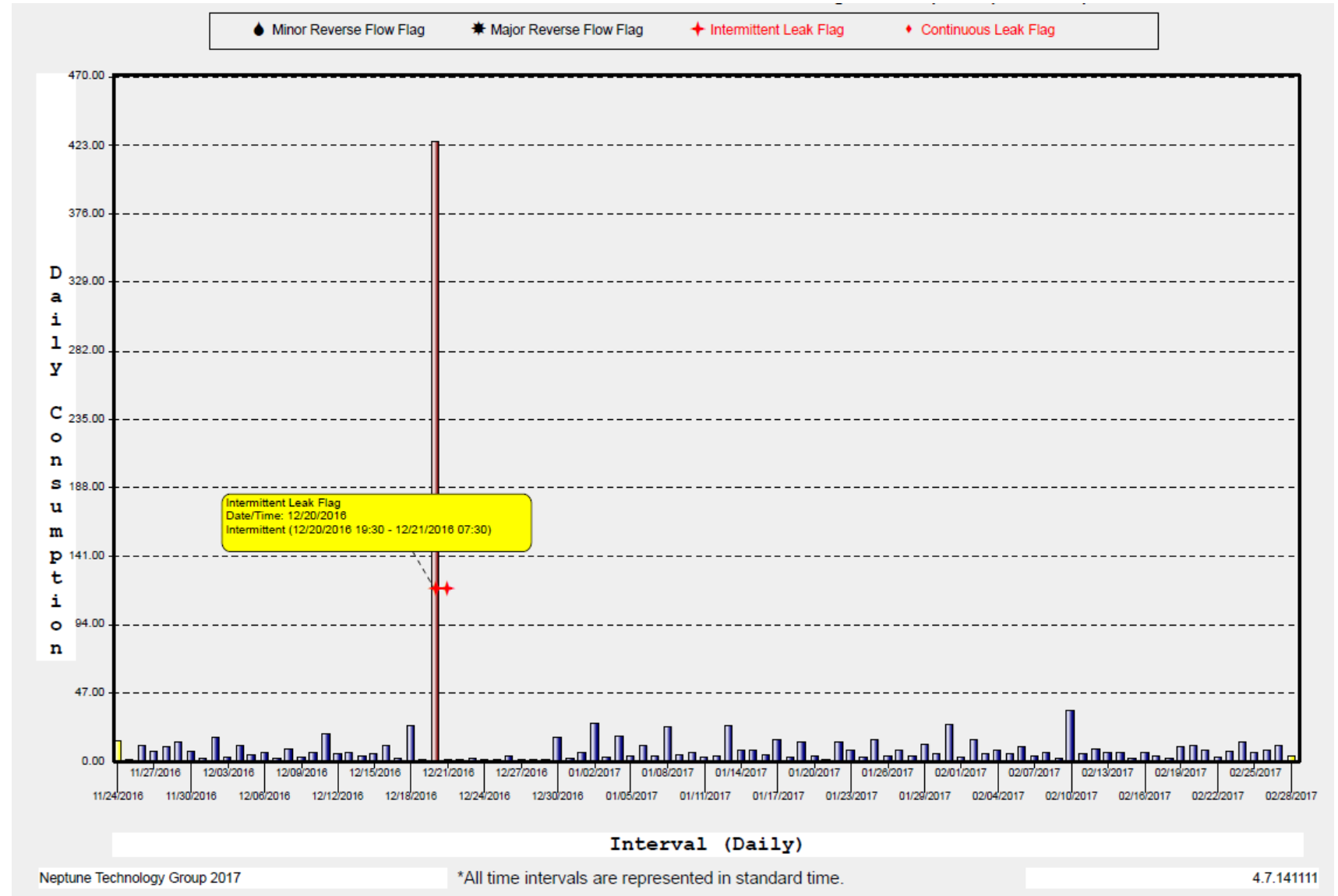
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Automatic Meter Readings (AMR)



Asset Management

- Tracking lifecycle of assets and planning for replacement/rehab
- Currently tracked: Valves, Hydrants, Reservoirs, Pump Stations, PRVs
- Pilot program: Mains, Service Lines, Meters



Parks & Recreation Department

- Weather Station
- Parks Facility Usage
- Soil Moisture Sensor Program



Efficiencies & Conservation

- Smart Flushers pilot
- Monthly JWC Audits (produced vs. sold)



Recap Time!

- Portion of a larger portfolio
- Low barrier to entry
- Customer service



Thank you!

Questions?

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