Loudoun Water
Asset Management Program

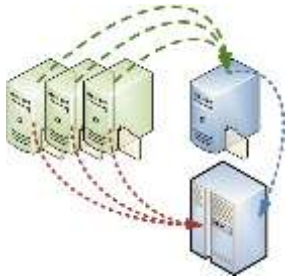
David Huffer

LOUDOUN WATER

About Loudoun Water

- Chartered in 1959 – Loudoun County Sanitation Authority.
- Currently serve estimated population of over 280,000 with more than 70,000 accounts.
- 23 MGD Average Water Demand and 17 MGD Average Wastewater Flows.
- Purchased water capacity from Fairfax Water- 50 MGD Max Day. Goose Creek WTP Approx 12 MGD. Constructing Trap Rock WTP Initial Capacity 20 MGD – online 2017.
- Beaverdam Creek Dam and Goose Creek Dam and reservoirs. Quarry storage development.
- Blue Plains Capacity 13.8 MGD. Broad Run WRF 11 MGD current capacity.
- Multiple Community Water and Wastewater systems in western part of county – well systems and small wastewater treatment facilities.
- Multiple Storage and Pumping Facilities

Importance of EAM



- Best way to track and report on Loudoun Water's thousands of equipments and multiple facilities.
- Streamlining maintenance operations to make the business more efficient as a whole.
- Enables visibility of overall condition and understanding of future R&R funding needs.

Our Journey Starts 2010

- Loudoun Water Team formed with representation from across the business to explore Asset Management Program development per Strategic Plan.
- EPA 10 step process used as a guideline.
- Piloted a couple of facilities to gain an understanding of the concepts.

2011

- Selected a consultant to assist in program development.

- Gap Analysis to create Road Map - identified Key future steps:

1) Develop internal structure to support and sustain the effort.

2011

2) Develop standardized methodology across the organization to establish:

- Asset Hierarchy
- Asset Valuation
- Asset useful life
- Condition, criticality and risk assessment and scoring.

2011 cont'd

3) Conduct a pilot to test and refine methodology
4) Close data gap for all assets in all systems
5) Develop a data collection SOP
6) Develop target service levels and performance measures
7) Enhance MMS capability

2011 cont'd

8) Develop reports for capital rehabilitation/replacement needs.
9) Enhance CIP development through standardized business case development and scoring/ranking criteria.
10) Improve maintenance SOP's and develop performance measures

2012

- SAP selected as new ERP solution to replace legacy systems including Hansen MMS
- Development of asset hierarchy, assessment methodology, and manual.
- Began effort to close the gap on attributed data collection in order to prepare for data load to SAP.

2013

- Focus on SAP and Asset Inventory Development

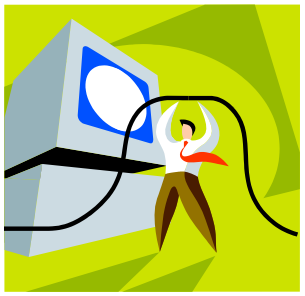
- Refine GEO.E Process linking SAP to our GIS

2014

- Continued Focus on SAP Implementation (October 2014 Go Live)

- Focus on Asset Inventory and Maintenance Plans

2015



- Finalize specification for new project asset on-boarding and “Data Loader” spreadsheet.

- Focus on SAP parts inventory and continued asset inventory

2016-17

- Exploring better alignment with ISO 55000 and ISO 14224
- Enhancements in SAP to support Condition & Criticality scoring
- Develop Reports
- Complete Condition & Criticality Assessments
- Develop Mobile Application for Work Orders

Costs to Date

- Total consulting fees to date - $470k
- Projected spending 2016 - $100k