

SANDY CLEAN WATERS PROGRAM UPDATE

**Economic Development
Advisory Board Meeting**

August 14, 2024



Jennifer Coker, PE

Agenda

- ▶ Introduction
- ▶ Sandy Background
- ▶ Sandy Clean Waters Reinvestment Program
- ▶ Consent Decree/Stress Test/CAP
- ▶ Next Steps

Background

- ▶ City of Sandy -13,500 people
- ▶ Top Ten Growing Communities in Oregon
- ▶ Commercial Center East Clackamas County



SANDY WILL DOUBLE ITS POPULATION BY 2050 AND REACH A POPULATION OF 29,180 BY 2070. IT IS ESTIMATED TO ADD BETWEEN 2,000 AND 2,500 NEW JOBS AND CLOSE TO 3,000 NEW PEOPLE BY 2043.



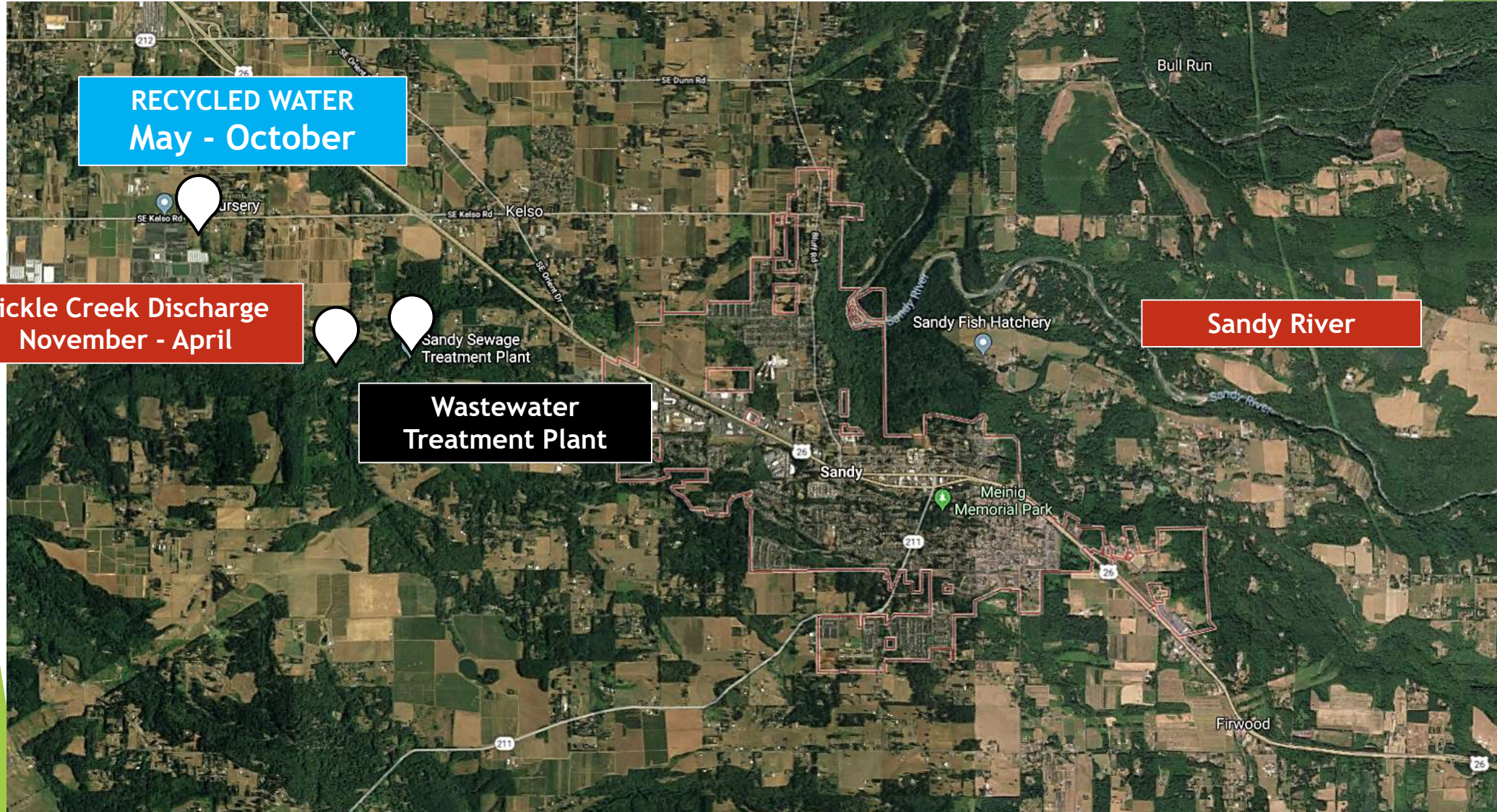
The logo for 'SANDY CLEAN WATERS' is positioned in the upper left. 'SANDY' is written in a large, bold, dark teal font. The letter 'D' is replaced by a circular icon containing a white fish swimming in teal wavy lines. Below 'SANDY' is a thin horizontal line with a color gradient from green to orange. 'CLEAN WATERS' is written in a smaller, teal font below the line.

SANDY CLEAN WATERS

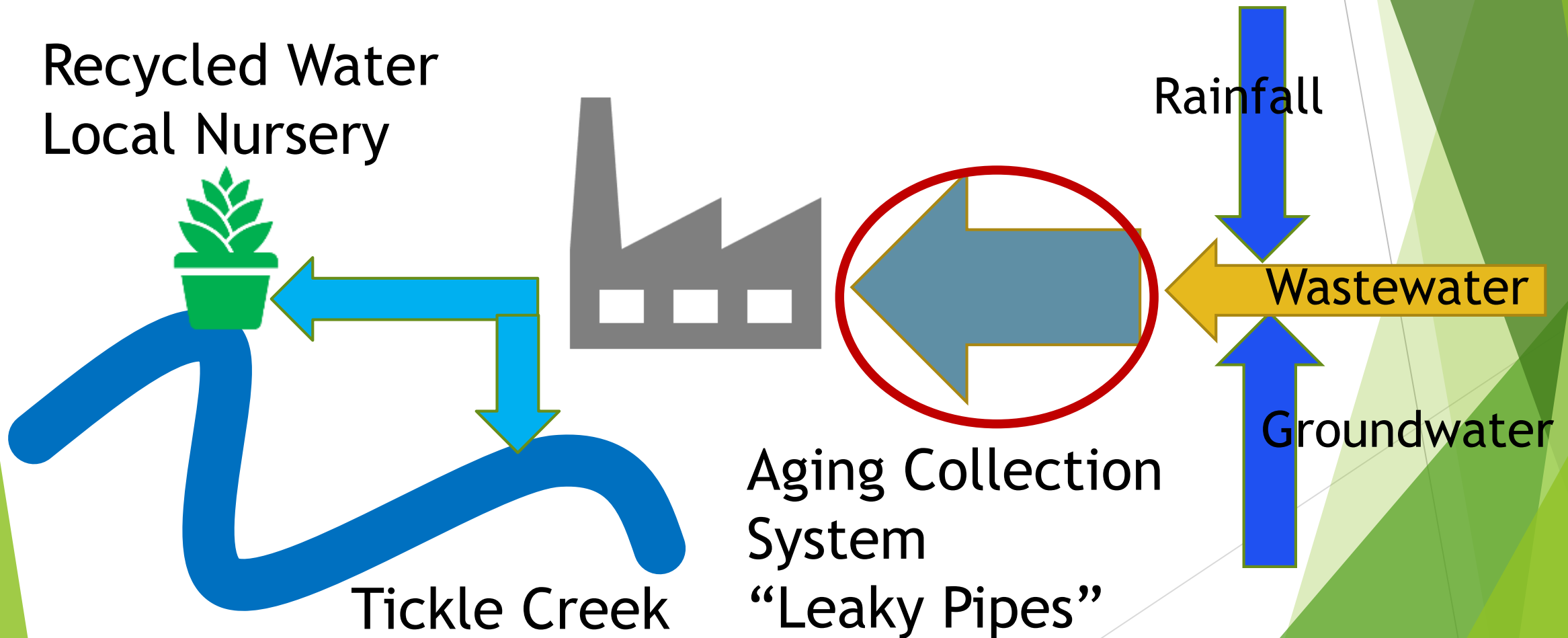
The text 'Phase 1A' is centered in the middle of the image in a large, white, sans-serif font. Below the text is a thin horizontal line with a color gradient from green to orange.

Phase 1A

Existing Wastewater System

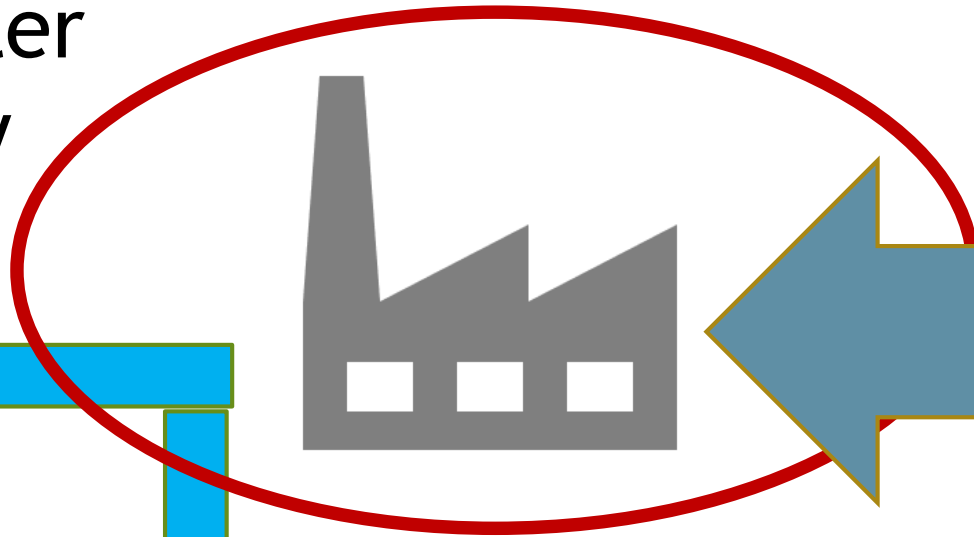
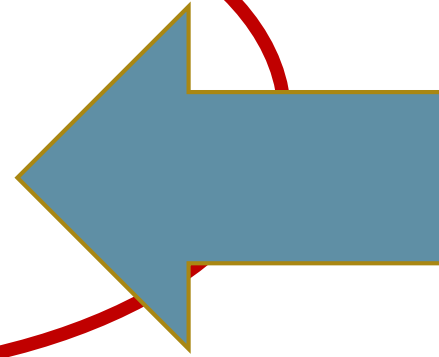
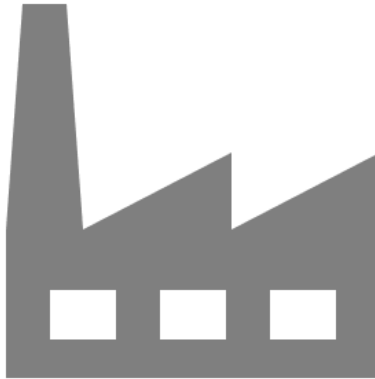


Challenge #1 – Collections System



Challenge #2 – Treatment

Recycled Water
Local Nursery



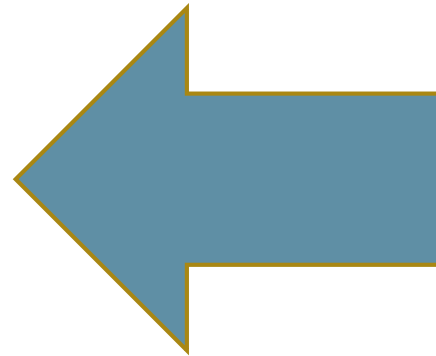
Aging Mechanical Equipment
needs Replacement and Expansion

Tickle Creek



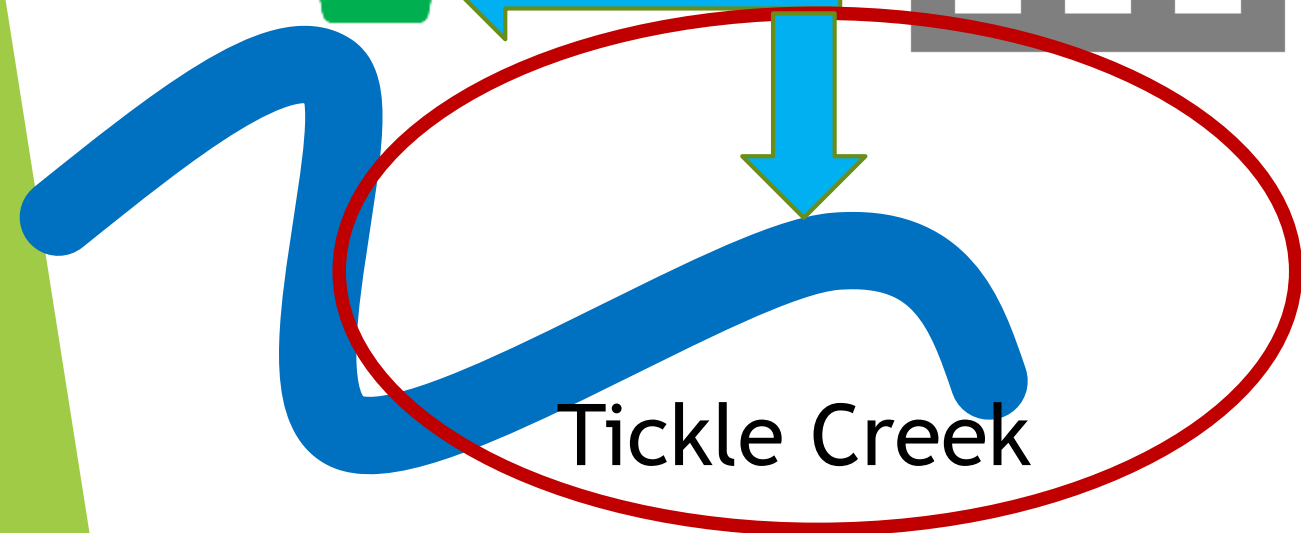
Challenge #3 – Effluent Disposal

Recycled Water
Local Nursery

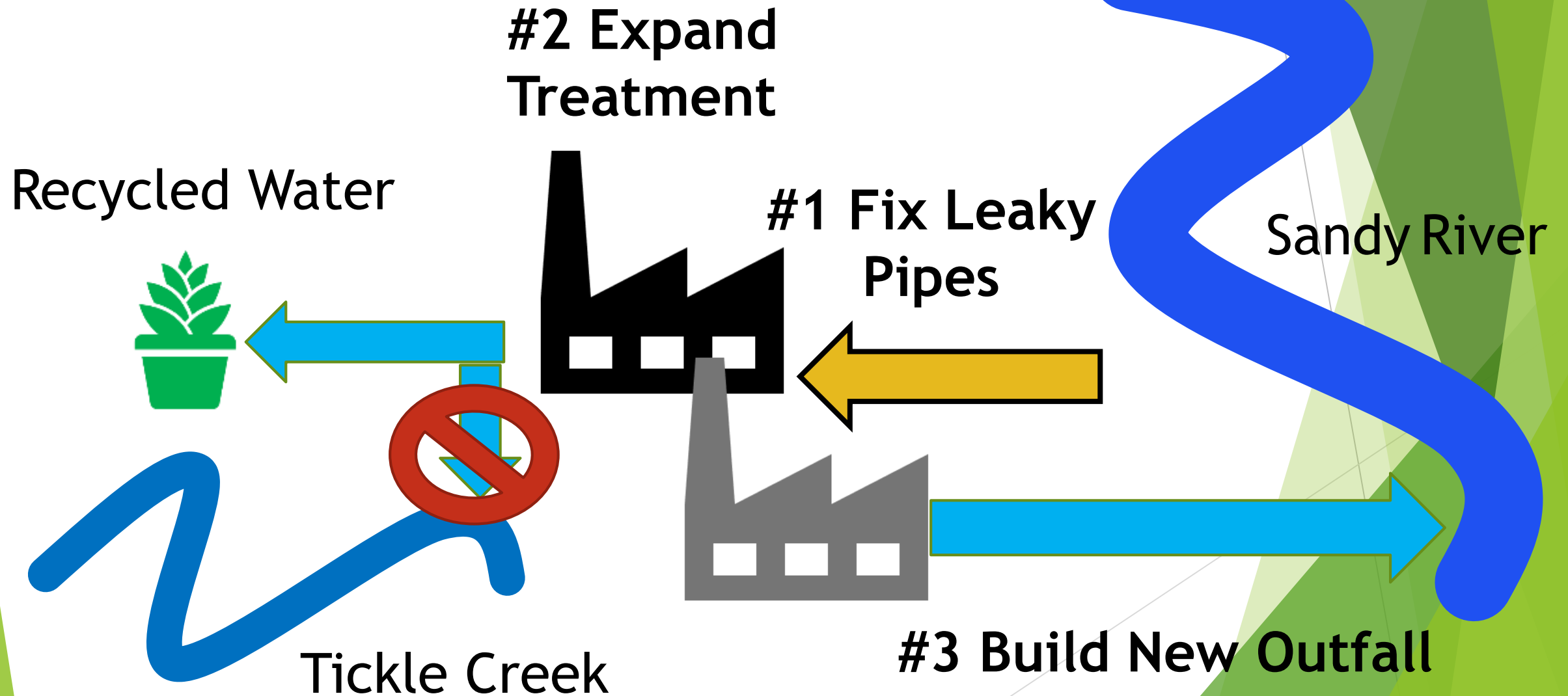


Mass Load Limit
“Bottleneck”

Tickle Creek



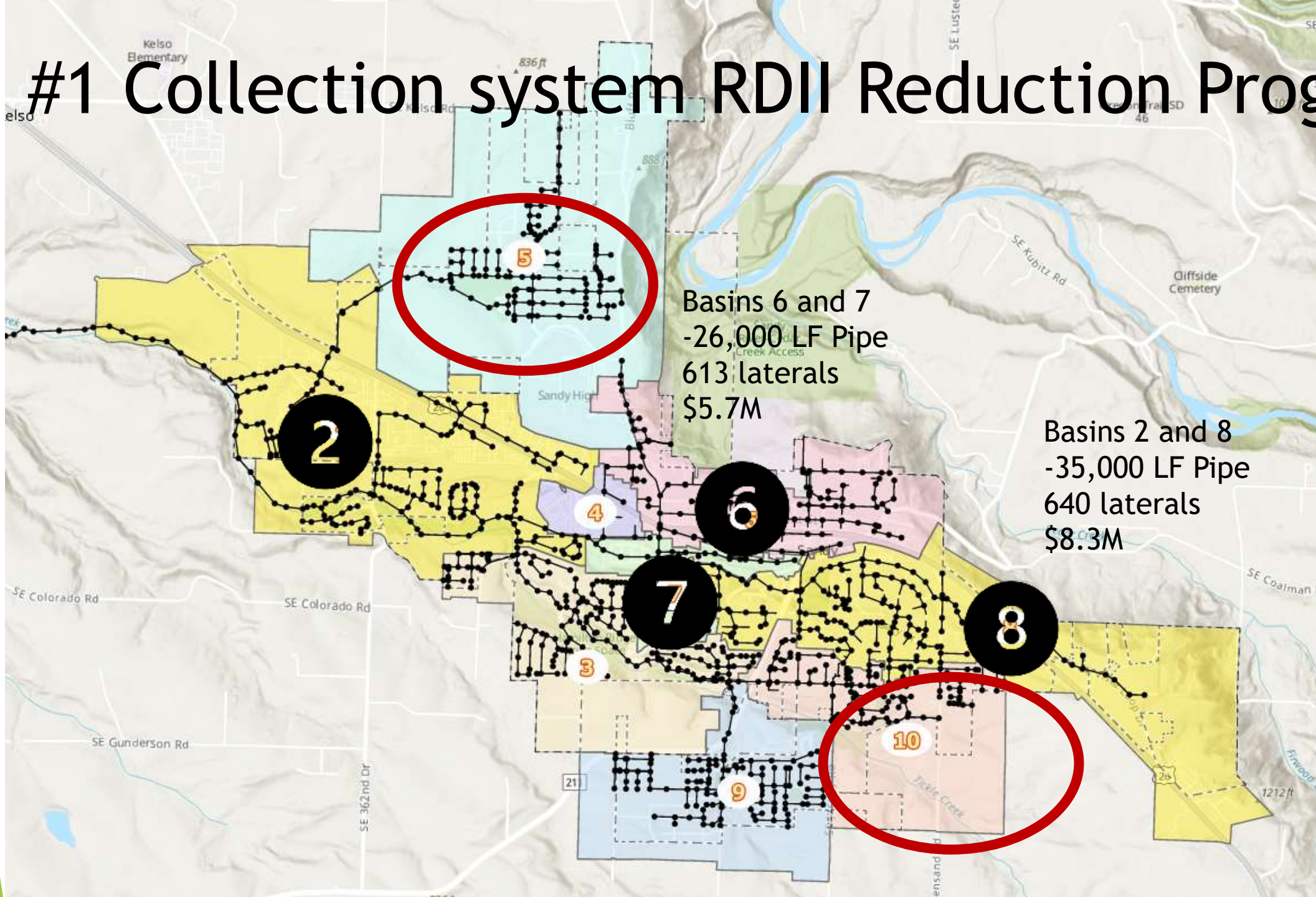
Three Step Plan



Phase 1A - 2019 Facility Plan Summary

- ▶ Rehabilitating Basins 2 and 8
- ▶ Equipment replacement at existing WWTP
- ▶ Plan for satellite wastewater treatment facility at Sunset Dr
- ▶ \$85.3M (2019 dollars)

#1 Collection system RDII Reduction Program



Collection System RDII Expected Results

- ▶ Basins 2 and 8 - Anticipated reduction 2.0 MGD
- ▶ Basins 6 and 7 Anticipated reduction 1.2 MGD
- ▶ **Total Peak Flow Reduction 3.2 MGD**
- ▶ **Model Validation Spring 2023**
- ▶ **CMOM Program**
- ▶ **Investigation of remaining basins by 2025**

#2 Treatment Replacement and Expansion

- ▶ Immediate Needs Improvement Project
- ▶ Construction completion Feb 2023
- ▶ Stress Test of system Spring 2023
- ▶ Facility Plan Amendment
- ▶ Immediate additional equipment and \$200,000 RRM purchases for Stress test

Phase 1A - WWTP Improvements (2021 - 2023)

- ▶ Upgrading failing WWTP equipment
- ▶ Reconfiguration of secondary and tertiary treatment processes
- ▶ \$13.9M spent



Anticipated Results at WWTP Construction Completion

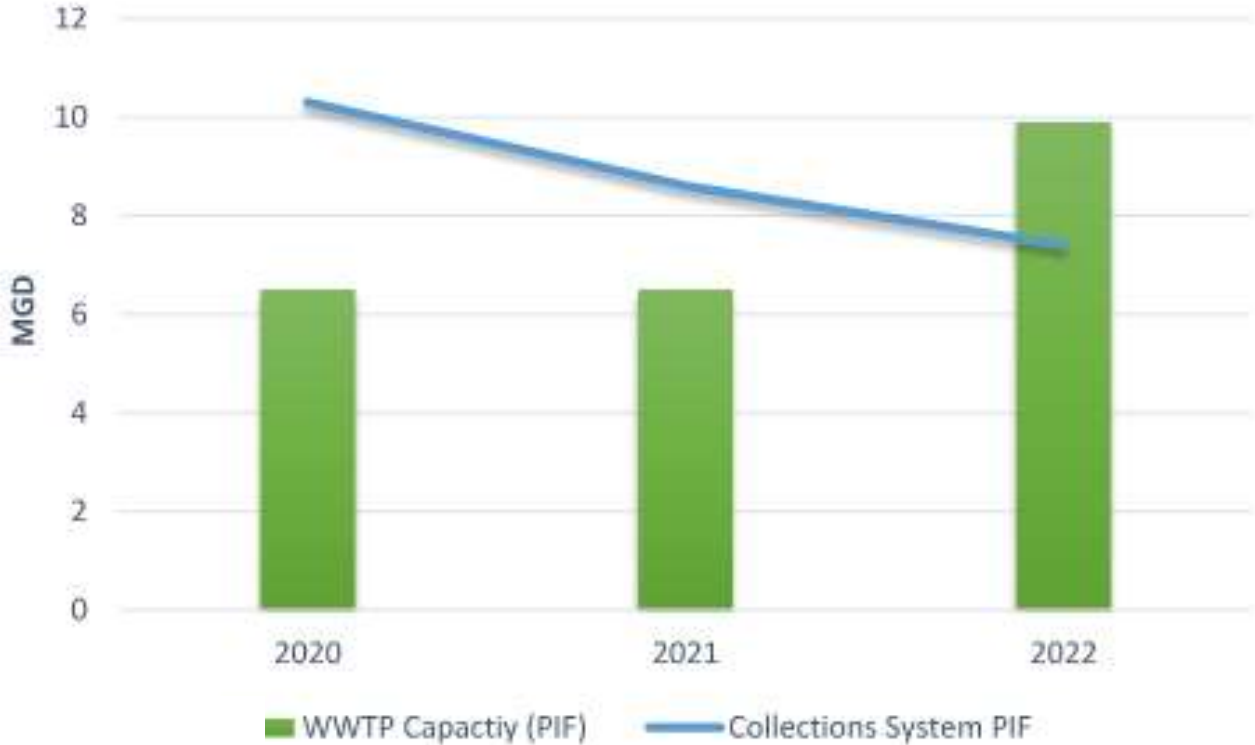


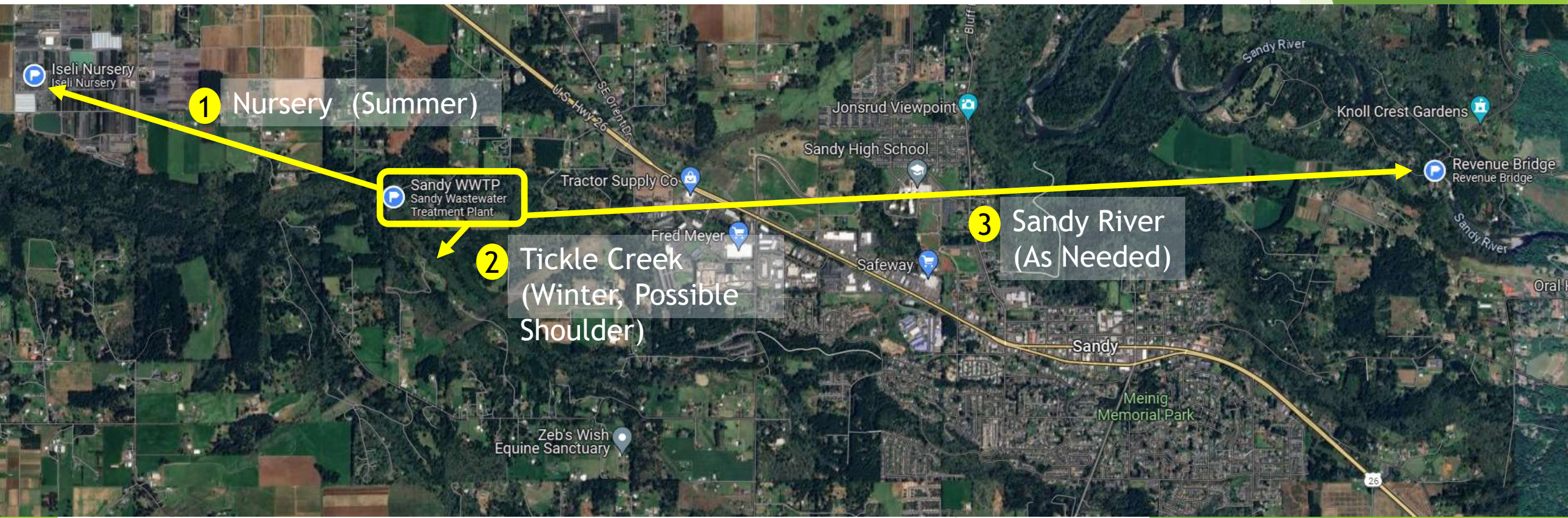
Table 4. Summary of WWTP Improvements Project Design Capacity

<i>Design Loading</i>	<i>Pre-Improvements</i>	<i>Post-Improvements (December 2022)</i>
<i>Maximum Monthly Dry Weather Flow (MMDWF)</i>	1.25 MGD	1.5 MGD
<i>Maximum Monthly Wet Weather Flow (MMWWF)</i>	1.85 MGD	1.9 MGD
<i>Peak Day Flow (PDF)</i>	3.7 MGD	5.5 MGD
<i>Peak Instantaneous Flow (PIF)</i>	6.5 MGD	9.9 MGD

Anticipated PIF comparison to WWTP PIF capacity.

#3 Permit Renewal

- ▶ Long-term Discharge Plan:
 - ▶ Maintain Tickle Creek Discharge
 - ▶ Add Sandy River Discharge
- ▶ Maintain Nursery Reuse
- ▶ Add Sandy River Discharge



Phase 1A - Summary

▶ \$30M+ spent

Element	2019 Facility Plan Budget	Spent (as of 12/31/2023)
I/I Reduction	\$11.8M	\$14.0M
Immediate WWTP Improvements	\$2.5M	\$13.9M
NPDES Permit Planning	\$0	\$800k

▶ No flow-related bypasses or permit violations since June 2022

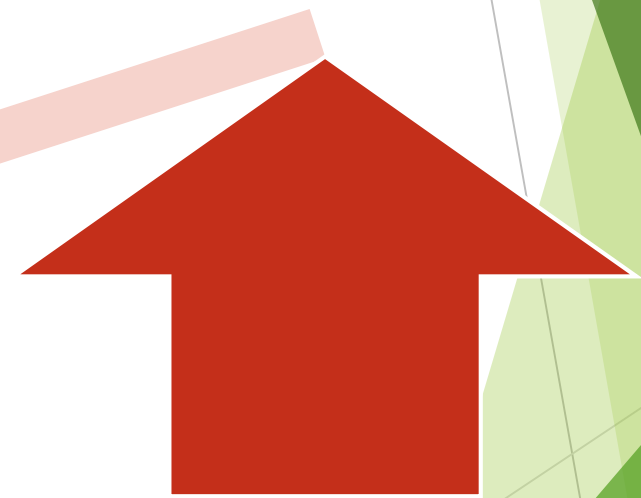
▶ Available capacity in collection system and at WWTP

- Some immediate bottlenecks to be addressed
- Long-term improvements needed to handle future growth

What changed since the 2019 Facility Plan?

Less treatment capacity needed

14 MGD



12.2 MGD

More Leaky Pipes Fixed



Moratorium

- ▶ The City negotiated a settlement with EPA
- ▶ Moratorium Adopted **October 3, 2022**
 - ▶ Development Services will not accept
 - ▶ applications for new sewer connections
 - ▶ After **Stress Test Results** switch to Capacity Assurance Program (CAP)
- ▶ June 3, 2024 - CAP of 570 ERUS
 - ▶ Pathway to unlock 190 additional ERUs

Stress test cost -
duration of 18
months

\$1 M

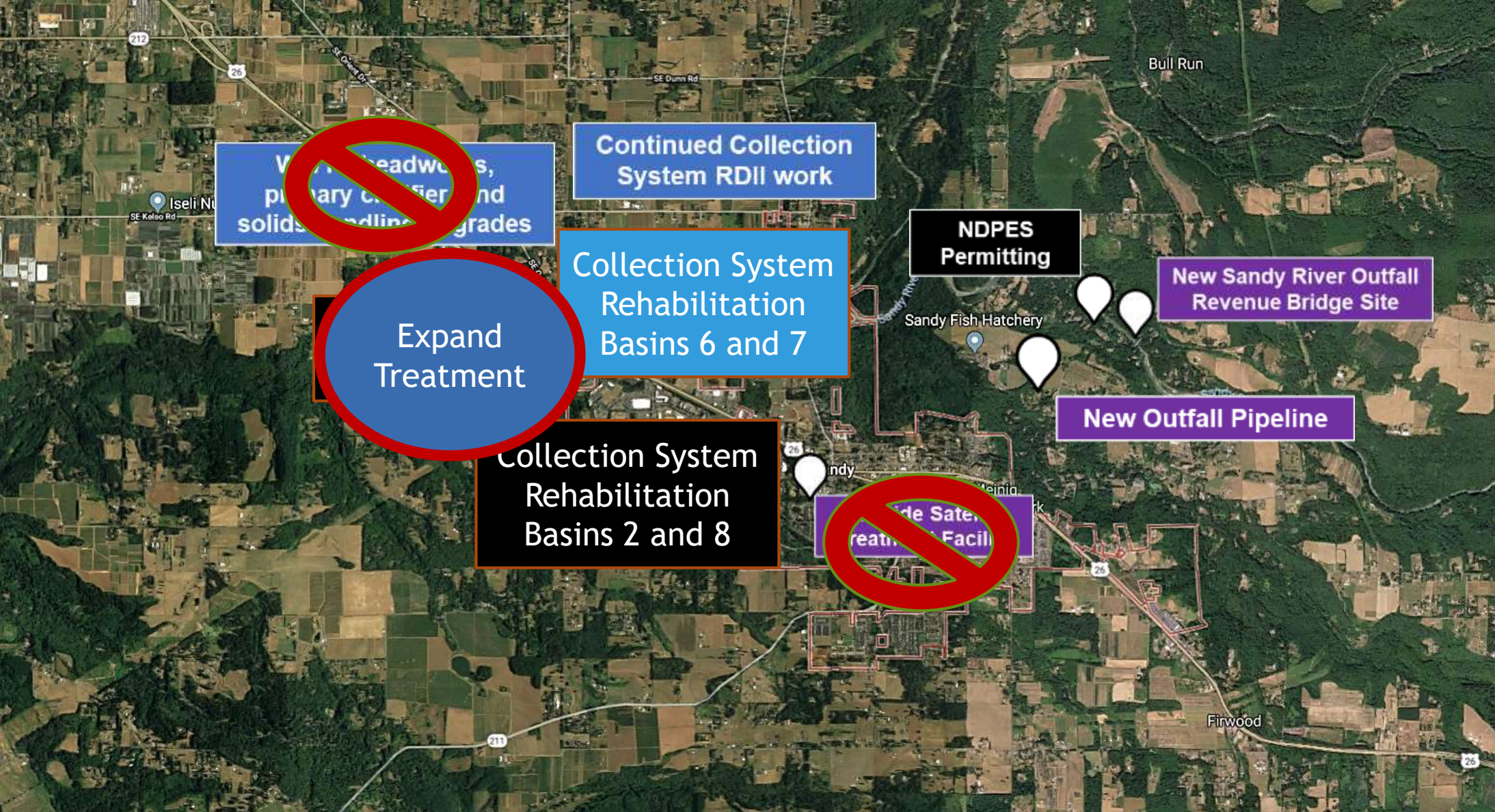
\$32 M

City investment in
Sewer System

EPA/DOJ Consent Decree Settlement

Status	Settlement	Element	Schedule
✓	(I/I) Investigation and Corrective Measures (Phase 1A)	Basins 2&8, 6&7, repairs to cat 4 and 5 defects	Substantial March 2023
✓	Existing Treatment Plant (Phase 1A)	Complete PDR recommendation & Stress Test	Construction Complete Sept 2023 Stress Test June 2023
	Capacity Assurance Program (CAP)	Period 1 – Moratorium on new land use, ERUS issued Period 2: After stress test results Additional ERUs – up to 190	June 3, 2024 – Moratorium CAP raise to 570 ERUs In Progress additional ERUs
	Facility Plan Amendment	Submit permit for outfall or alt discharge Complete Facility Plan Amendment	In Progress
✓	CMOM Program	Develop and submit CMOM by March 2024	Complete
✓	Civil Penalties/SEP	Interim Clean Water Act Penalty Policy	Paid

Wastewater CIP – Potential Change?



Schedule

Additional Capacity

	2020-2022	2023 - 2025	2026 - 2028	2029 - 2032
Collections	Rehab Basins 2,8, 6, 7	Investigate Basins 10, 1, 3, 4, 9	CMOM	CMOM
Treatment	Complete Immediate Needs Project	Facility Plan Amendment Design Phase 1B	Construct Phase 1 B	
Effluent Disposal	Submit Sandy River Outfall Application	Public Involvement, NEPA process,	Design, permitting, begin Construction	Complete construction