

ABSTRACT

- Mixture of old and new assets



- Demand on plant increases & multiple upgrades
- Similar equipment being maintained differently resulting in inconsistencies in practices and reliability



INTRODUCTION

- Improve maintenance practices as technology, engineering and manufacturing improve
- Look beyond OEM maintenance recommendations
- Suppliers no longer supporting equipment
- Asset ownership



MAINTENANCE PHILOSOPHIES



 Australian Water Association



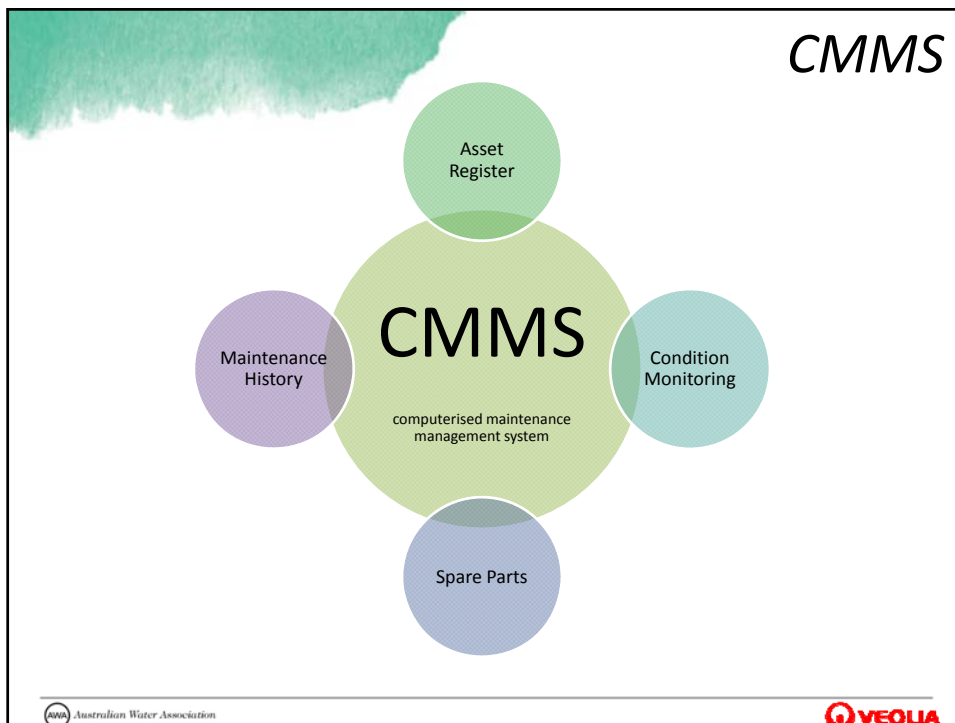
RELIABILITY CENTRED MAINTENANCE

- Implemented in the aviation industry in the 1960's
- Breaking assets down to the separate functions
- Possible functional failures
- Building a maintenance program around addressing these failures
- Limit intrusive maintenance
- Condition monitoring to baseline assets



 Australian Water Association





SUPPLIERS

- International and local framework agreements



CAPEX

- Identify capital expenditure
- Risk assess and identify assets approaching end of life



CONTINUOUS IMPROVEMENT

- Find areas for improvement
- Promote the need to seek continuous improvements



- Optimisation:
 - Electricity Costs
 - Environmental impact
 - Power monitoring
 - Instrumentation





CULTURE

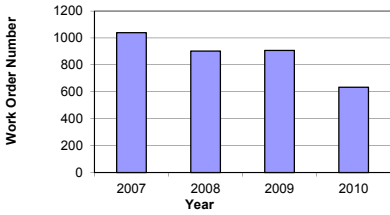
- Right people
- Equal across all levels
- Opportunity to obtain skills and development
- Open communication
- Plant ownership
- Commitment
- Involve your people in the decision making



VEOLIA CONTRACTS

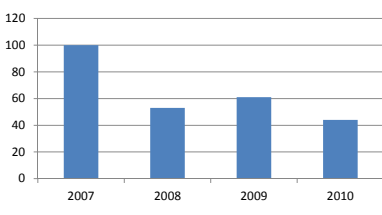



Corrective Work Order Totals





Year	Work Order Number
2007	1000
2008	850
2009	850
2010	600



Asset Overhaul Cost %



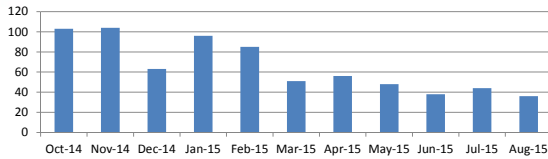
Year	Asset Overhaul Cost %
2007	100
2008	50
2009	60
2010	40

HUNTER WATER CONTRACT






Total Breakdowns

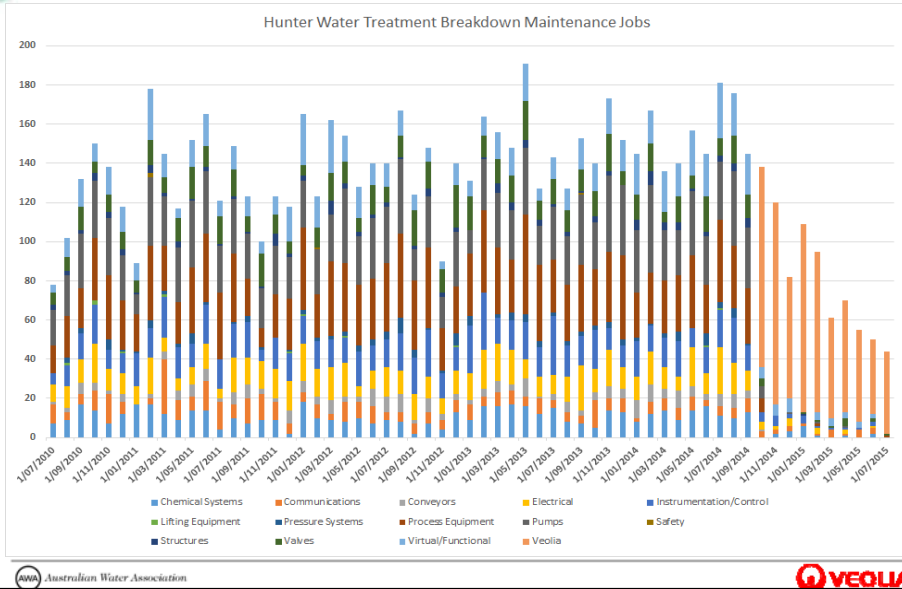


Month	Total Breakdowns
Oct-14	100
Nov-14	100
Dec-14	60
Jan-15	90
Feb-15	80
Mar-15	50
Apr-15	55
May-15	45
Jun-15	40
Jul-15	45
Aug-15	35

- Asset register updated
- Critical spares identified
- Review of the existing preventive maintenance has taken place and all employees have been involved in the process
- Training and development plans in place
- Employee engagement and WHS committees implemented
- 50% reduction in breakdowns
- Reduction in callouts

HUNTER WATER CONTRACT



Thank you