LCA Goals – 2017 & Beyond

2nd Quarter Update – July 10, 2017

Effective Utility Management (EUM) framework

- Developed by USEPA, AWWA & 7 other industry-leading associations
- Descriptions of 10 attributes of an effectively managed utility
- Outline of 5 keys to success
- Toolkit w/ 80+ industry-accepted measures
- Overall framework for goalsetting & continual improvement



Effective Utility Management (EUM) assessment

Really Great! LAST PRIORITY 2nd PRIORITY Don't focus on areas that Keep improving are not as important and in the most How are we performance is already important areas doing? good 3rd PRIORITY TOP PRIORITY! Improvements needed, **Improvements** but this area is not as needed in the most important as others important areas Not so great Most Important Least Important

What is Most Important?

2017 Goal Areas – Lehigh County Authority

- Financial Viability Focus on developing capital financing & rate-making strategies
- Infrastructure Stability Focus on Suburban Division asset management & CityWorks implementation
- Product Quality Focus on elimination of SSOs & Administrative Order compliance
- Employee & Leadership Development Focus on workforce / succession planning & knowledge creation

Plus one more...

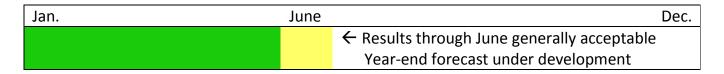


The longer-term view:

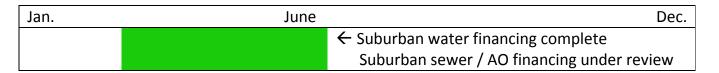
- Establish measures for each attribute area
- Develop ways to leverage technology within all goal areas
- Look out through 2020 to develop longer-term plans in these (and other) areas
- Build a culture of Continual Improvement!

Financial Viability - Progress

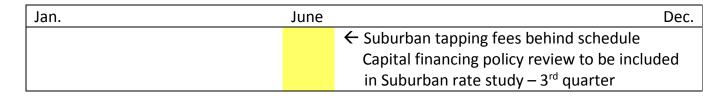
■ Achieve targeted performance included in 2017 budget



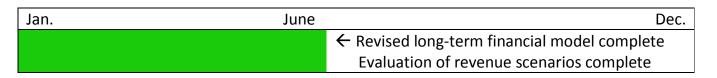
■ Complete new borrowing for known capital needs



■ Review, revise and adopt capital financing policy that staff & Board agree on



■ Understand and develop strategy to address impact of Allentown Division revenue shortfall



Financial Viability – Measures (NEW!)

MEASURE # 1 – Debt Service Coverage Ratio

What does it measure?

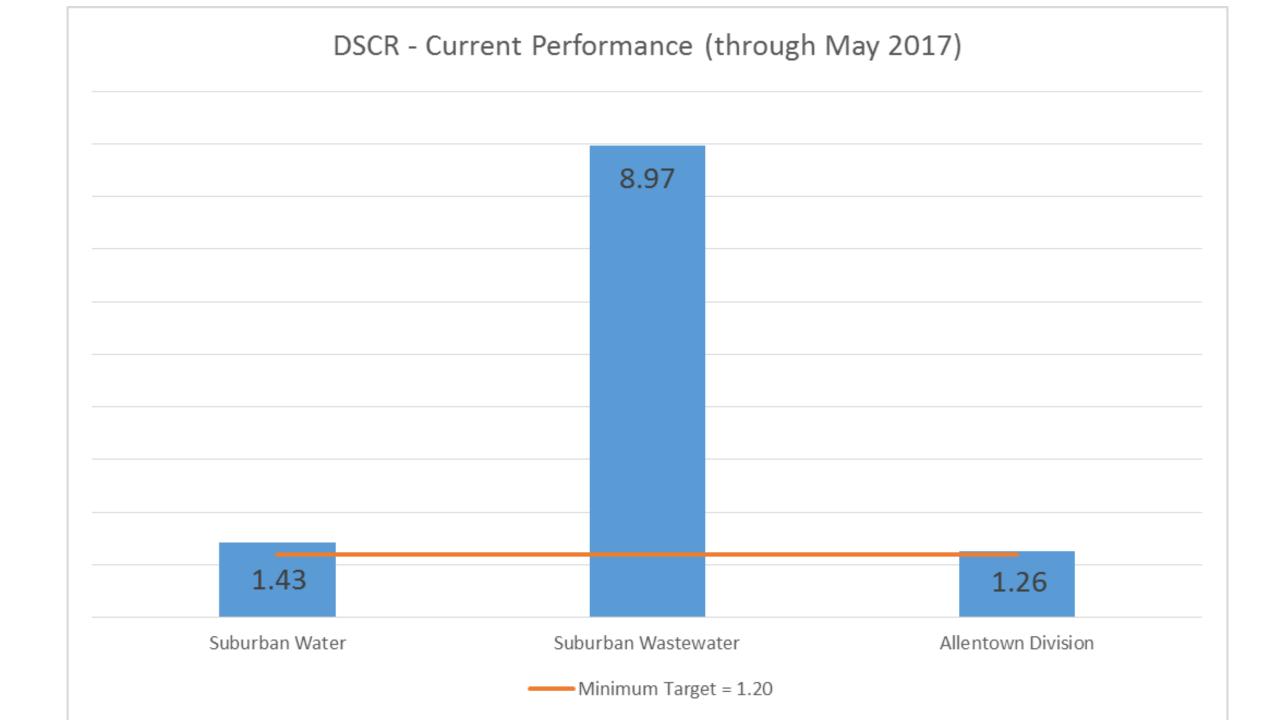
Adequacy of cash generated from operations to cover both operations and debt-related expenses

Why is it important to LCA?

Excess cash is needed for future capital improvements and principal payments, and to avoid/limit future borrowing

When will we measure it?

Now!



Financial Viability – Measures (NEW!)

MEASURE # 2 – Internal vs. External Funding for Capex

What does it measure?

Internal funding availability, after operations and debt-related expenses, to cover capital expenses

Why is it important to LCA?

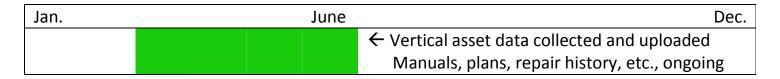
Allows for establishing Division-specific targets which will inform rate-making evaluations, assess future borrowing needs, and improve planning for future capital expenses

When will we measure it?

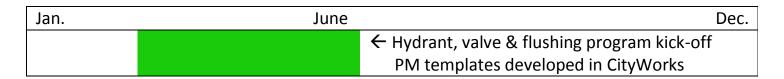
Data available now, targets not yet established – year-end 2017 for all divisions

Infrastructure Stability- Progress

■ Complete data collection and population of Suburban Division asset data into CityWorks



■ Create Suburban Division preventative maintenance program for all major equipment



■ Incorporate asset management projects into Capital Plan based on needs assessed



■ Develop strategy to integrate Asset Management approach across all LCA divisions

Jan.	June	Dec.	
		← Asset management measures defined	
	Teams assembled to review data collection		
		needs, formats & reporting methods	

Infrastructure Stability – Measures (NEW!)

MEASURE # 3 – Asset Condition Assessment Coverage

What does it measure?

Number / ratio of critical assets with condition assessed and risk categorized

Why is it important to LCA?

Emphasizes need for planned approach to asset management

When will we measure it?

Team assembled to investigate data requirements. Anticipate basic measure to be developed by year-end 2017, with new asset classes added as data is gathered annually through 2020.

Infrastructure Stability – Measures (NEW!)

MEASURE # 4 – Planned Maintenance Ratio

What does it measure?

Planned maintenance as a percentage of maintenance activities completed (both planned and corrective)

Why is it important to LCA?

Will provide focus for establishing consistent preventive maintenance procedures across all operating groups

When will we measure it?

Team assembled to investigate data requirements. Anticipate basic measure to be developed by year-end 2017, with new asset classes added as data is gathered annually through 2020.

Infrastructure Stability – Measures (NEW!)

MEASURE # 5 – Asset "Needs Addressed" Coverage

What does it measure?

Progress on addressing needs that are identified via condition assessments

Why is it important to LCA?

Important to track progress on addressing needs identified, to provide support for funding additional capital improvements and other expenses to maintain our assets

When will we measure it?

2020 – after Measures 3 & 4 are established

Product Quality- Progress

 Separate detailed discussion planned for August to review status of USEPA Administrative Order work!

Measure # 6 – AO / SSO Progress (measure TBD)

 Through discussion of how to measure "Product Quality" additional measures were identified...

Product Quality – Measures (NEW!)

MEASURE # 7 – Small Water Systems – Disruption of Service *What does it measure?*

Water service reliability measure for LCA small systems vs. large systems *Why is it important to LCA?*

Service reliability is more challenging for LCA's 12 small water systems, but customer expectation is the same regardless of the size of the community

When will we measure it?

Data available now – establish measure by year-end 2017

Product Quality – Measures (NEW!)

MEASURE # 8 – Small Water Systems – Regulatory Compliance

What does it measure?

Number of days LCA's small systems are under a Tier 1 violation vs. large systems (Allentown & Central Lehigh divisions)

Why is it important to LCA?

Boil advisories and other critical system conditions occur more frequently in LCA's 12 small water systems, but customer expectation is the same regardless of the size of the community

When will we measure it?

Data available now – establish measure by year-end 2017

Product Quality – Measures (NEW!)

MEASURE # 9 – Small Wastewater Systems – Regulatory Compliance

What does it measure?

Number of non-compliance events in LCA's small vs. large wastewater systems (Allentown & Western Lehigh divisions)

Why is it important to LCA?

LCA's 7 small sewer systems face higher rates of non-compliance events such as plant bypasses, permit exceedances, etc., but customer expectation is the same regardless of the size of the community

When will we measure it?

Data available now – establish measure by year-end 2017

Employee Leadership & Devel. - Progress

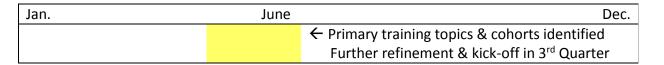
■ Identify and plan for retirements in the 1-3 year timeframe



■ Evaluate & realign non-union employee pay scales



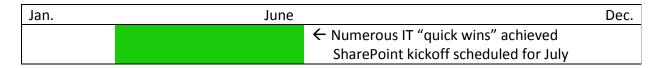
■ Developing management training & leadership development strategies



■ Develop continuous improvement program / culture



■ Leverage technology to address information sharing / training needs of the organization



Employee Leadership & Dev. – Measures (NEW!)

MEASURE # 10 – Training & Knowledge Management Coverage

What does it measure?

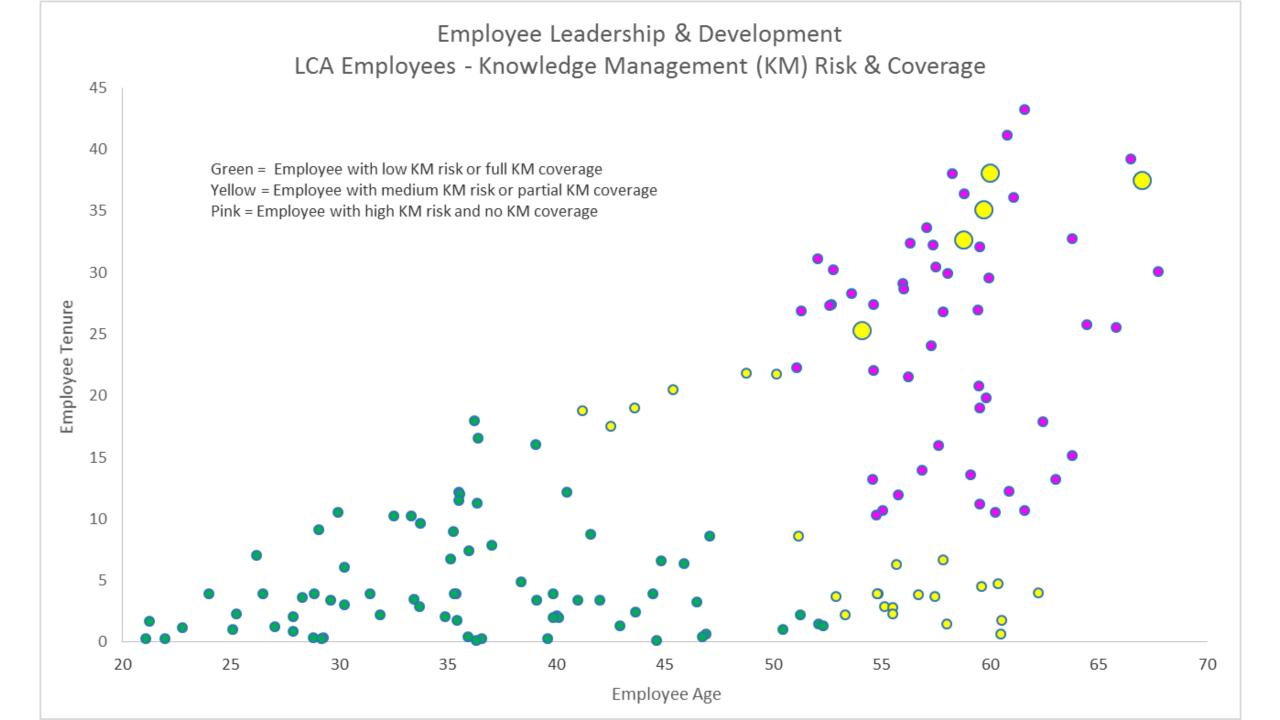
Employees for which LCA has developed the plan components as appropriate for the employee risk category to address training, succession planning and knowledge management needs

Why is it important to LCA?

A tool already exists to establish risk profiles, and this measure will place additional focus on taking action based on those risks

When will we measure it?

Now!



Employee Leadership & Dev. – Measures (NEW!)

MEASURE # 11 – Training Hours per Employee

What does it measure?

Hours of training provided to each employee per year, categorized into key areas such as safety, on-the-job, certification-based, etc.

Why is it important to LCA?

Focus is on ensuring on-the-job training (OJT) is occurring, especially between experienced and new employees prior to critical retirements

When will we measure it?

While sponsored training hours are tracked via payroll, OJT is not, and training plans are not developed for most employees. Linkage to Measure # 10 will be required, by 2020.

What does all this mean? LCA 2020 Vision

• KPI Development Schedule

		Key Performance Indicator	<u>Sub-Measure</u>	KPI Development Schedule (DRAFT)				
Measure #	EUM Attribute			<u>2017</u>	<u>2018</u>	<u>2019</u>	2020	
1	Financial Viability	Debt Service Coverage Ratio	SB Water	✓	✓	✓	✓	
			SB Wastewater	√	✓	✓	✓	
			AL Division	√	✓	✓	✓	
2	Financial Viability	Internal vs. External Funding for Capex	SB Water	✓	✓	✓	✓	
			SB Wastewater	✓	✓	✓	✓	
			AL Division	✓	✓	✓	✓	
3	Infrastructure Stability	Asset Condition Assessment Coverage	AL Water - Vertical	✓	✓	✓	√	
			AL Water - Horizontal		✓	✓	√	
			AL Wastewater - Vertical		√	✓	√	
			AL Wastewater - Horizontal			✓	√	
			SB Water - Vertical	√	√	√	√	
			SB Water - Horizontal		√	√	√	
			SB Wastewater - Vertical			√	√	
			SB Wastewater - Horizontal			✓	√	
4	Infrastructure Stability	Planned Maintenance Ratio	AL Water - Vertical	√	√	∨ ✓	√	
			AL Water - Horizontal		√	√	√	
			AL Wastewater - Vertical	√		✓	√	
			AL Wastewater - Horizontal		√	√	√	
			SB Water - Vertical			√	√	
			SB Water - Horizontal				√	
			SB Wastewater - Vertical			√	√	
			SB Wastewater - Horizontal				√	
5	Infrastructure Stability	Asset "Needs Addressed" Coverage	AL Water - Vertical		√	√	√	
			AL Water - Horizontal				√	
			AL Wastewater - Vertical			✓	√	

What does all this mean? LCA 2020 Vision

• Strategies / Action Plans

Measure #	EUM Attribute	Key Performance Indicator		2018	2019	2020
10	Employee & Leadership Development	Training & Knowledge Management Coverage	Target	15%	35%	65%
			Actions	- Establish train-the-trainer	- Training plans for highest	- Complete Document
				program	turn-over positions	Management project
				- Succession / KM plans for	- Reassess retirement risk	- Reassess management /
				top 15% of at-risk positions	- Succession / KM plans for	leadership training needs
				- Kick off Document	next 20% at-risk positions	- Partner w/ tech schools
				Management project		for apprenticeship

What does all this mean? LCA 2020 Vision

• LCA Scorecard Report

				Conceptual Future LCA Scorecard			
Measure #	EUM Attribute	Key Performance Indicator	Sub-Measure	Trend	Performance	Target	
1	Financial Viability	Debt Service Coverage Ratio	SB Water	(1.6	1.5	
			SB Wastewater	{	4.2	5.5	
			AL Division	(1.6	1.4	

Summary

- Progress on 2017 "Action Items" generally on track!
- Key Performance Indicators identified that tell the story of what we want to achieve in each of the strategy areas
- Lots of work yet to do!
 - Further defining the measures
 - Establishing 3-year strategies
 - Communicating the LCA 2020 vision

Discussion