LEADING BUSINESS PRACTICES IN ASSET MANAGEMENT

Case Study Report

B&V PROJECT NO. 193122

PREPARED FOR

American Water Works Association

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# Table of Contents

Acknowledgements ............................................................................................................................... 7
Introduction ............................................................................................................................................... 8
Leading Practice – Current State of Assets .......................................................................................... 10
  Downers Grove Sanitary District ........................................................................................................ 11
  Kansas City Board of Public Utilities .............................................................................................. 19
  Marshalltown Water Works .............................................................................................................. 28
  Hastings Utilities ............................................................................................................................... 34
  San Diego County Water Authority .................................................................................................. 40
Leading Practice – Levels of Service .................................................................................................. 50
  Portland Water Bureau ....................................................................................................................... 51
  Brunswick & Topsham Water District ............................................................................................... 70
Leading Practice – Risk Management .................................................................................................. 77
  City of Annapolis ............................................................................................................................... 78
  Washington Suburban Sanitary Commission .................................................................................... 84
Leading Practice – Maintenance and Reliability ............................................................................... 98
  Fairfax Water ....................................................................................................................................... 99
  Des Moines Water Works .................................................................................................................. 105
  Livingston County Water and Sewer Authority ........................................................................... 114
Leading Practice – Asset Management Planning .......................................................................... 119
  Mount Pleasant Waterworks ............................................................................................................ 120
# LIST OF TABLES

Table 1 List of utility case studies and leading practice key concepts covered ........ 9  
Table 2 Portland Water Bureau Key Service Levels ........................................ 55  
Table 3 Portland Water Bureau - Benefits of the asset management approach .... 68  
Table 4 Brunswick and Topsham Water District - Water system operations  
levels of service .................................................................................................. 73  
Table 5 Brunswick and Topsham Water District - Water Resource  
Management Levels of Service ........................................................................ 73  
Table 6 Brunswick and Topsham Water District Business Principles Levels  
of Service ............................................................................................................. 74  
Table 7 Brunswick and Topsham Water District - Workplace Environment  
Levels of Service ................................................................................................ 74  
Table 8 Brunswick and Topsham Water District - Customer Service Levels of  
Service .................................................................................................................. 74  
Table 9 City of Annapolis - Consequence of failure criteria ............................... 82  
Table 10 WSSC - Asset Management Process and Procedures .......................... 90  
Table 11 WSSC - Probability of Failure Criteria .............................................. 91  
Table 12 WSSC - Consequence of Failure Factors ........................................... 92  
Table 13 WSSC - Loss of Service Impact ......................................................... 92  
Table 14 WSSC - Examples of Mitigation Approaches and Mitigation Factors ...... 93  
Table 15 WSSC - BRE Zones ............................................................................ 93  
Table 16 WSSC - Consequence of Failure Bands ............................................. 94  
Table 17 WSSC - Risk Reduction Efforts, Number of Assets in Each BRE Zone  
by COF Band ....................................................................................................... 94
LIST OF FIGURES

Figure 1 Downers Grove Sanitary District - Screen shot of CMMS data for a service lateral.......................................................... 14
Figure 2 Downers Grove Sanitary District - Condition Grading of the Sewer System ........................................................................ 16
Figure 3 BPU - Sample name plate for a motor control center............................... 21
Figure 4 BPU - Sample of data collected by staff during plant construction........ 22
Figure 5 BPU - Sample documentation opened from within Maximo using App Enabler ............................................................................ 23
Figure 6 BPU - Water production KPI for PM performance from dedicated start center ................................................................. 23
Figure 7 BPU - Example Lubrication Analysis Report........................................ 26
Figure 8 MWW - Extract from the GIS.................................................................................. 31
Figure 9 MWW - Screen shot of asset inventory in the CMMS............................ 32
Figure 10 Hastings Utilities - Screenshot of GIS with data attributes for a distribution main ............................................................................ 37
Figure 11 San Diego County Water Authority Aqueducts ........................................ 44
Figure 12 San Diego County Water Authority - Geovisualization of Wire Break Data ........................................................................................................ 46
Figure 13 San Diego County Water Authority - Geovisualization of Magnetic Flux Leakage Data ............................................................................ 47
Figure 14 San Diego County Water Authority - Example Risk Matrix.................. 48
Figure 15 Portland Water Bureau - Service Level Hierarchy .................................. 56
Figure 16 Portland Water Bureau – Likelihood of Failure Criteria.......................... 58
Figure 17 Portland Water Bureau - Risk Matrix ......................................................... 58
Figure 18 Portland Water Bureau - Count of meters in each BRE category based on the meter program risk criteria ............................................. 59
Figure 19 Portland Water Bureau - Count of meters in each BRE category based on the Bureau CLEM risk criteria ..................................................... 59
Figure 20 Portland Water Bureau - Examples from the risk register ................. 61
Figure 21 Portland Water Bureau - Weibull graph showing failure rates of Cast Iron pipe vs age of Pipes ............................................................... 65
Figure 22 Portland Water Bureau - Example of selected strategies ..................... 66
Figure 23 City of Annapolis - Results of desktop condition assessment for water mains .................................................................................. 81
Figure 24 City of Annapolis - Risk Exposure Plot ..................................................... 82
Figure 25 WSSC Asset Management Policies ......................................................... 89
Figure 26 WSSC’s Business Case Evaluation Process ........................................... 96
Figure 27 Fairfax Water - Example CMMS Reports ................................................. 102
Figure 28 DMWW - Example of an EAM Start Center .............................................................. 108
Figure 29 DMWW - The SCADA system is integrated with the EAM and used to trigger work orders based on operational anomalies ........................................ 110
Figure 30 DMWW - Maintenance Priority Matrix ..................................................................... 111
Figure 31 DMWW - Asset cost hierarchy .................................................................................. 112
Figure 32 Livingston County - Example of preventive maintenance schedule .......... 117
Figure 33 Livingston County - Example of inspection and maintenance questionnaire  ...................................................................................................................... 117
Figure 34 Mount Pleasant Waterworks – High level asset hierarchy ................................. 122
Figure 35 Mount Pleasant Waterworks – Risk Scoring for Ware Mains ............................. 124
Figure 36 Mount Pleasant Waterworks – Capital Improvement Planning Process .................................................. 126
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Introduction

LEVEL OF PROGRESS IN UTILITY ASSET MANAGEMENT SURVEY
AWWA conducted a survey in mid-2015 to collect information on the level of progress in utility asset management. The survey covered general asset management, current state of the assets, levels of service, risk management, maintenance and reliability, and asset planning. AWWA received completed responses from 545 utilities in North America. The purpose of the survey was to support utilities seeking to advance their asset management practices and for AWWA to better understand the need for additional resources. AWWA has a number of resources available on the Asset Management Resource Community web page (http://www.awwa.org/resources-tools/water-knowledge/asset-management.aspx), and facilitates presentations at conferences and webinars during the year. The *Level of Progress in Utility Asset Management* survey is available on AWWA’s website.

LEADING BUSINESS PRACTICES IN ASSET MANAGEMENT CASE STUDIES
Following on from the survey, AWWA has developed case studies on some of the leading practices identified in the survey to provide more information on what leading utilities are doing. The case studies are intended to serve as a resource for other utilities to learn from their experience and to help improve asset management programs. The information will also be used as the basis for conference presentations, webinars and workshops.

A total of 13 case studies have been developed, covering five key concepts of asset management:

1. Current state of assets (asset inventory, use of geographic information systems (GIS), condition assessment)
2. Levels of service
3. Risk management (asset risk assessment and planning pipe replacements)
4. Maintenance and reliability (use of preventive maintenance approaches and computerized maintenance management systems)
5. Asset management planning (development of asset management plans and the use of business case evaluations for decision making)

In the survey 49% percent of the respondents were utilities with less than 50,000 customers; for the purpose of this report these utilities are referred to as small utilities. These smaller utilities were found to have different approaches to asset management than the larger utilities, and less likely to have an asset management program in place, so case studies have been developed for some small utilities as well as larger utilities.
Table 1 lists the 13 utility case studies and the leading practice concepts covered. Most case studies covered a single leading practice concept while some included two or three leading practices. Utilities were selected based on their responses to the survey; those large and small utilities that scored very high or high in each of the leading practices were asked to participate. The AWWA project team then interviewed each of the interested utilities to better understand their asset management programs and practices, and developed the case studies using information provided. The case studies have been developed in collaboration with the utilities, who have reviewed and approved the case studies included in this report.

Table 1 List of utility case studies and leading practice key concepts covered

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<th>Utility</th>
<th>Population served</th>
<th>Current State of Assets</th>
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