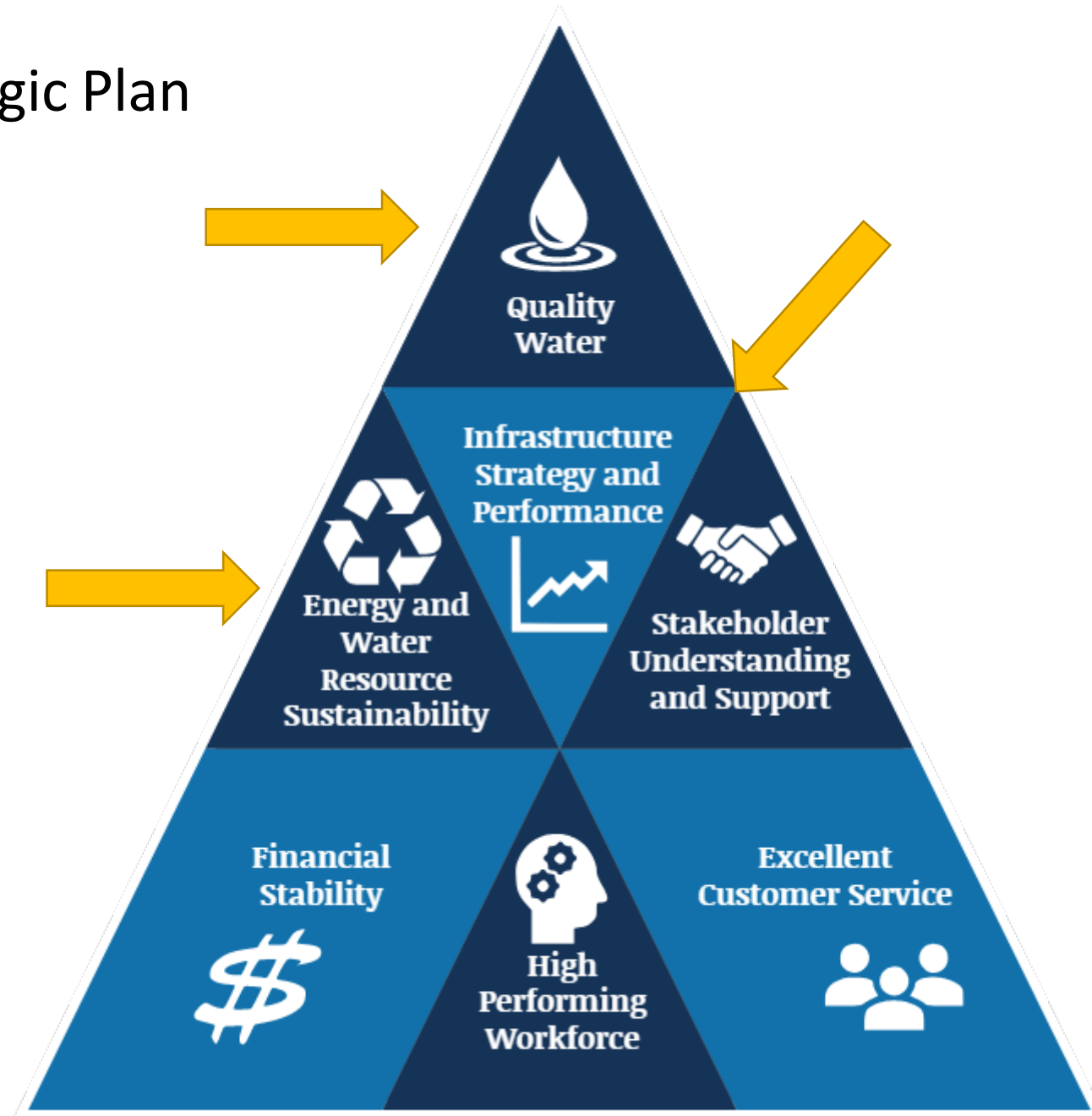


# SPRWS Strategic Plan



# Performance Measures

Based on Past Performance

# Enhance Infrastructure Strategy and Performance

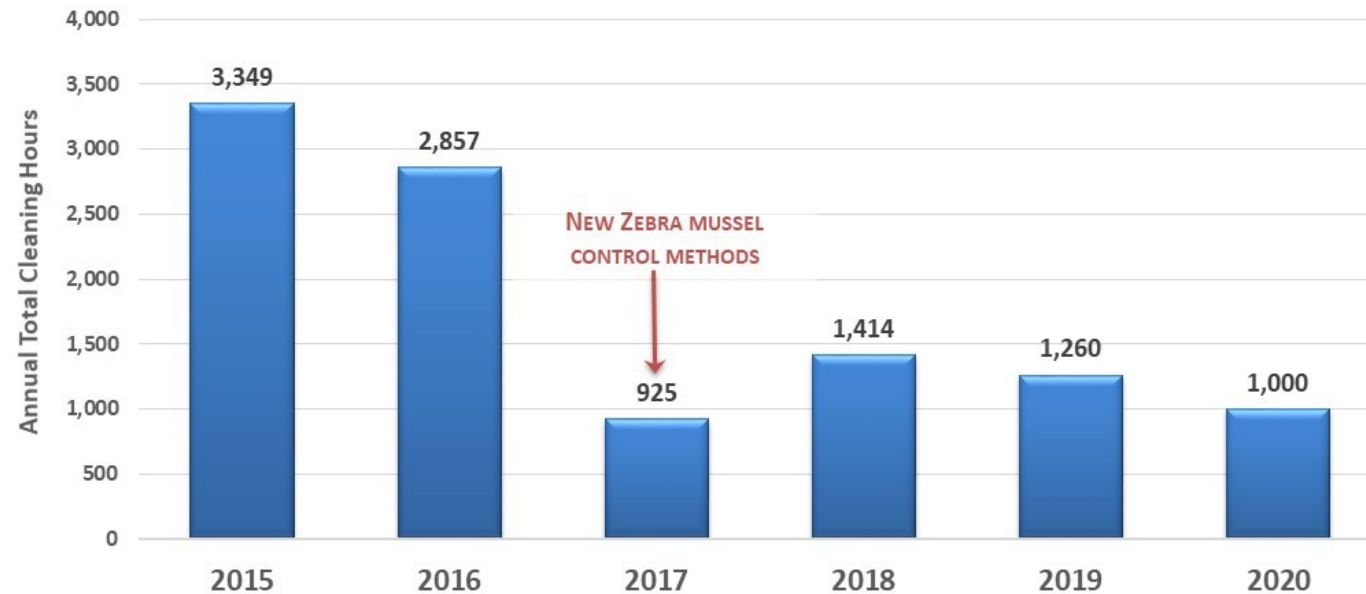
IDENTIFY COST EFFECTIVE INNOVATIONS AND SOLUTIONS TO PROVIDE OPERATING EXCELLENCE

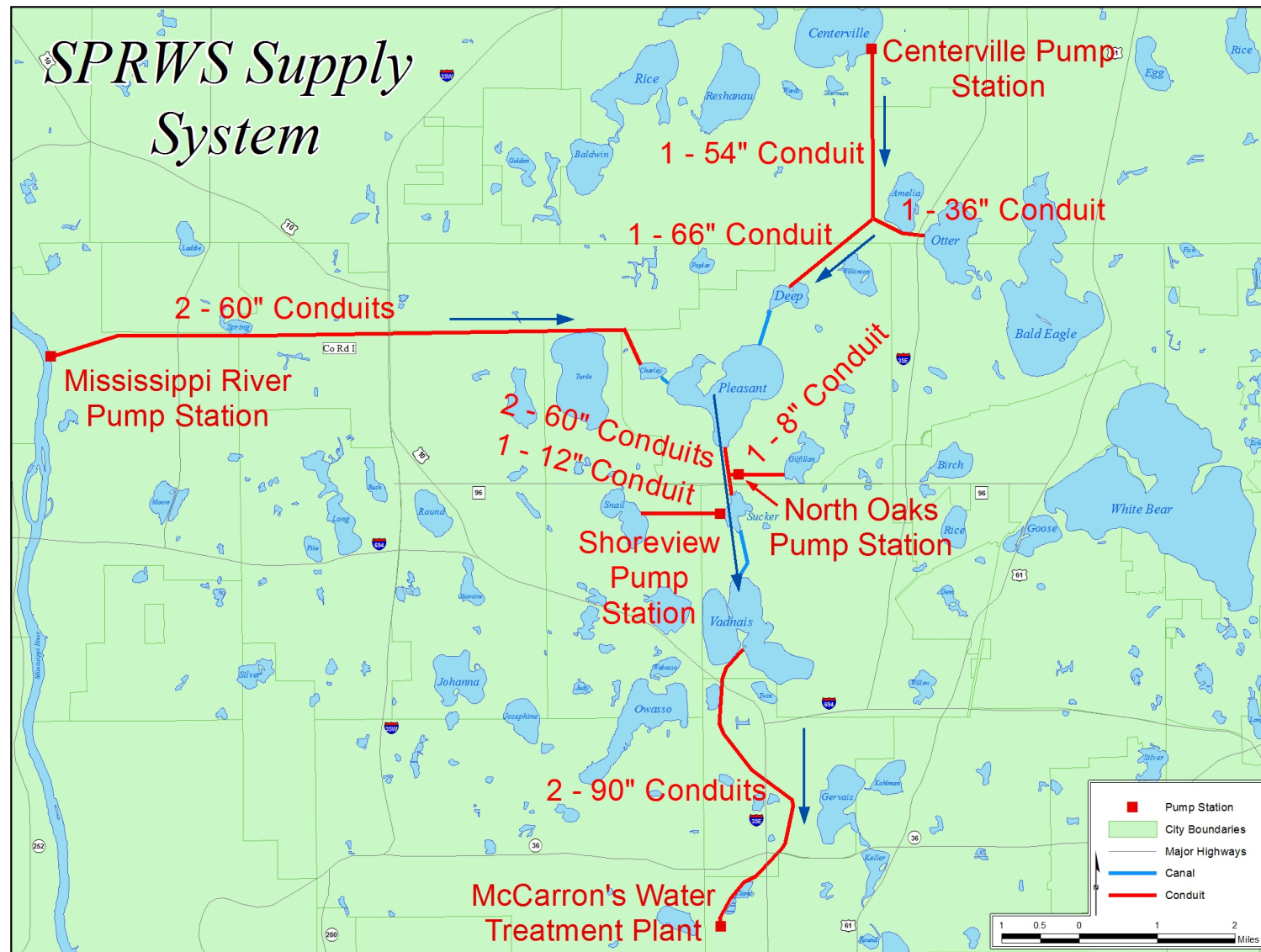
## Zebra Mussel Cleaning

**Description:** Metric used as an indicator of the success of zebra mussel control methods in water supply pipe.

**Analysis:** Methods implemented in 2017 are effective at reducing time spent cleaning zebra mussel build up.

**Frequency:** Annually on first quarter, six-year trend.





# Ensure Delivery of **Quality Water** Now and into the Future

STRIVE FOR EXCELLENT WATER QUALITY AND CONTINUOUS IMPROVEMENT

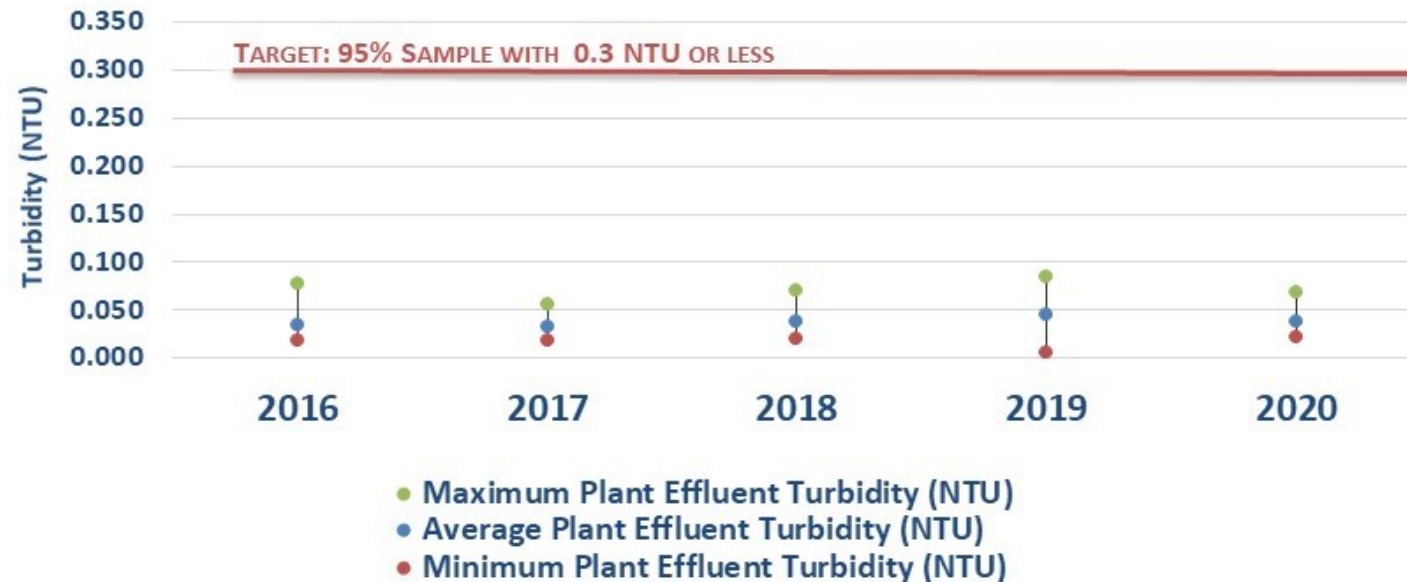
## Regulatory Compliance

**Description:** Water quality metrics required by federal and state agencies to protect public health and water resources.

**Analysis:** SPRWS continues to go above and beyond meeting current regulations 100% of the time. The graphs below illustrate two out of many regulated water quality parameters.

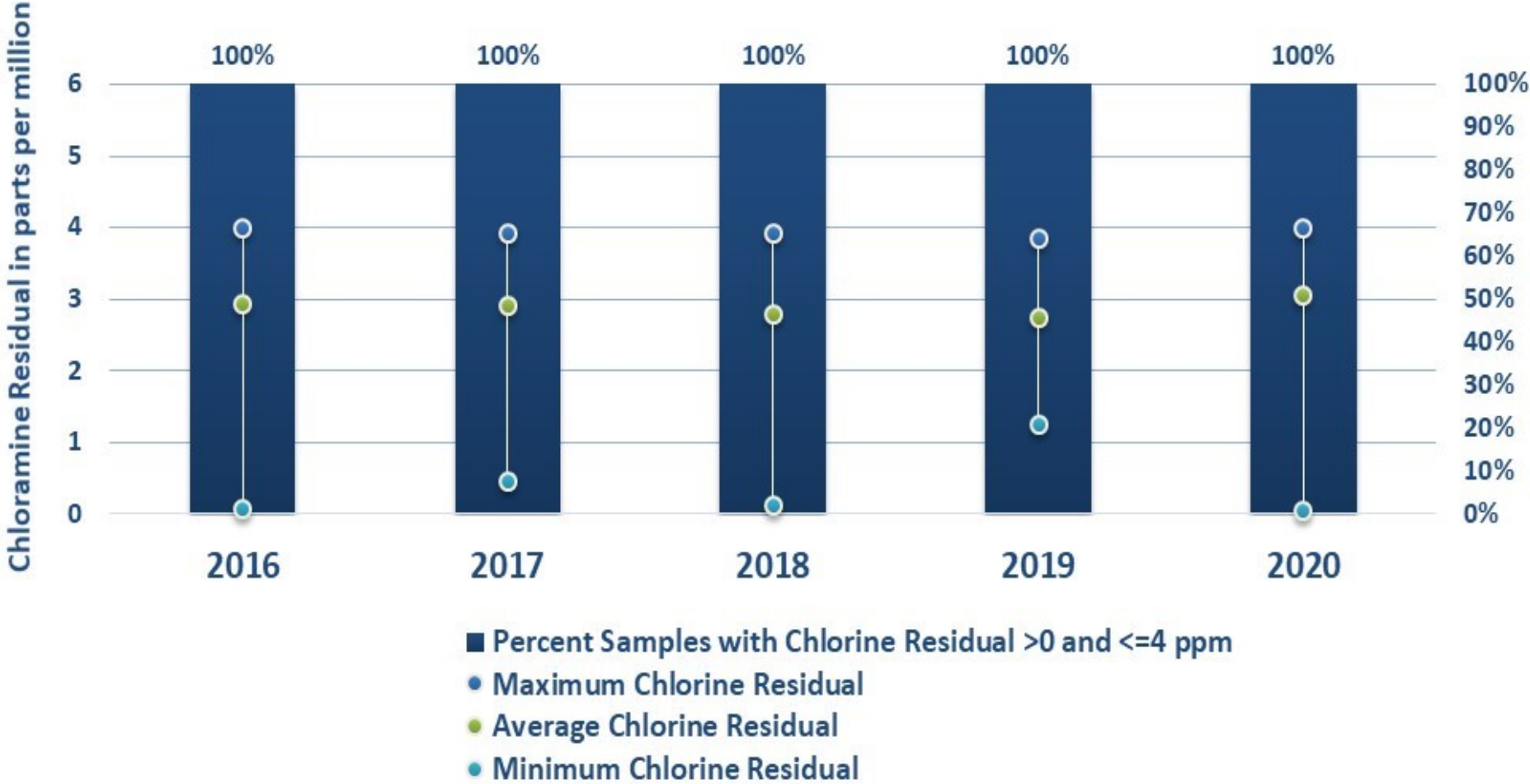
**Frequency:** Updated quarterly with a five-year trend.

### Effluent Turbidity



# Chloramine Residual in Distribution System

TARGET: 95% OF SAMPLES WITH RESIDUAL GREATER THAN ZERO AND 4 PARTS PER MILLION OR LESS



## Focus on Energy and Water Resource Sustainability

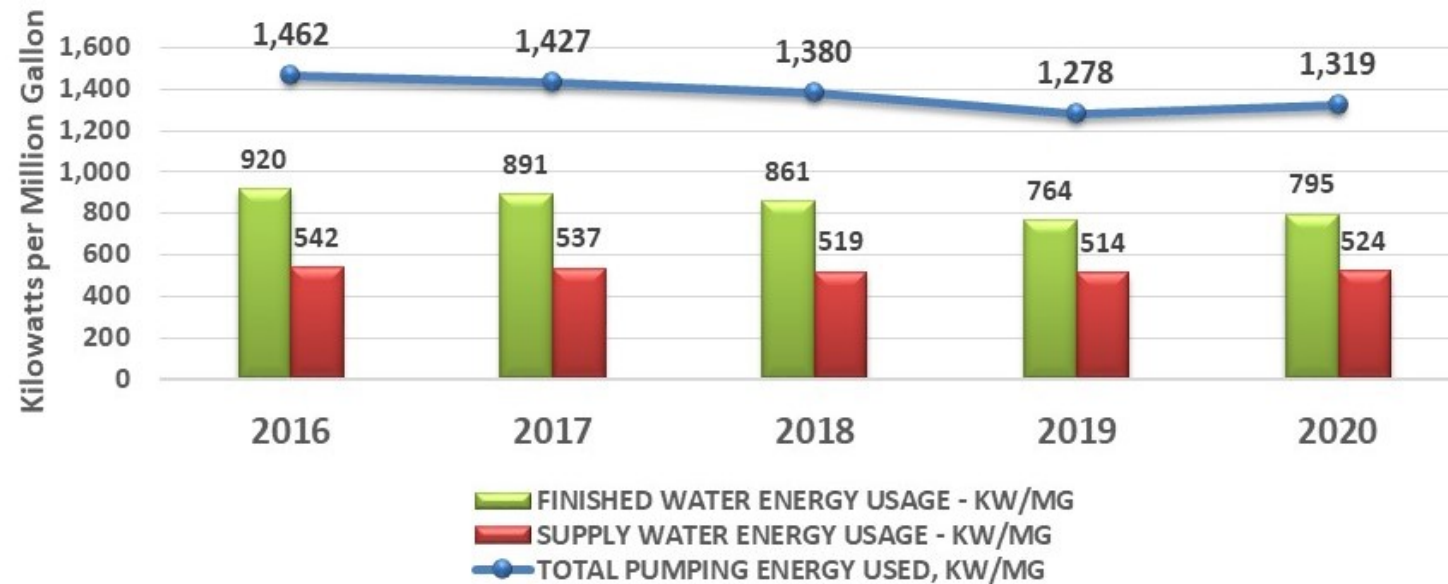
FURTHER INCORPORATE ENVIRONMENTAL STEWARDSHIP IN OUR OPERATIONS

### Pumping Energy Use

**Description:** Energy used to pump supply and finished water in kilowatts per million gallon of water produced.

**Analysis:** Energy used for pumping showed a slight upward trend in 2020. SPRWS is benchmarking its energy consumption to establish goals and measure progress.

**Frequency:** Quarterly, five-year trend.



# Looking Forward

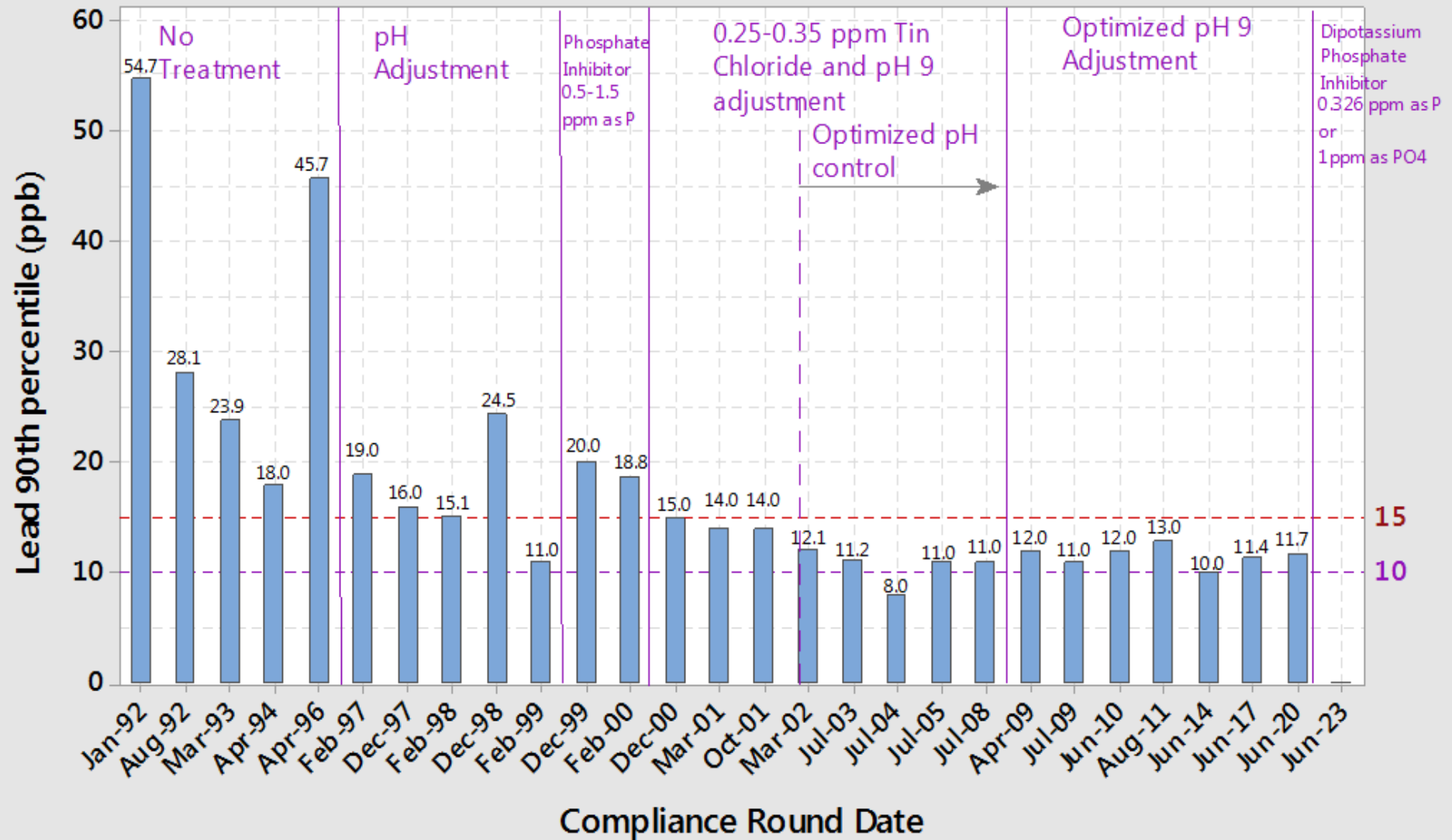
Rule Changes

# EPA Lead and Copper Rule Revisions

(we will talk about lead only)

- Action level remains the same, P90>15 ppb
  - If 90<sup>th</sup> percentile is over the action level of 15 ppb, treatment must be re-optimized, along with other requirements.
- Adds a “trigger level” of P90>10 ppb
  - If over the trigger level of 10 ppb, treatment must be re-optimized as specified in new rule (MDH discretion). \*see historical P90 graph\*
- All samples must be collected from homes with lead service lines, if available. (29,000 LSLs inside property in SPRWS system)
- Collect the fifth-liter sample from running faucet, after water has sat stagnant for at least 6 hours (old rule was first-liter)
- “Find and Fix” on any individual home sampled that is over 15 ppb of lead
- Systems must conduct sampling in 20% of elementary schools and 20% of child care facilities, as well as requests from secondary schools, for 1 testing cycle (5 years).

## Lead and Copper Rule Monitoring: Lead 90th percentile of 1st Draw



# EPA Lead and Copper Rule Revisions (continued)

(we will talk about lead only)

- Many changes related to Lead Service Lines including:

- If P90>15 ppb, must replace 3% of LSLs per year for at least 2 years ( $3\% \times 29,000 = 870$ )
- If P90>10 ppb to 15 ppb, must implement a lead service line replacement with goals set in consultation of MDH for 2 years of replacements
- Only full lead service line replacements will count towards mandatory rate
- Inform customers annually that they are served by a lead service line or status unknown service line
- All systems must develop a lead service line inventory
- All systems must develop a lead service line replacement plan
- New requirements for partial lead service line replacements include owner notification of upcoming work (we do this), promote private portion replacement (we do this), educational info on increased lead levels following partial replacement (we do this), instructions on service line flushing (we do this), provide filter pitchers and 6 month supply of replacement cartridges (we do this), offer follow up sample between 3 and 6 months after work is completed (need to start this)
- Must replace utility's portion of service line within 45 days of notification of private portion replacement

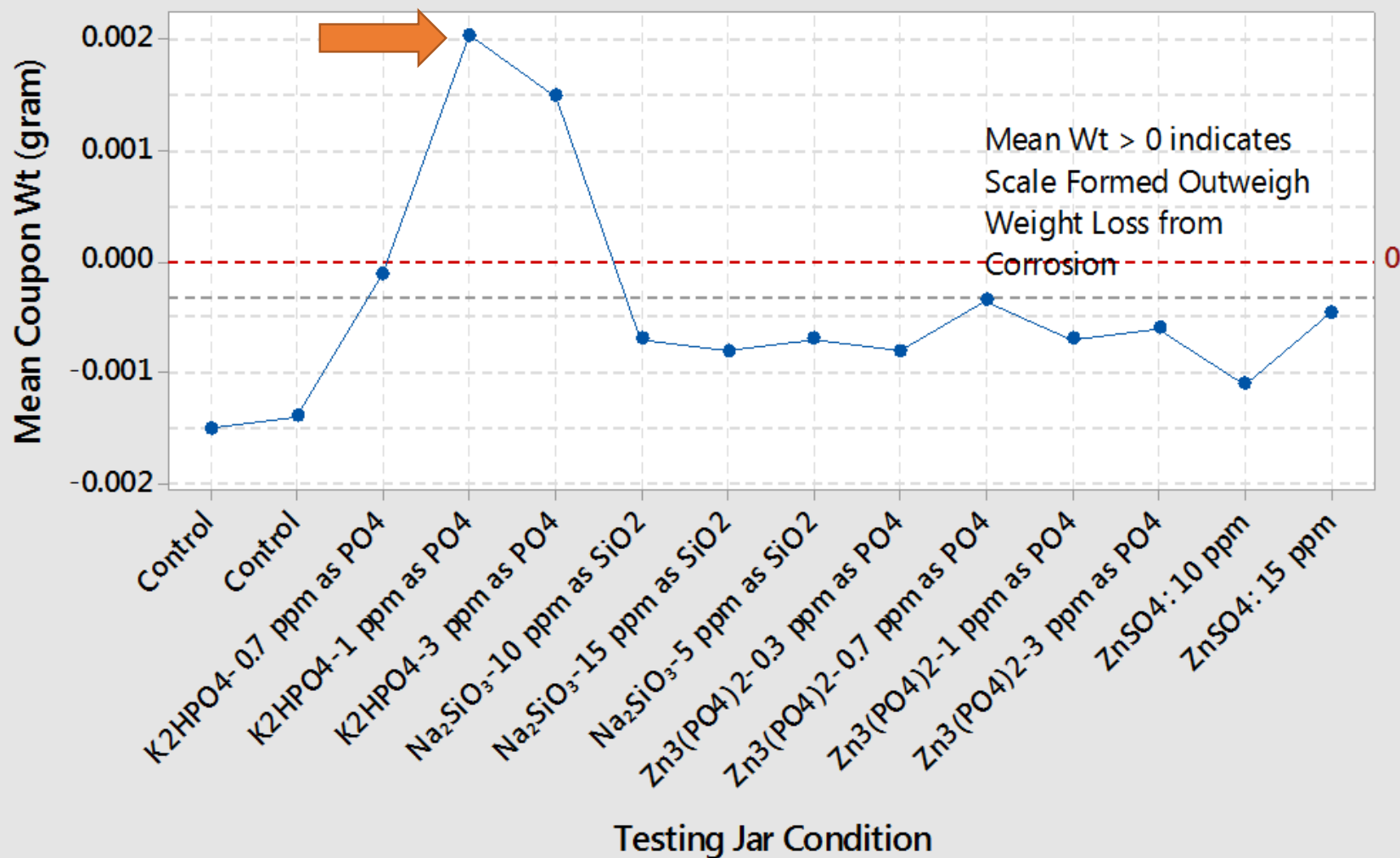
# EPA Lead and Copper Rule Revisions (continued)

(we will talk about lead only)

- SPRWS intends to change its corrosion control treatment
  - Our goal is to reduce our P90>10 ppb
  - We have done laboratory testing on corrosion control additives and believe a phosphate additive is our best option for reducing our lead levels from current levels.

# Lead Coupon Wt. After 42 days of Immersion in Drinking Water (gram)

8/17/2020 - 9/28/2020



# Looking Forward

Treatment Plant Improvements and Other  
Capital Projects Underway

# Treatment Plant Improvements Project Goals – Highest Priority



- Maintain Exceptional Water Quality
- Provide flexibility for future capacity and treatment
- Improve plant reliability
- Ensure staff is equipped to operate and maintain new treatment
- Maintain public trust



McCarrons Campus

Proposed Plant Improvements



# West Side Pump Station Electrical Improvements





# Highland Pump Stations Electrical Improvements







Thank You