

# 2018 Performance Measurement Report

NapaSan  
Board of Directors  
February 20, 2019

## Performance Measurement Report



Calendar Year  
2018

Performance Measurements Using the  
“Effective Utility Management” Framework



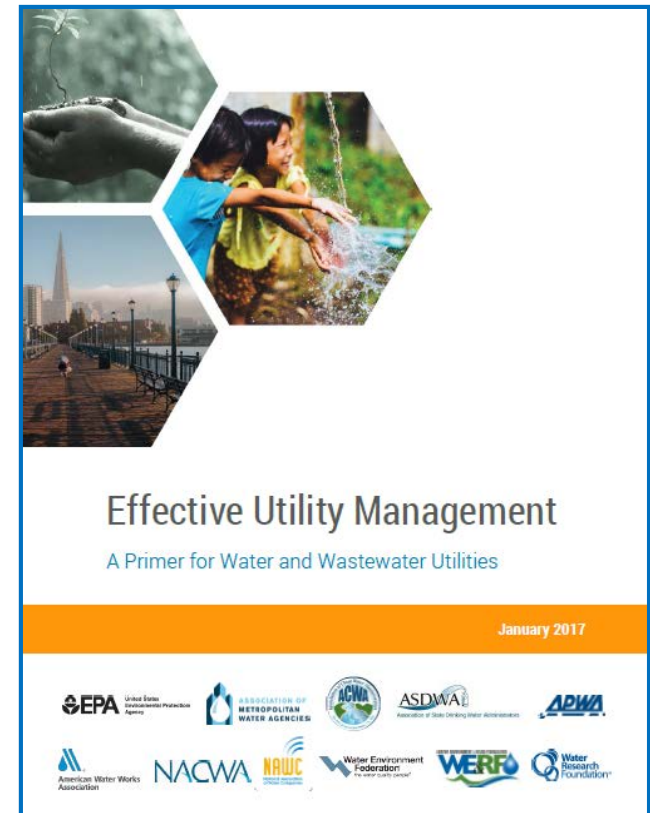
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# Effective Utility Management

## *10 Attributes of Effectively Managed Water Utilities*

- Product Quality
- Customer Service
- Employee Leadership and Development
- Operational Optimization
- Financial Viability
- Infrastructure Stability
- Operational Resiliency
- Community Sustainability
- Water Resource Adequacy
- Stakeholder Understanding & Support



# Summary

- 62 Performance Measures

	<u>2018</u>	<u>Trend</u>
★ “Satisfactory”	59 (95%)	57 (92%)
◆ “Watch”	3 (5%)	4 (6%)
▲ “Unsatisfactory”	0 (0%)	0 (0%)
⊘ “Insufficient Data”	0 (0%)	1 (2%)

# Product Quality

Attribute	Measurement	2018	Trend	Page
1. Product Quality	1-NPDES Compliance: Treatment for BOD and TSS Removal	★	★	17
	2-NPDES Compliance: Total Allowable BOD and TSS	★	★	18
	3-Sanitary Sewer Overflows (SSOs)	★	★	19
	4-Volume of Sewage Overflow	★	★	20
	5-Plugged Main Lines	★	★	21
	6-Recycled Water Quality	★	◆	22



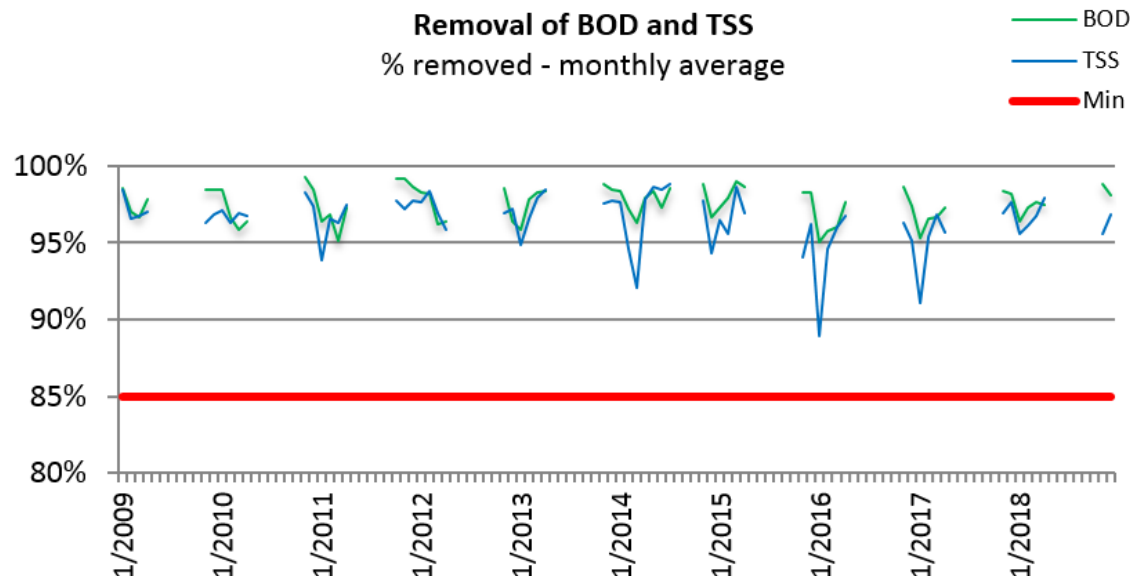
# Product Quality

- NPDES Compliance

Rating	
Current Year	10-Year Trend
★ Satisfactory	★ Satisfactory

Percentage of  
Days in Compliance

Year	Percent
2009	100%
2010	100%
2011	100%
2012	100%
2013	100%
2014	100%
2015	100%
2016	100%
2017	100%
2018	100%



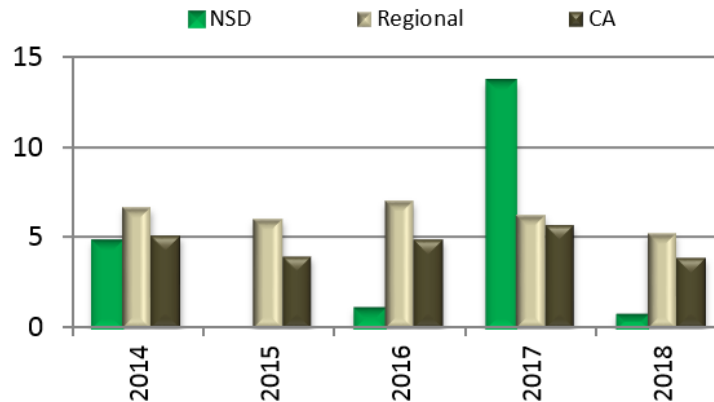
# Product Quality

- Sanitary Sewer Overflows

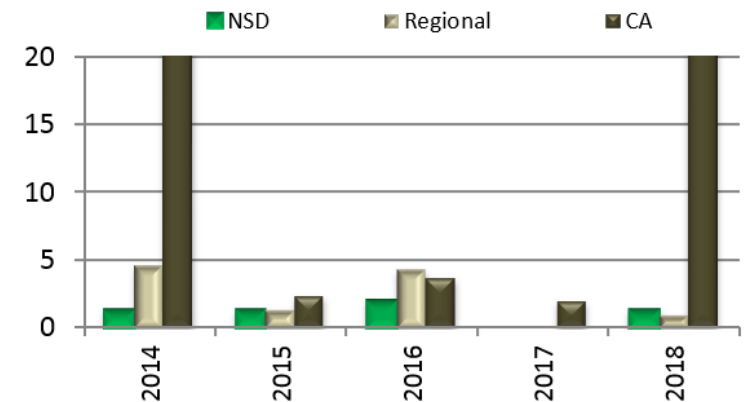
Rating	
Current Year	5-Year Trend
★ Satisfactory	★ Satisfactory

## Performance Data

**Category 1 SSOs for Sewer Mains**  
# of SSOs per 100 miles



**Category 1 SSOs for Sewer Laterals**  
# of SSOs per 100 miles






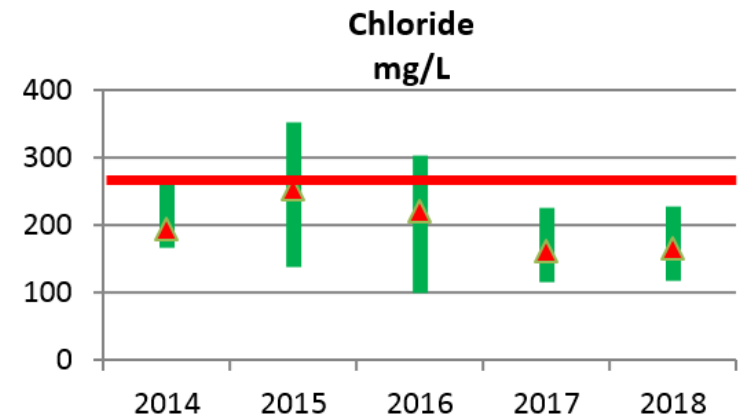
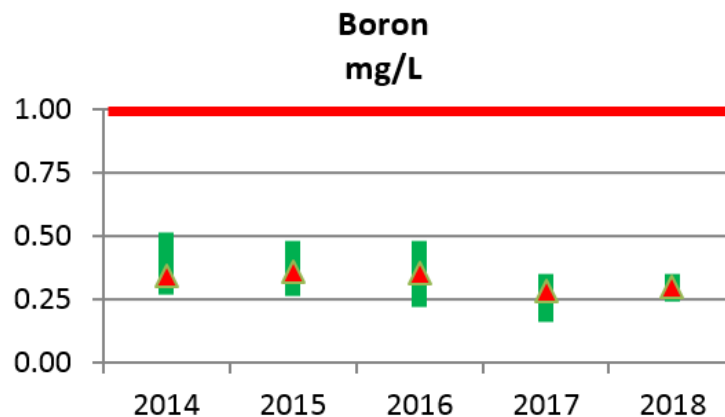
# Product Quality

- Recycled Water Quality

Rating	
Current Year	5-Year Trend
	
Satisfactory	Watch

## Performance Data

-  Indicates the range within the year
-  indicates annual average
-  Indicates the maximum concentration for sensitive grape species





# Customer Service

Attribute	Measurement	2018	Trend	Page
2. Customer Service	1-Service Calls for District Plugged Laterals	★	★	25
	2-Service Call Response Time	★	★	26
	3-Development Review Response Time	★	★	27
	4-Customer Satisfaction	★	★	28

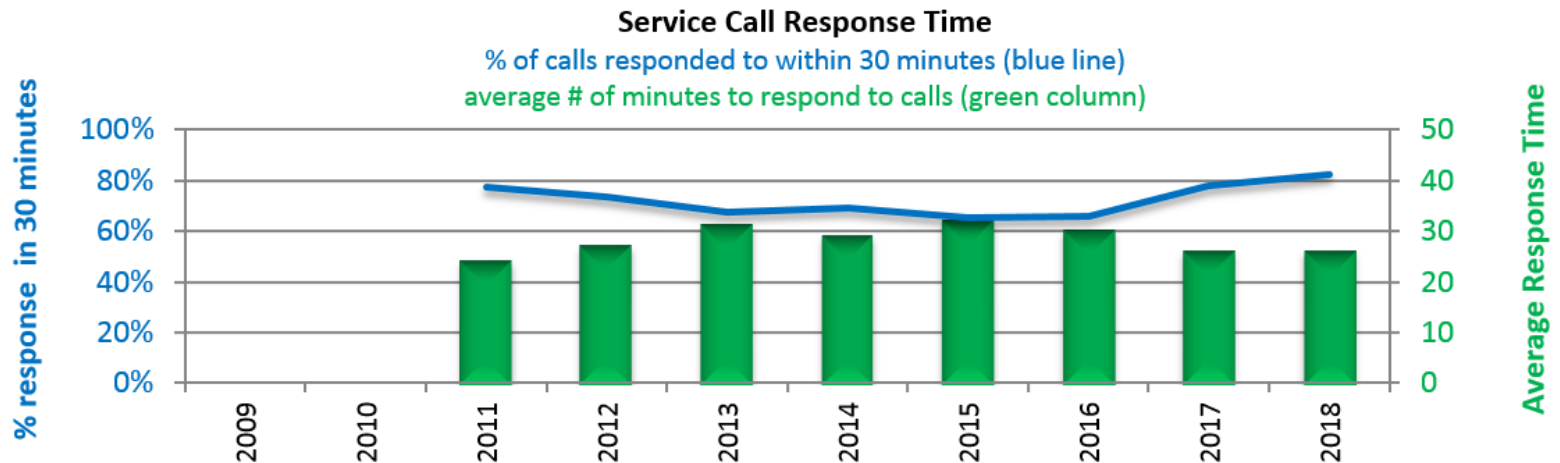


# Customer Service

- Service Call Response Time

Rating	
Current Year	10-Year Trend
★ Satisfactory	★ Satisfactory

## Performance Data

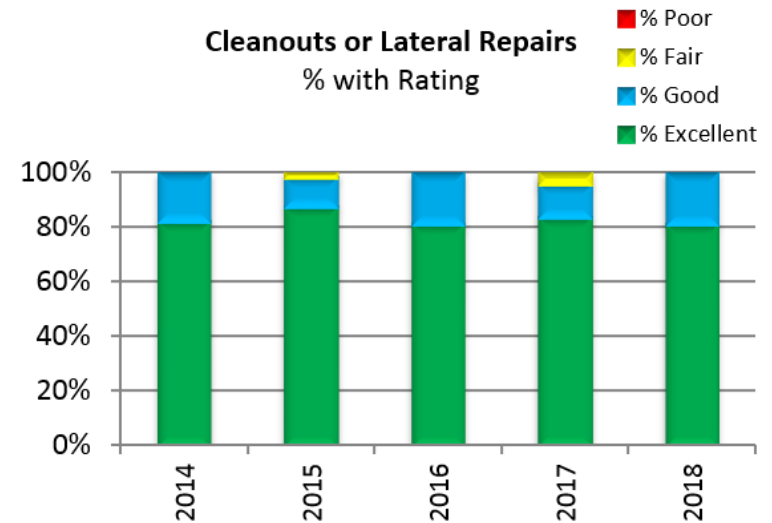
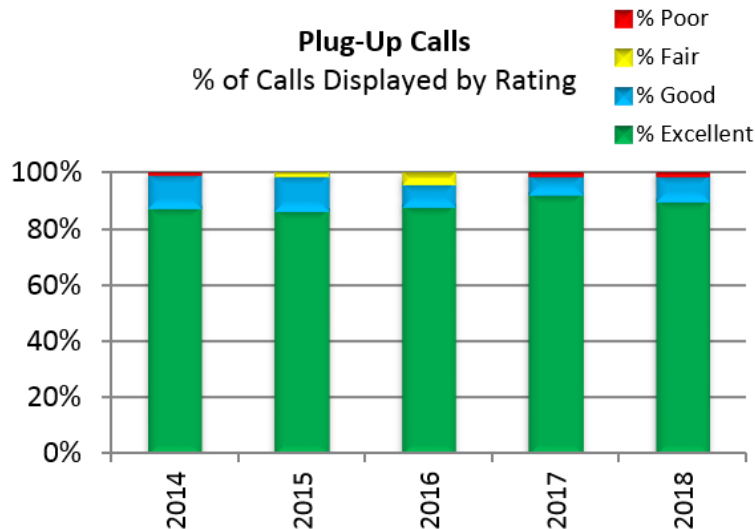


# Customer Service

- Customer Satisfaction

Rating	
Current Year	5-Year Trend
★ Satisfactory	★ Satisfactory

## Performance Data





# Employee & Leadership Development

Attribute	Measurement	2018	Trend	Page
3. Employee and Leadership Development	1-Experience Turnover Rate	★	★	31
	2-Employee Satisfaction	★	★	32
	3-Online Safety Training Hours	★	★	33
	4-Succession Planning	★	★	34
	5-Institutional Knowledge Capture	★	★	35



# Operational Optimization

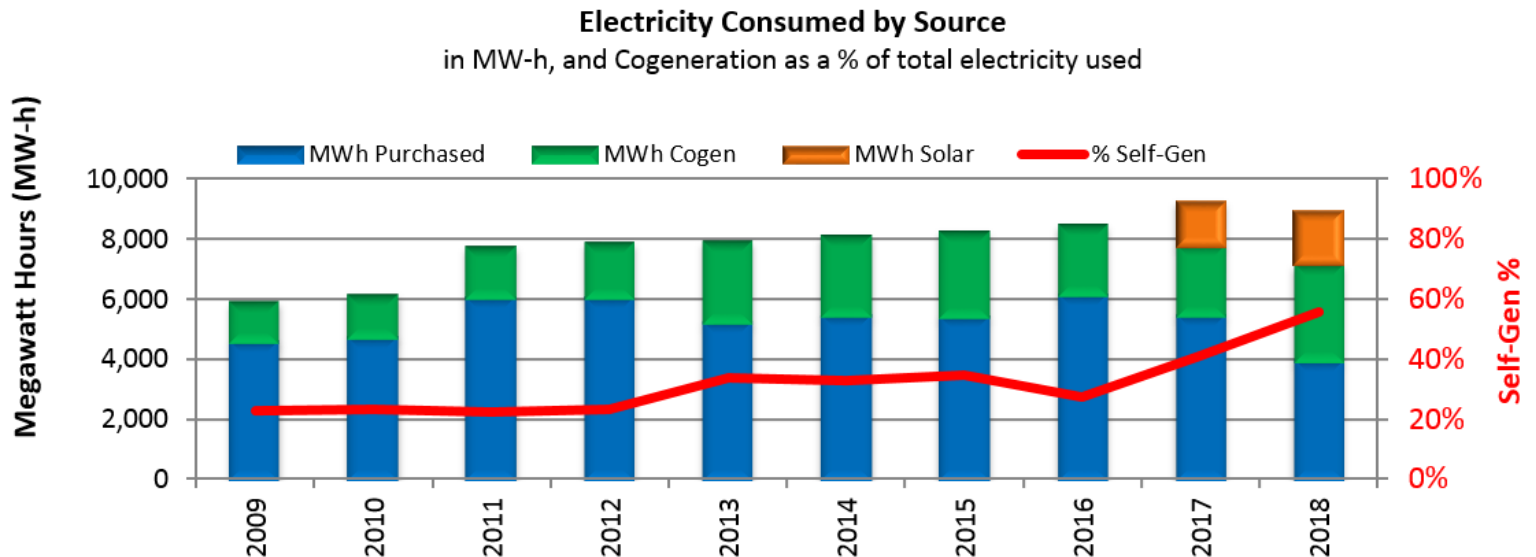
Attribute	Measurement	2018	Trend	Page
4. Operational Optimization	1-Electricity Self-Generation	★	★	39
	2-Electricity Consumption Efficiency	★	★	40
	3-Chemical Consumption	★	★	41
	4-Planned Maintenance Ratio-Collections	★	★	42
	5-Planned Maintenance Ratio-Treatment Plant	★	★	43

# Operational Optimization

- Electricity Self-Generation

Rating	
Current Year	10-Year Trend
★ Satisfactory	★ Satisfactory

## Performance Data

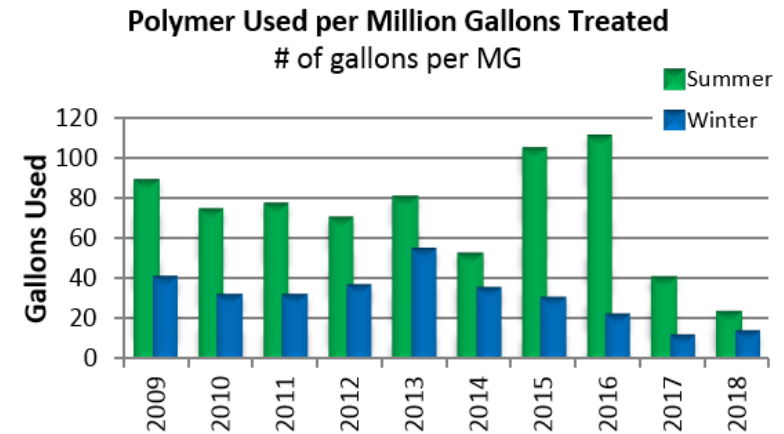
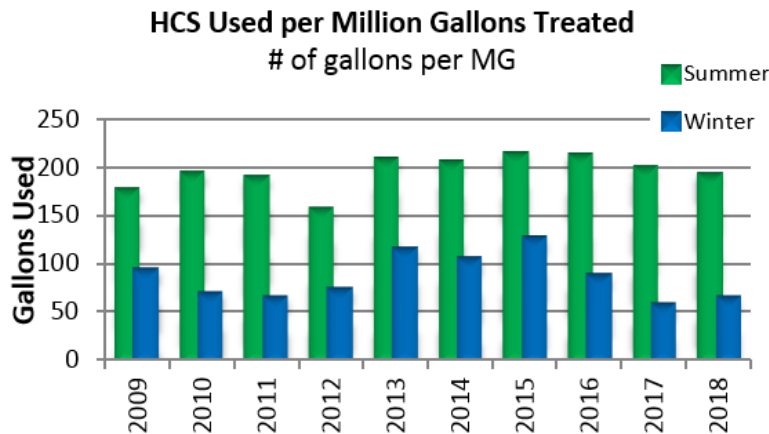


# Operational Optimization

- Chemical Consumption

Rating	
Current Year	10-Year Trend
★ Satisfactory	★ Satisfactory



















## Performance Data



# Financial Viability

Attribute	Measurement	2018	Trend	Page
5. Financial Viability	1-Operating Ratio	★	★	47
	2-Current Ratio and Days Cash on Hand	★	★	48
	3-Capital Expenses Compared to Operating Expenses	★	★	49
	4-Debt Service Coverage Ratio	★	★	50
	5-Financial Procedure Integrity	★	★	51
	6-Bond Rating	★	★	52
	7-Financial Reserves	★	★	53

# Infrastructure Stability

Attribute	Measurement	2018	Trend	Page
6. Infrastructure Stability	1-Asset Inventory			57
	2-Renewal & Replacement of Assets			58
	3-Sewer Main Condition Assessment			59
	4-Sewer Main Line Cleaning			60
	5-Food Service Establishment Inspections			61
	6-Sewer Main Renewal and Replacement			62
	7-Lower Sewer Lateral Renewal and Replacement			63
	8-Sewer Partial or Total Collapse Rate			64
	9-Recycled Water Service Availability			65

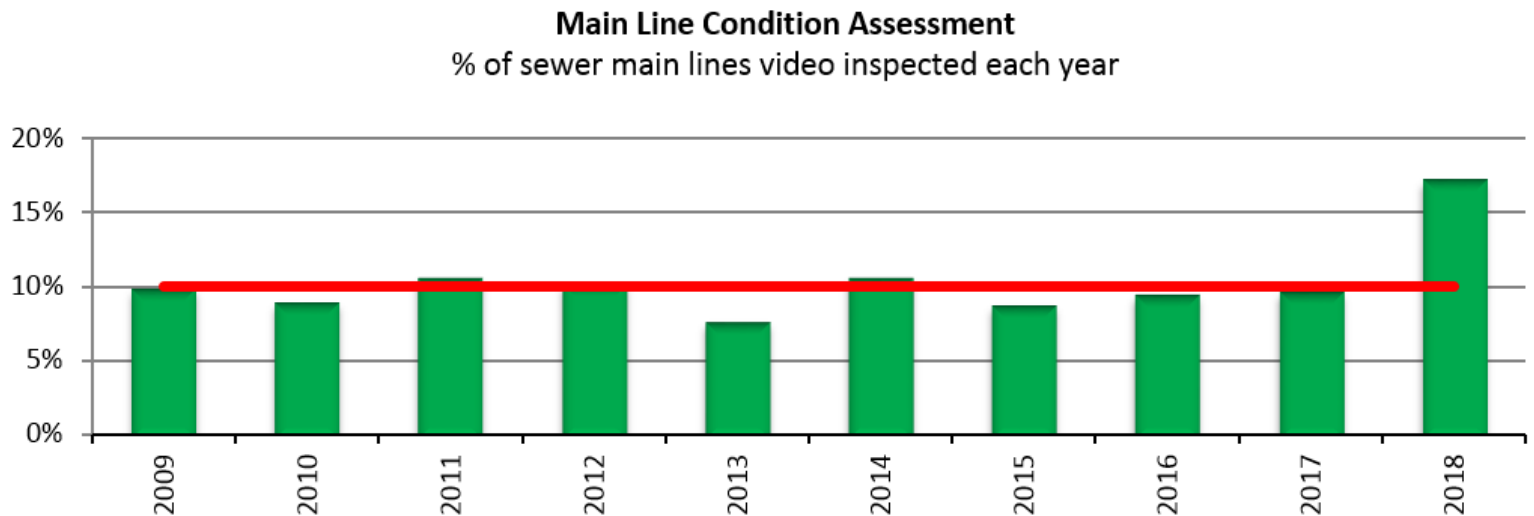


# Infrastructure Stability

- Sewer Condition Assessment

Rating	
Current Year	10-Year Trend
★ Satisfactory	★ Satisfactory

## Performance Data

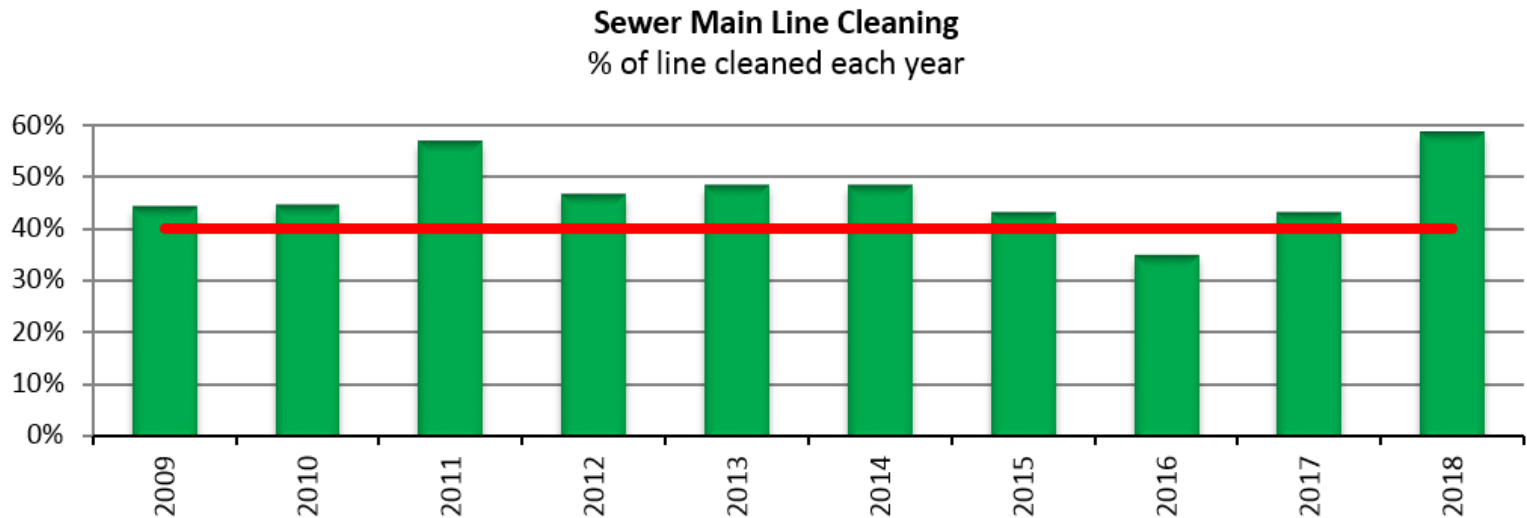


# Infrastructure Stability

- Sewer Main Line Cleaning

Rating	
Current Year	10-Year Trend
★ Satisfactory	★ Satisfactory

## Performance Data

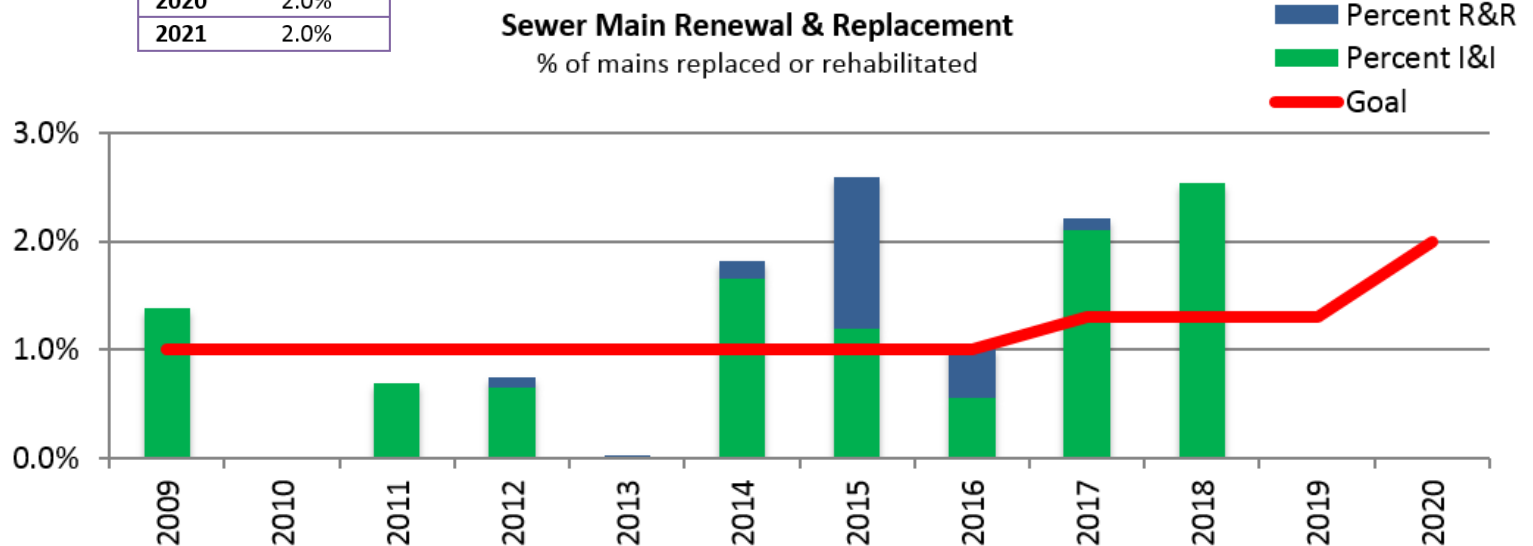


# Infrastructure Stability























- Sewer Main Rehabilitation

Replacement	
Year	Goal
2016	1.0%
2017	1.3%
2018	1.3%
2019	1.3%
2020	2.0%
2021	2.0%

Rating	
Current Year	10-Year Trend
★ Satisfactory	★ Satisfactory



# Operational Resiliency

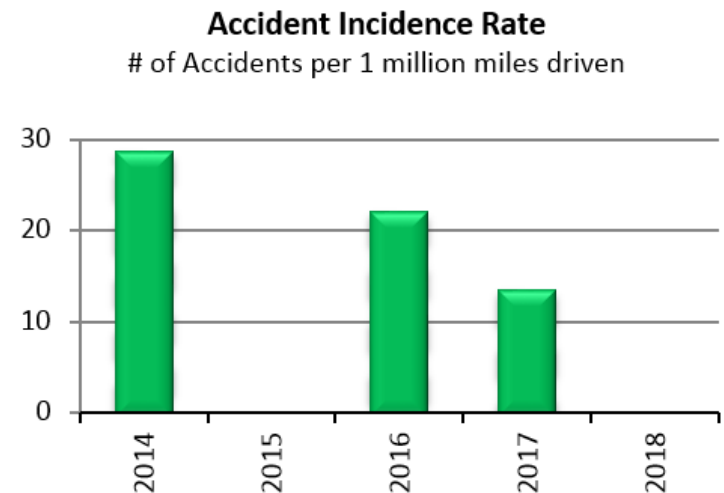
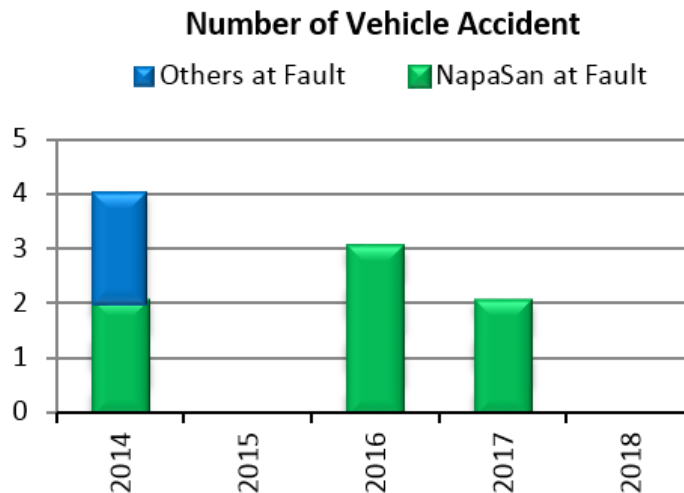
Attribute	Measurement	2018	Trend	Page
7. Operational Resiliency	1-Total Recordable Incidence Rate			69
	2-Vehicle Accident Rate			70
	3-Lost Time Hours			71
	4-Insurance Claims			72
	5-Experience Modification (XMOD) Rate			73
	6-Emergency Response Plans			74
	7-Uptime for Cogeneration Engine			75
	8-Uptime for Pumps at Pump Stations			76
	9-Resiliency Under Emergency Conditions: Power			77
	10-Resiliency Under Emergency Conditions: Staff			78
	11-Treatment Plant Capacity			79

# Operational Resiliency

- Vehicle Accident Rate

Rating	
Current Year	5-Year Trend
★ Satisfactory	◆ Watch

## Performance Data

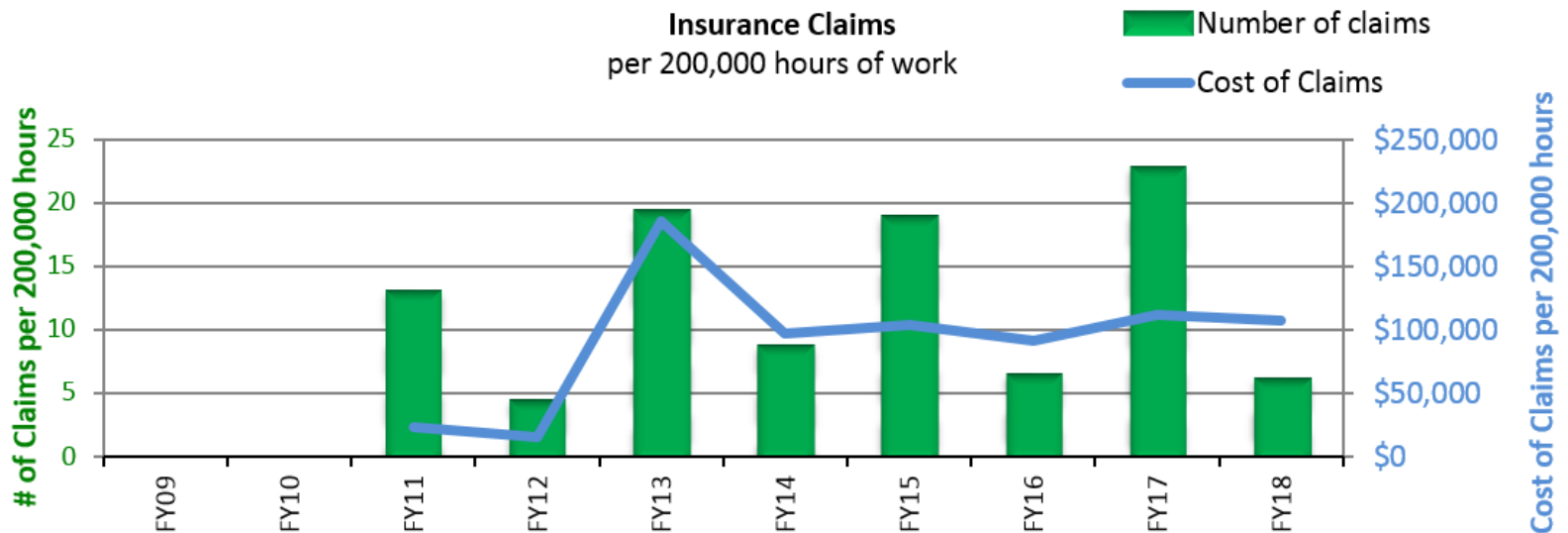


# Operational Resiliency

- Insurance Claims

Rating	
Current Year	10-Year Trend
★ Satisfactory	◆ Watch

## Performance Data

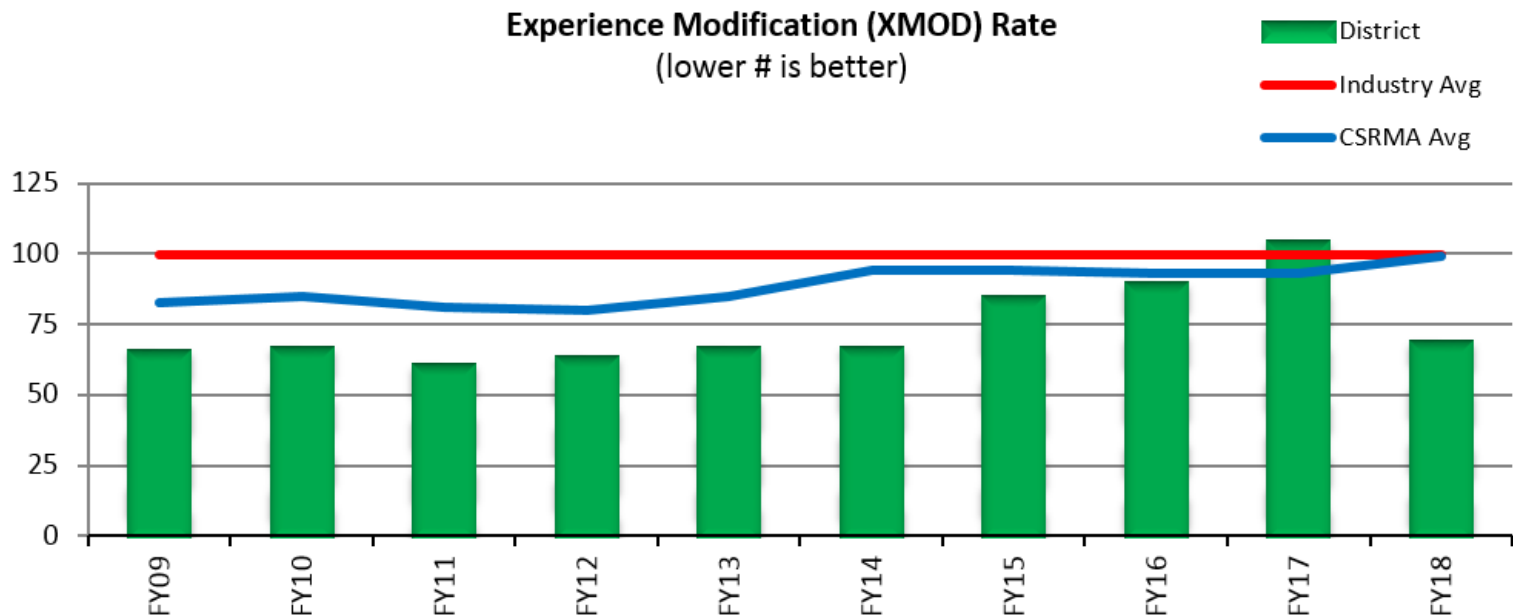


# Operational Resiliency

- Experience Modification (XMOD) Rate

## Performance Data

Rating	
Current Year	10-Year Trend
★ Satisfactory	★ Satisfactory

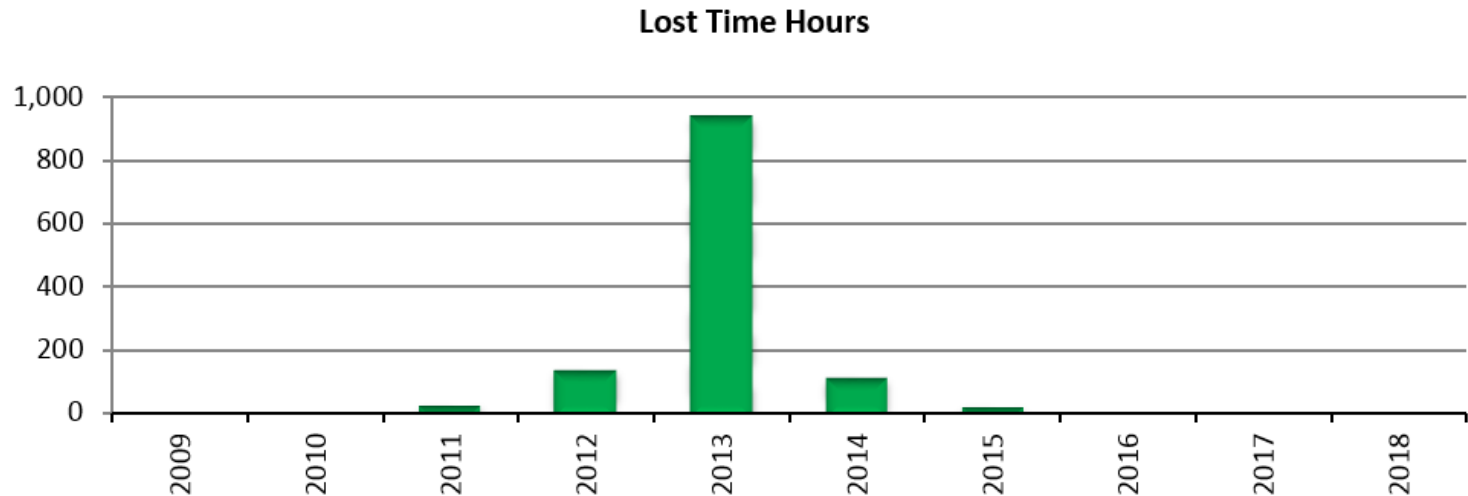


# Operational Resiliency

- Lost Time Hours

Rating	
Current Year	10-Year Trend
★ Satisfactory	★ Satisfactory

## Performance Data





# Community Sustainability

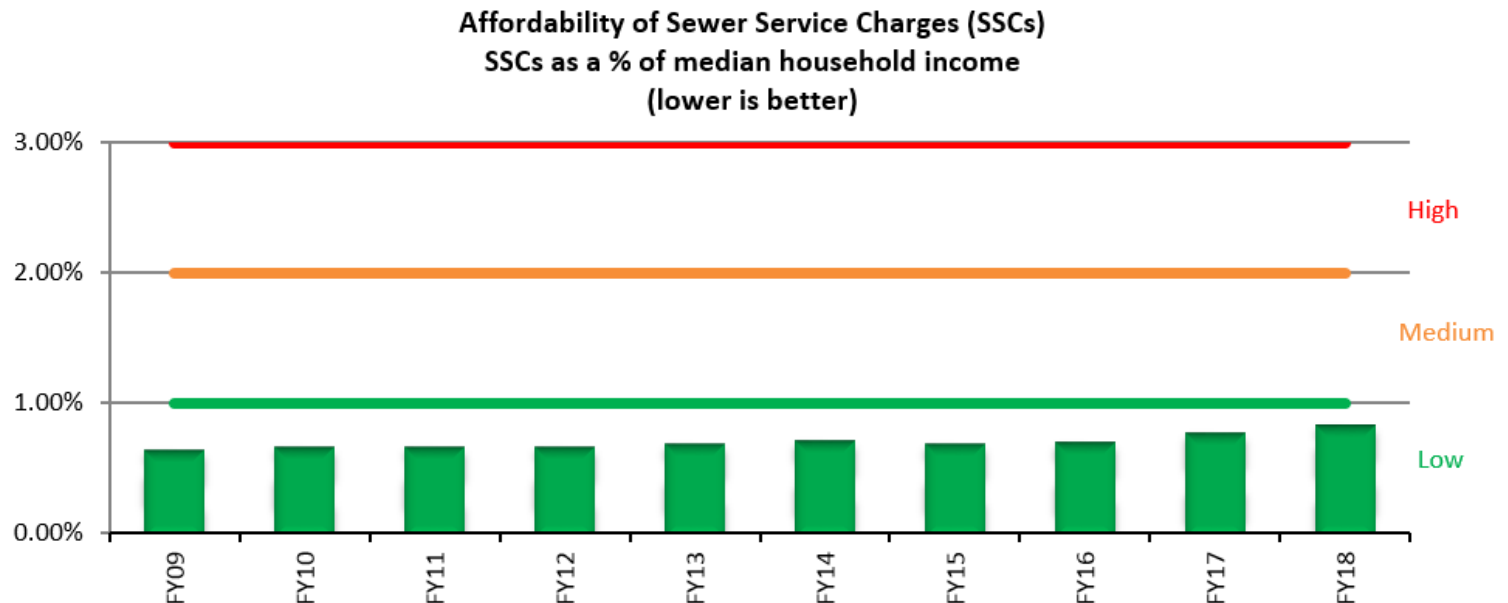
Attribute	Measurement	2018	Trend	Page
8. Community Sustainability	1-Watershed-based Infrastructure Planning	★	★	83
	2-Green Infrastructure – Programs	★	★	84
	3-Green Infrastructure – New Infrastructure	★	★	85
	4-Greenhouse Gas Emissions – Purchased Energy	★	★	86
	5-Digester Gas Beneficial Reuse	★	★	87
	6-Recycled Water Beneficial Reuse	★	★	88
	7-Biosolids Beneficial Reuse	★	★	89
	8-Sewer Service Charges - Affordability	★	★	90
	9-Low Income Billing Assistance	★	★	91

# Community Sustainability

- Sewer Service Charge Affordability

Rating	
Current Year	10-Year Trend
★ Satisfactory	★ Satisfactory

## Performance Data



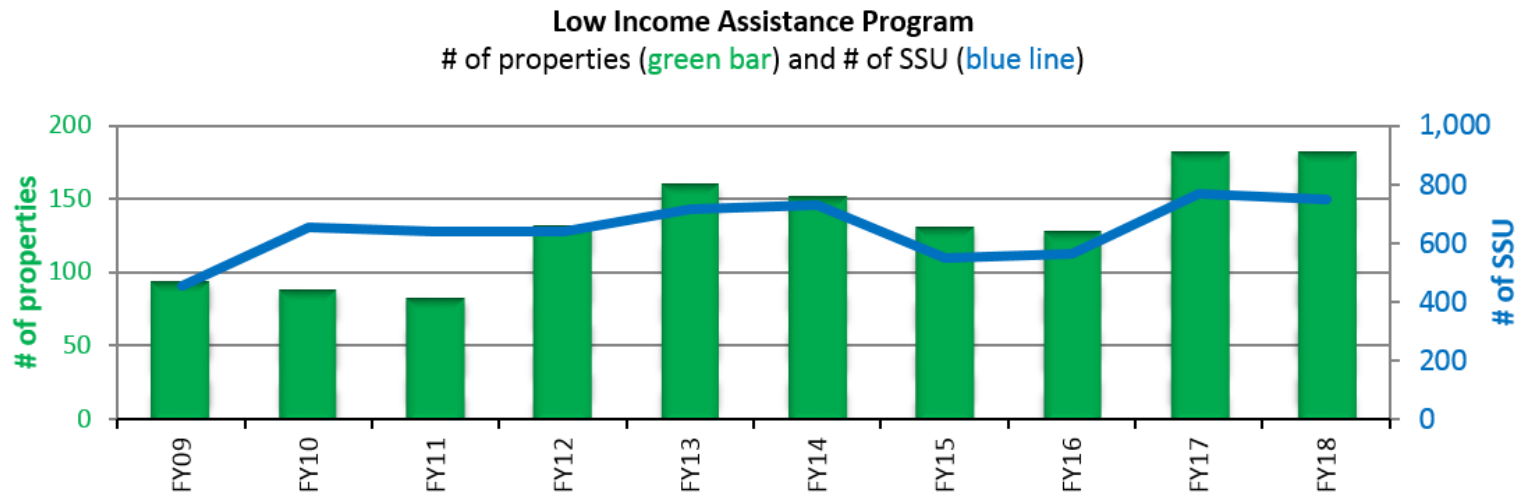


# Community Sustainability

- Low Income Billing Assistance

Rating	
Current Year	10-Year Trend
★ Satisfactory	★ Satisfactory

## Performance Data





# Water Resource Adequacy

Attribute	Measurement	2018	Trend	Page
9. Water Resource Adequacy	1-Recycled Water Supply Adequacy	★	★	95

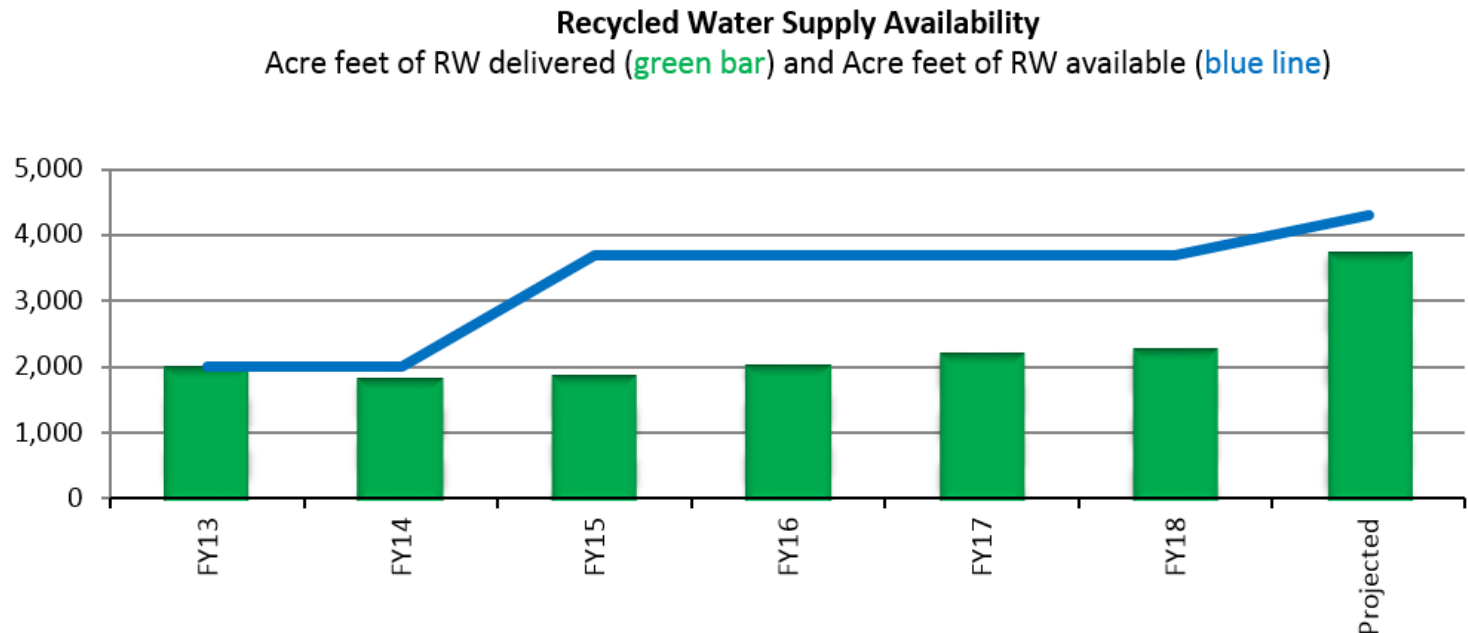


# Water Resource Adequacy

- Recycled Water Availability

## Performance Data

Rating	
Current Year	10-Year Trend
★ Satisfactory	★ Satisfactory





# Stakeholder Understanding & Support

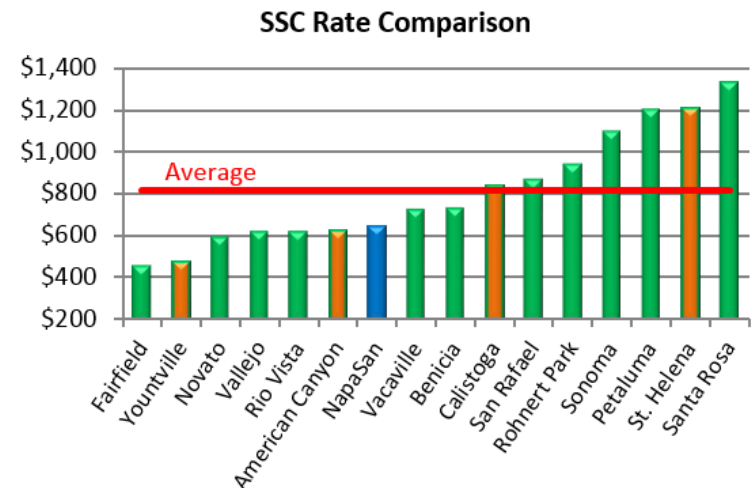
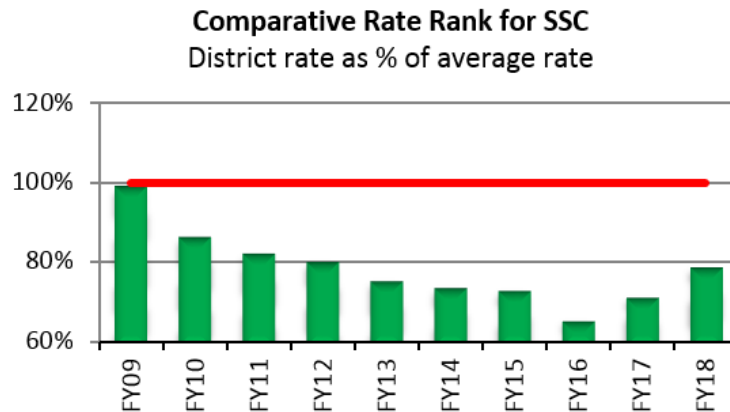
Attribute	Measurement	2018	Trend	Page
10. Stakeholder Understanding & Support	1-Stakeholder Consultation	★	★	99
	2-Public Education Presentations	★	★	100
	3-SSC Comparative Rate Rank	★	★	101
	4-Recycled Water Comparative Rate Rank	★	★	102
	5-Media/Press Coverage	★	★	103

# Stakeholder Understanding & Support

- Comparative Rate Rank

Rating	
Current Year	10-Year Trend
★ Satisfactory	★ Satisfactory

## Performance Data



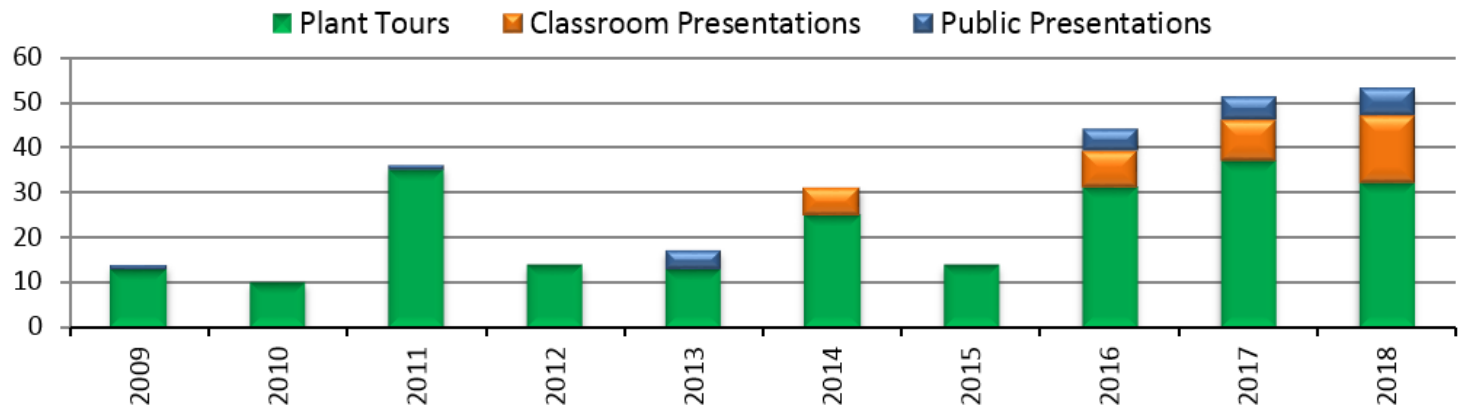
# Stakeholder Understanding & Support

- Public Education Presentations and Tours

Rating	
Current Year	10-Year Trend
★ Satisfactory	★ Satisfactory

## Performance Data

### Public Education Presentations





# Questions / Comments

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