

WestRock Closure Response

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September 27, 2023



WestRock Closure Response

- What's been done to date
 - Financial Planning
 - Analysis of Westrock Closure
 - Incident Command System
 - Review & Adjustments
 - Capital Improvement Plan
 - Projects & Studies
 - Work Underway
 - Hydraulic Analysis
 - Water Quality Monitoring
 - Green River Filtration Facility Modifications
 - Storage & Reservoirs
 - Future Work
 - Wells & Groundwater
 - 251 Zone Master Plan
 - Integrated Resource Plan & PFAS Study
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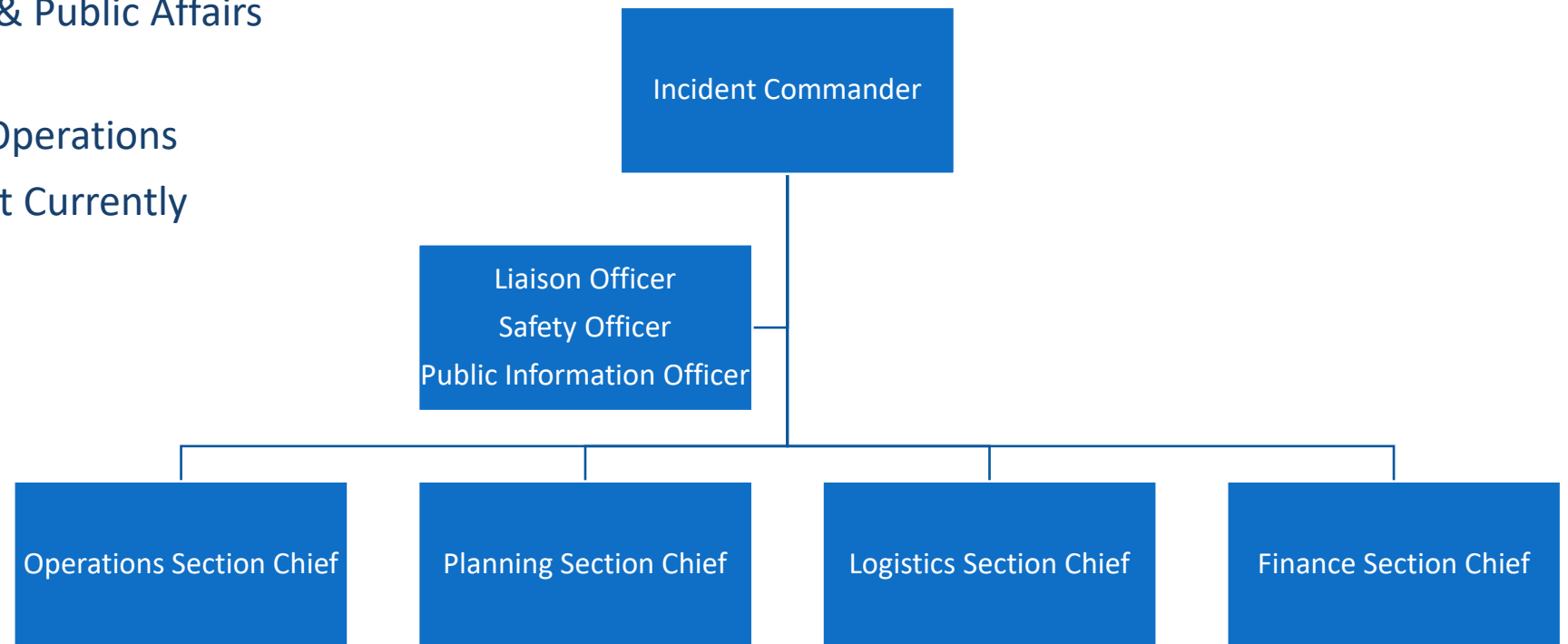


Analysis of WestRock Closure

- Financial
- Water Quality
- Storage (Reservoirs)
- Wells/Groundwater
- Hydraulics
- Maintenance Practices
- Green River Filtration Facility
- System Reliability
- Water Rights Issues

Incident Command System Kicked Off August 9th

- Purpose: Westrock announced August 1, 2023, permanent closure on September 30, 2023. Water needs to be prepared for operations without this demand in our system now and into the future.
- Incident Commander: Tosha Siebert, System & Asset Planning Manager
 - All sections of Water & Public Affairs
- Operational Period 4
 - Focus on Green River Operations
- ICS-233 Incident Action List Currently
 - 44 Items Total
 - 27 Items Closed



Review & Adjustments of Projects

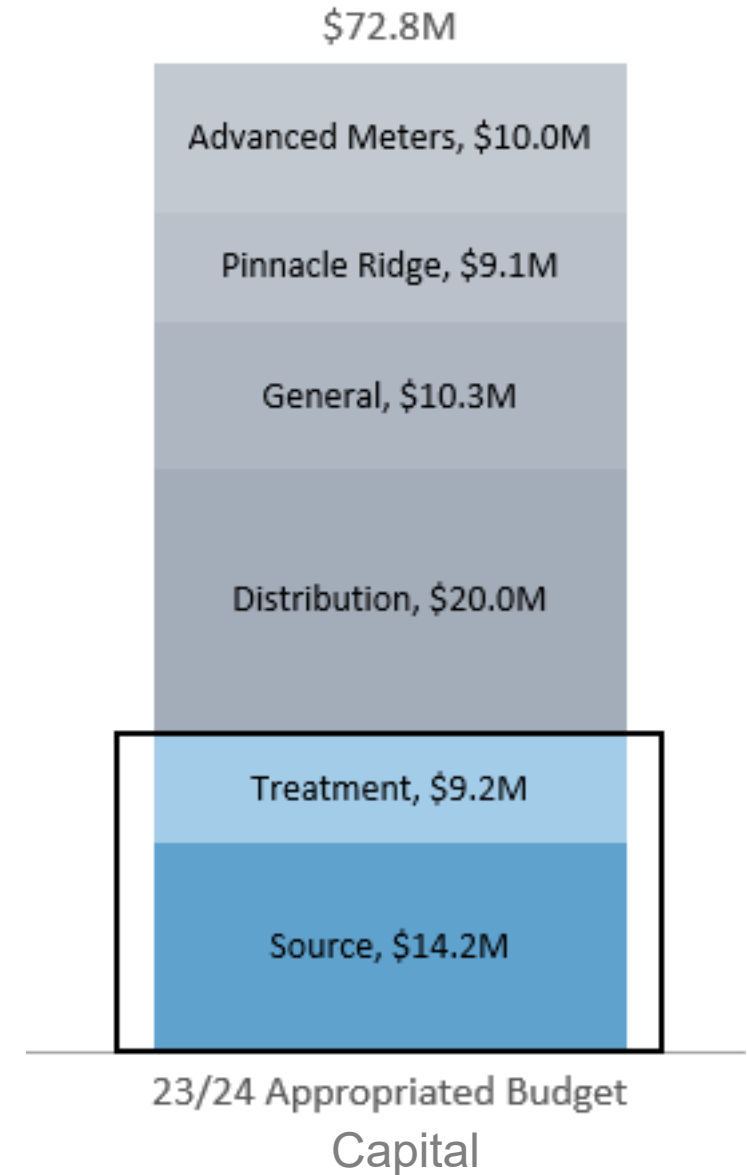
Capital Work

- Reviewed 92 projects planned over the next 6 years. 21 Projects estimated at \$36.2 M were further analyzed
 - 11 Projects (~\$23.6M) identified for delay
 - 10 Projects (~\$12.6M) need to continue as planned
- 23/24 Budget 5 projects (~\$9M) are being paused

Operations & Maintenance

- Capital delay will result in some additional O&M
- 3 studies will be delayed

4 new projects already identified due to system changes



Work Underway

Hydraulic Analysis

Water Quality Monitoring

Green River Filtration Facility Modifications

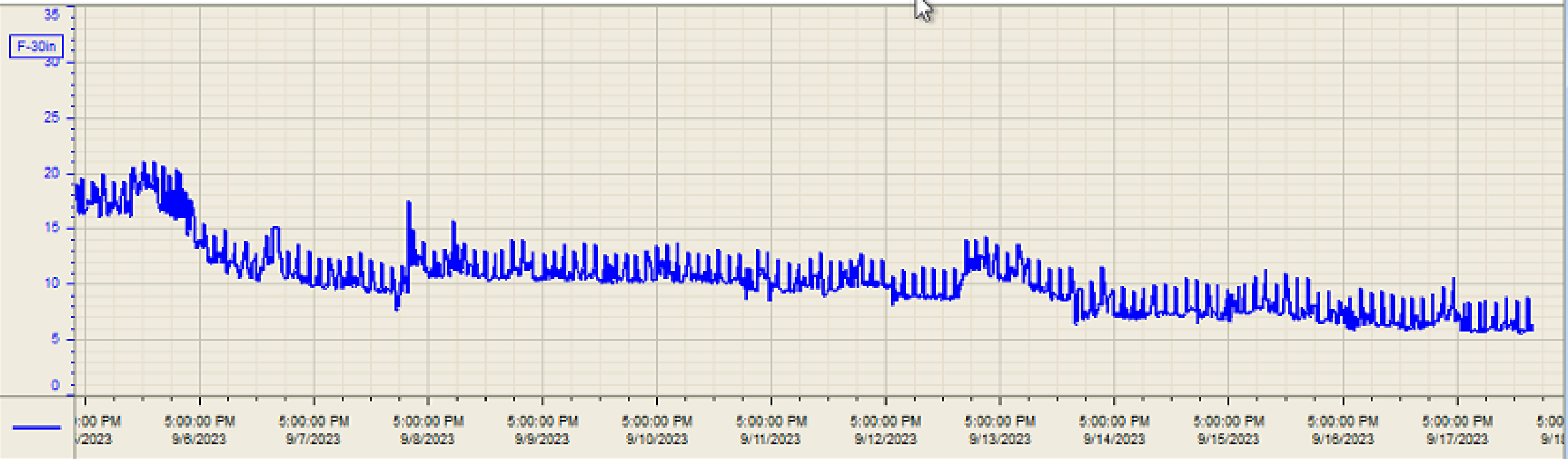
Storage & Reservoirs



251 Zone

- Large Diameter Mains
- Two Large Reservoirs
- Well System Set Up To Easily Serve





Hydraulics

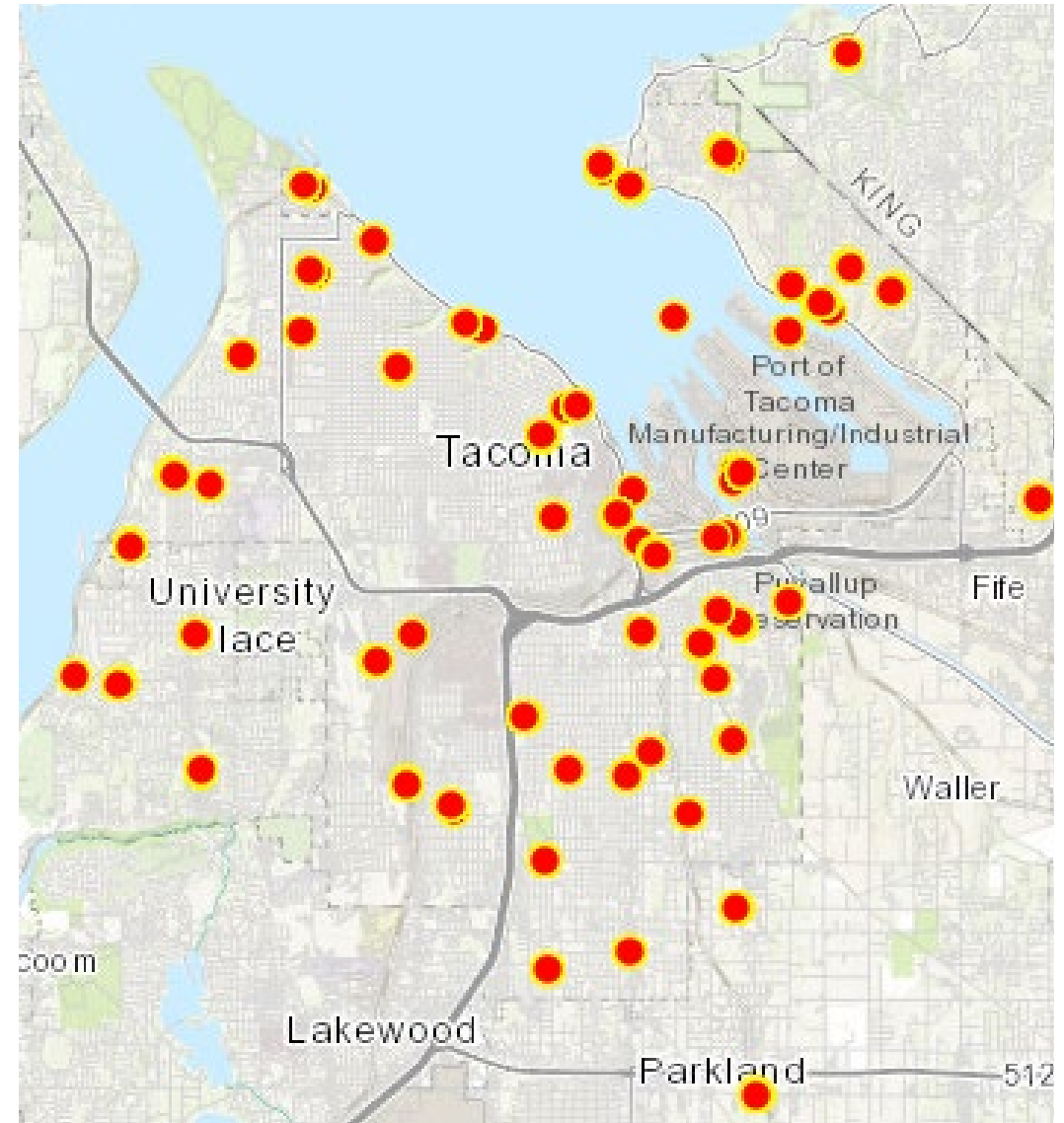
- Hydraulic Model Upgrades: Extended Period Simulation
- Q3-Q4 2023:
 - Determine operational limitations of our current infrastructure with low or no WestRock water use
 - Determining WestRock low flow metering options
 - 356th Pump Station Improvements Charter



Water Quality

Water age and chlorine decay in some parts of the system, especially in the 251 zone will decline.

- Extensive distribution system sampling and online analyzer system
- Monitoring **over the next year** with focused sampling plans prepared if specific concerns arise
- Baseline profiles of reservoirs completed and will be repeated after a few months



GRFF Treatment

Green River Filtration Facility Analysis Completed

- 3 new chemical pumps needed
- Associated electrical/controls modifications

Observe effects on operations in the coming months



Storage Reservoirs

Water is going to significantly slow down in our entire system, and the impact on reservoirs is unclear.

Areas we will be analyzing include:

- Water quality
- Fire flow
- Emergency storage
- Redundancy

251 Master Plan will determine if we currently need all our reservoirs.

- Hood Street Reservoir
- Portland Ave Reservoir



Future Work

Wells & Groundwater

251 Zone Master Plan

Integrated Resource Plan & PFAS Study





Wells/Groundwater

Historically Wells have been an important secondary source

- Going forward in normal years, less well water is anticipated
- Continue to provide system resiliency, and may need supplemental source in dry years

Q4 2023

- Run Model for system reliability (WYSDM)
- Adjust Wells Master Plan

Q1 2024

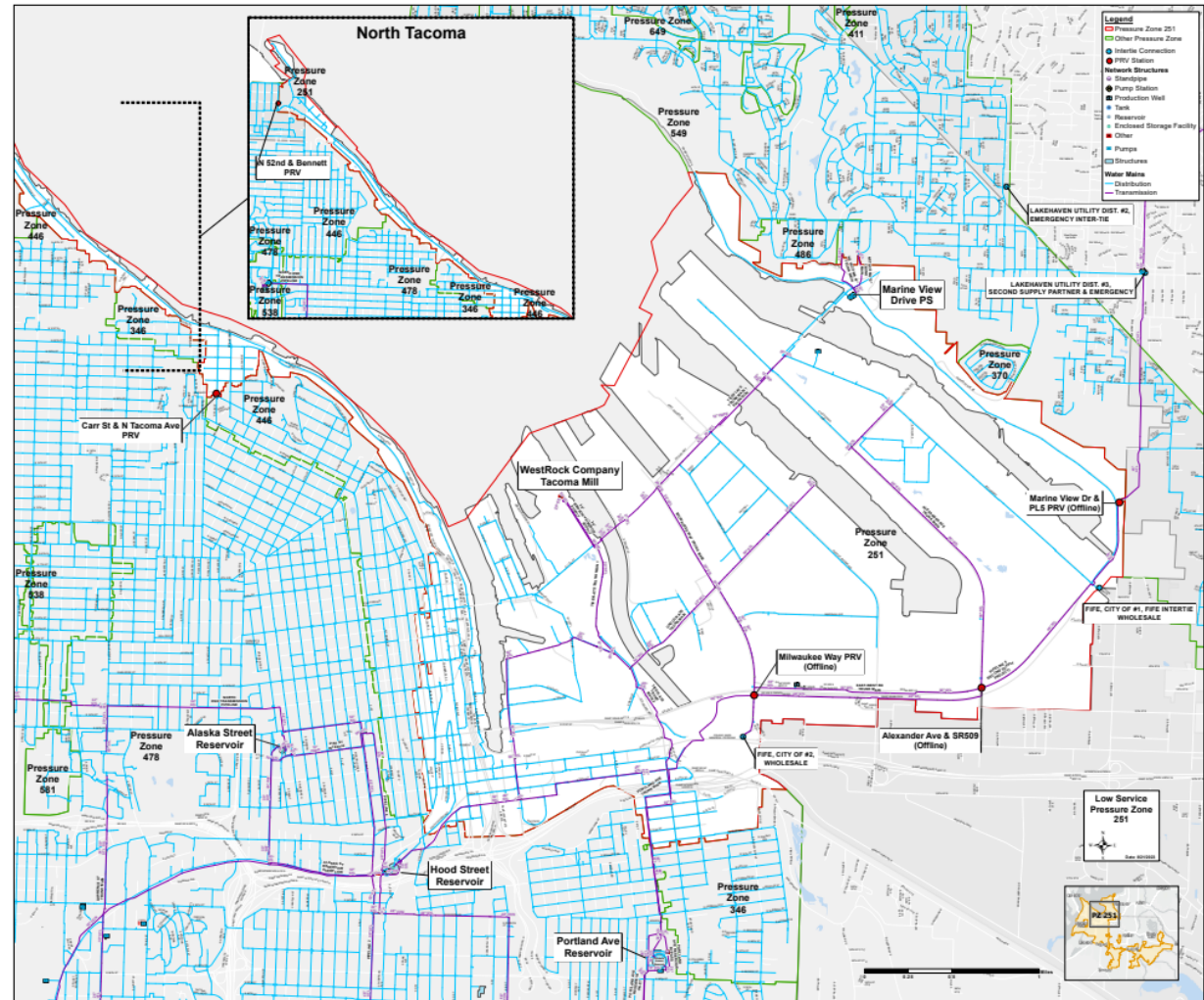
- Integrated Resource Plan
- PFAS Evaluation

251 Zone Master Plan

Determine the future state

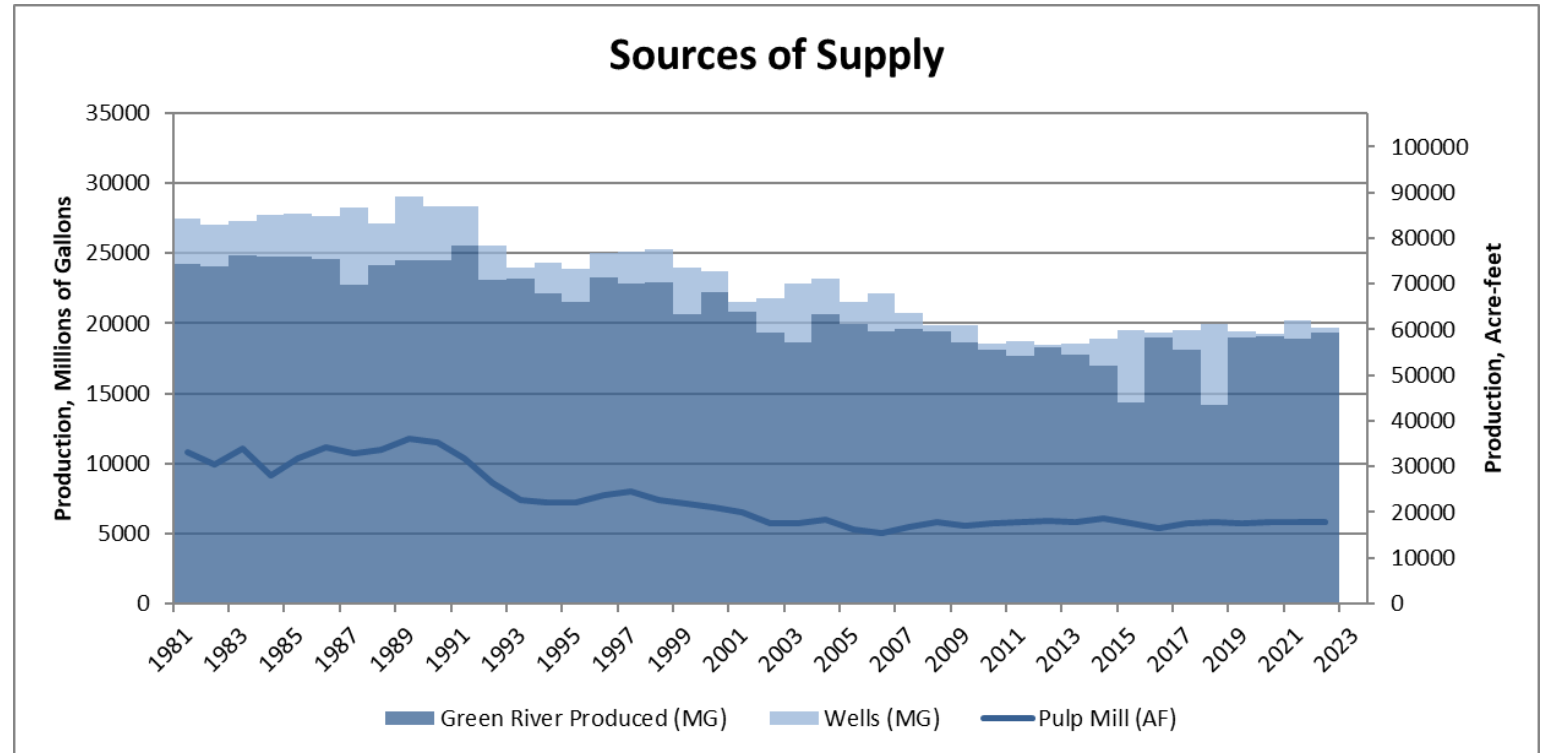
- Do we still need all our assets?
- What improvements are needed to continue using our existing assets?
- What size mains do we need in the future?

Anticipated to be completed Q1 2024



Integrated Resource Plan

- Analyze changing conditions such as
 - PFAS,
 - Impacts of the WestRock shutdown,
 - Climate change,
 - Resiliency and other issues
- Groundwater emphasis
- Will assist and guide water source and resource investments in the future



WestRock Closure Response Summary

Lots of work has already been complete, more is underway, and is anticipated in the future

Tacoma Water was Set up Well to Pivot

Monitor & Adaptatively Manage over the next Year

