



March 15, 2021

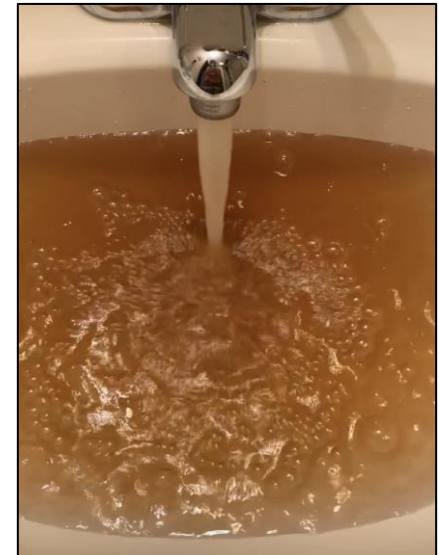
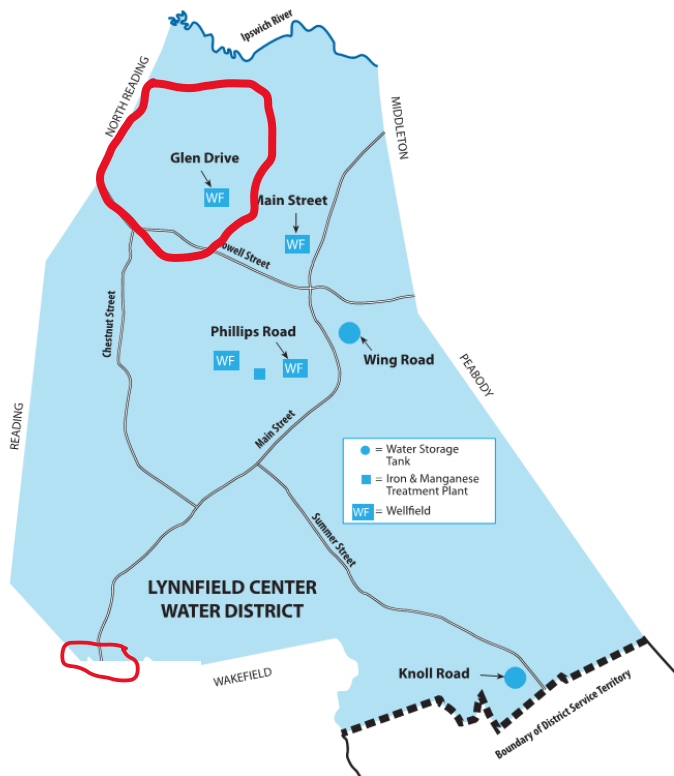
FY22-23 Capital Improvement Plan

Lynnfield Center Water District



Why are we here?

- Water system has capital needs
- Present the Plan and impacts
- Board of Commissioners Endorsement
- You will vote on the Capital Plan



Tonight's Presentation

- **Review the Capital Plan**
 - Supplemental Water
 - Intermunicipal Agreement
 - Glen Drive Treatment Facility
- **Frequently Asked Questions**
- **Timeline & Costs**

Water Source 4
(Glen Drive)

Water Source 2
(Main Street)

Peabody

Andover

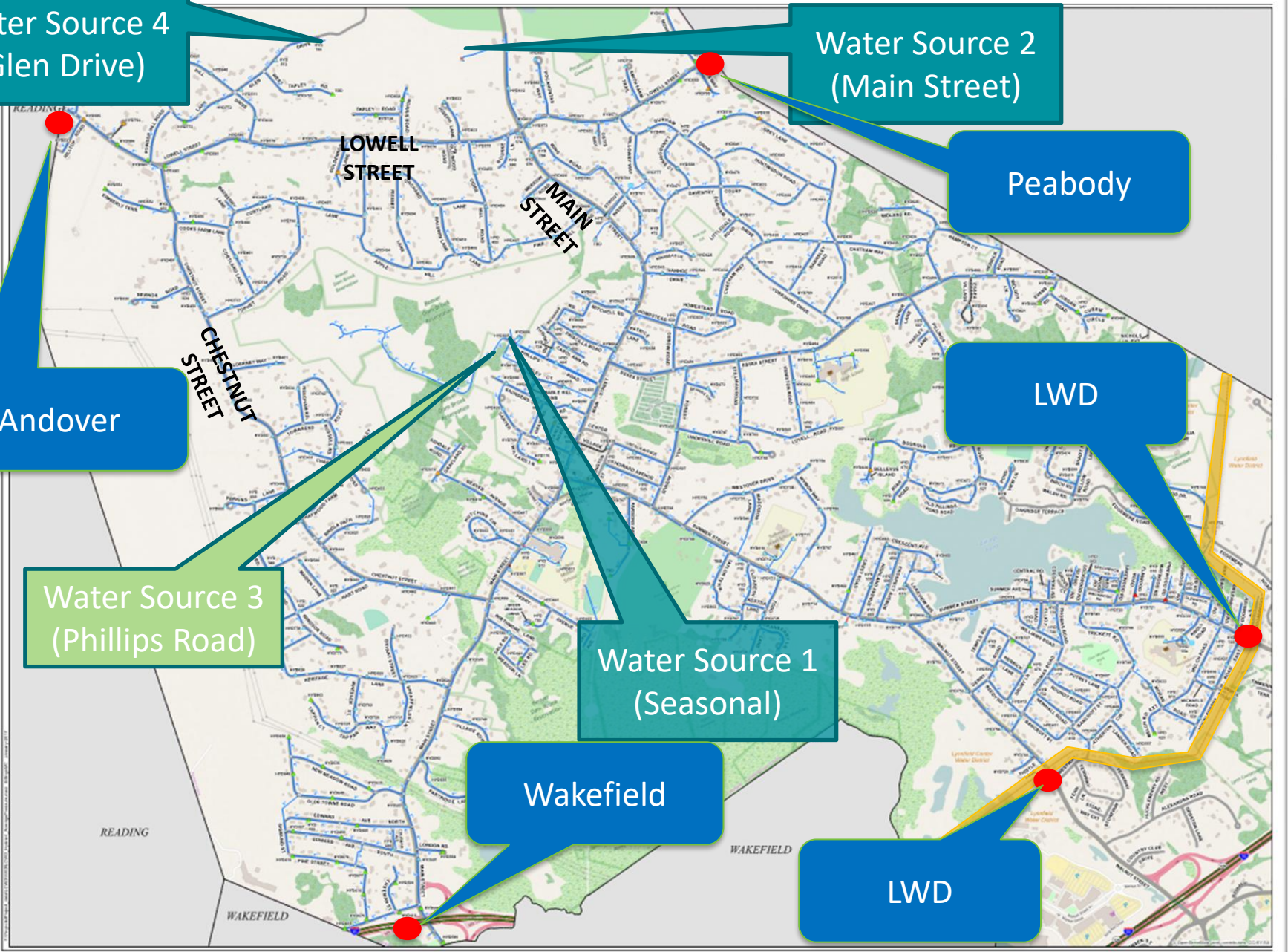
LWD

Water Source 3
(Phillips Road)

Water Source 1
(Seasonal)

Wakefield

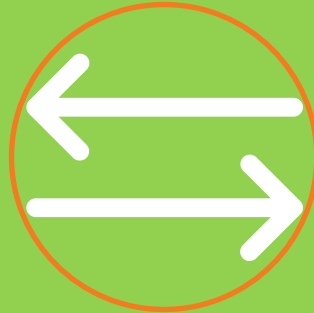
LWD



The Studied Options:



All water from
LCWD



Improvements to
LCWD and
Supplemental
water from others



All water from
MWRA



Supplemental Water

The District requires sufficient maximum capacity, consistent water quality, & adequate fire suppression

Options

- Drill more wells
- Operational changes
- Direct connect to MWRA
- MWRA thru Lynnfield
- Andover thru N. Reading
- MWRA thru Wakefield

Considerations

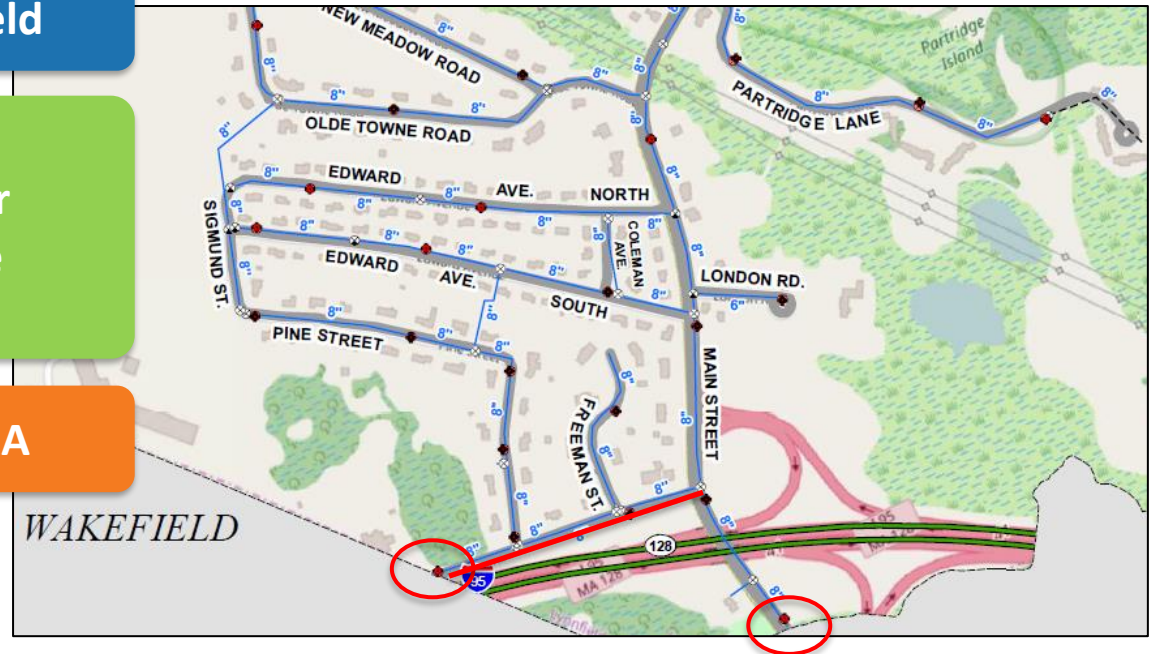
- Water Management Act
- Existing infrastructure
- Capital costs
- Annual costs
- Permitting
- Flexibility and growth

The Recommended Plan

1. Interconnect to Wakefield

2. Make local water main improvements to allow for 250 gallons / minute to be purchased

3. Permit to join the MWRA



Benefits

- Hydraulically favorable
- Simplified interconnection facility
- Can be scaled up in future
- Diversifies water sources
- Minimal pipeline investment
- Increases redundancy

Wakefield Intermunicipal Agreement

Capital Costs – Construction, Engineering, PM, & Contingency

Phase 1: Bay State Road Water Main

Phase 2: Main Street Water Main Rehab

Phase 3: Culvert Crossing

Total: \$865,000 - \$915,000

*Final amount pending subsurface boring results and MassDOT permit coordination meeting

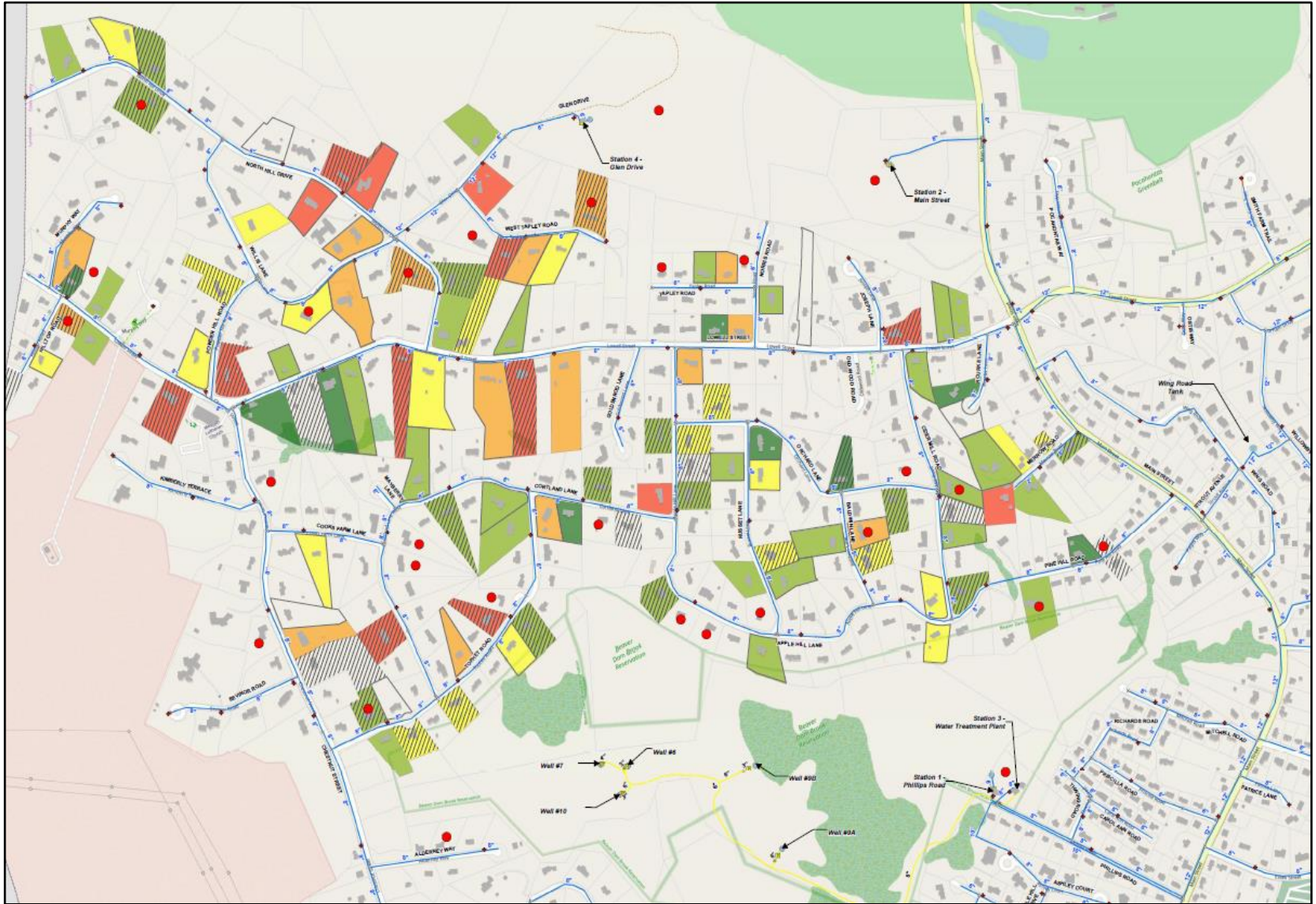
Wakefield Intermunicipal Agreement

“Wheeling” Rate



- Proposal for a 7-year intermunicipal agreement
- Fixed 20% markup on MWRA wholesale rate

Glen Drive



Glen Drive Water Treatment Plant

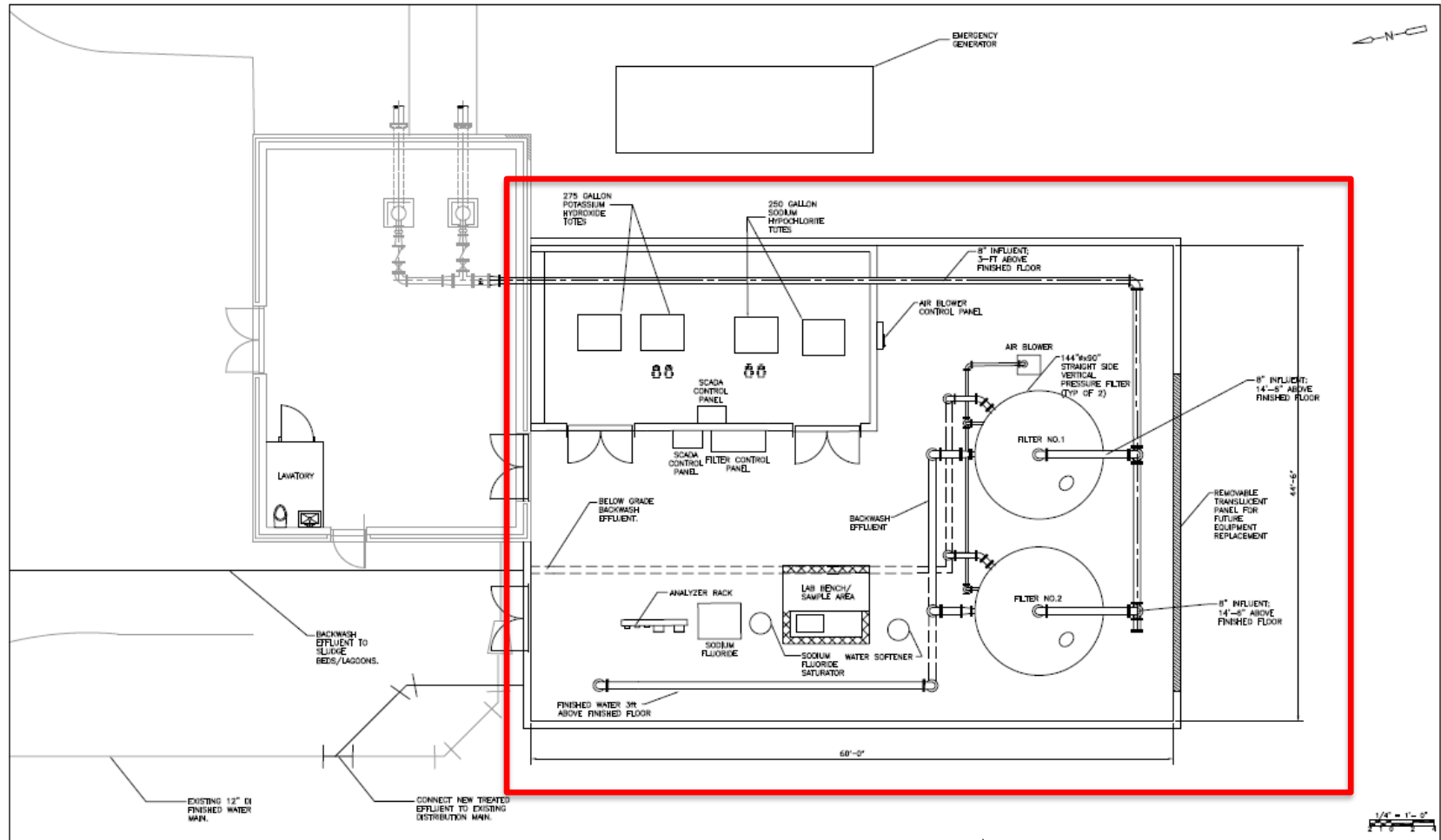
2018 Facilities Plan

- Recommended Greensand Filtration
- 5 Day minimum pilot testing required by DEP
- Designed for future Main Street connection
- PFAS Testing



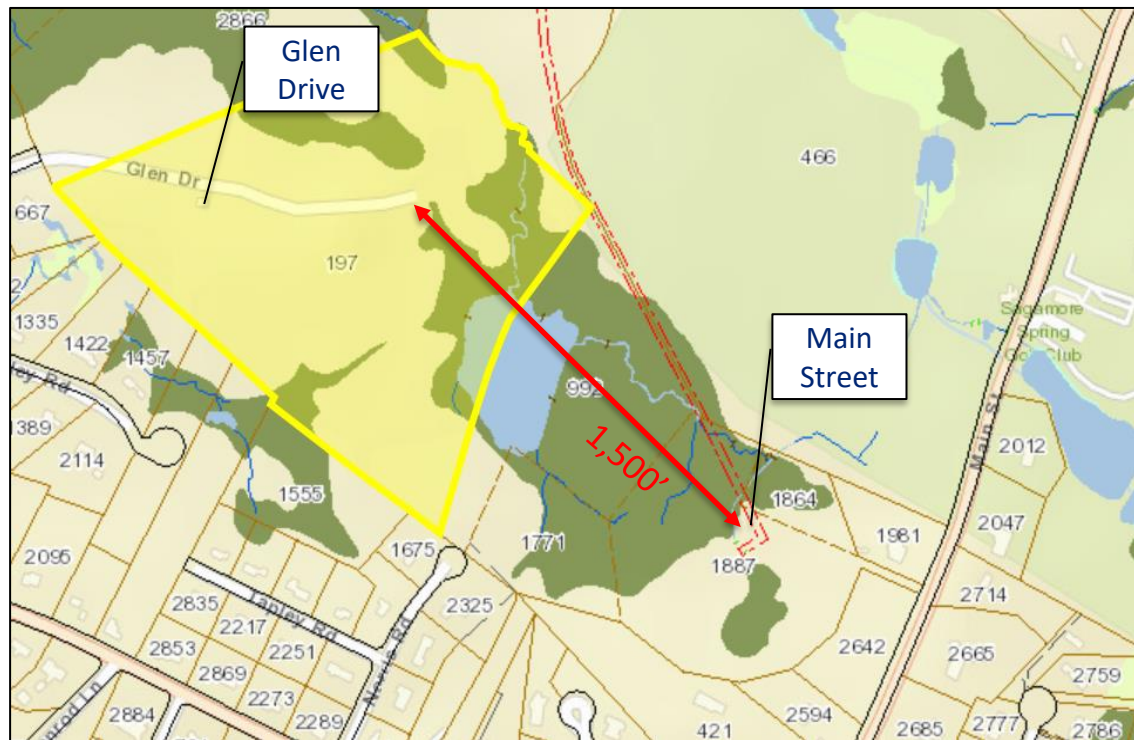
Glen Drive Water Treatment Plant

Conceptual Layout



Glen Drive Water Treatment Plant

Future Connection of Main Street



- 3 Parcels owned by LCWD
- Wetland Permitting
- HDD is an option for pipeline construction

Frequently Asked Questions

MWRA

- Why not 100% MWRA water?
 - Pipeline upgrades are not as cost effective
 - Permitting & Construction timeline is lengthy
- Are we bringing in enough MWRA water?
 - Yes, the current plan will boost max capacity by 25%
- Is MWRA water compatible with LCWD water?
 - Yes, studied in 2020 and results have been accepted by MassDEP
- Can LCWD obtain more MWRA water in the future?
 - Yes, permit to allow for great flexibility with this new water source
- What are the benefits of joining MWRA?
 - MWRA offers local assistance for water main replacement and allows capital debt to be financed over many years

Frequently Asked Questions

Outdoor Watering Restrictions

- What is the Water Management Act?
 - The WMA permits water withdrawals in MA
 - LCWD has permits which require watering restrictions
- Will there be outdoor watering restrictions?
 - Yes. The goal of the CIP is bolster source supply to enact water restrictions only when required by the District's existing permit.
 - Last summer's outdoor watering ban was not related to the Ipswich; it was a demand issue.
 - DEP is proposing state-wide watering restrictions during drought.
- Will the Ipswich run out of water?
 - LCWD source aquifers will not run out of water. There is no documented link between municipal water withdrawals from deep aquifers and baseflow in the river.
 - Municipal groundwater withdrawals have fallen to 1960s levels.

Capital Improvement Program

Three Projects

Project 1

Station 1 to
seasonal
operation

Project 2A

Pursue a
connection
with Wakefield

Project 2B

Begin MWRA
permitting
process

Project 3

WTP at Glenn
Drive



Diversifies water sources



Addresses quantity and quality

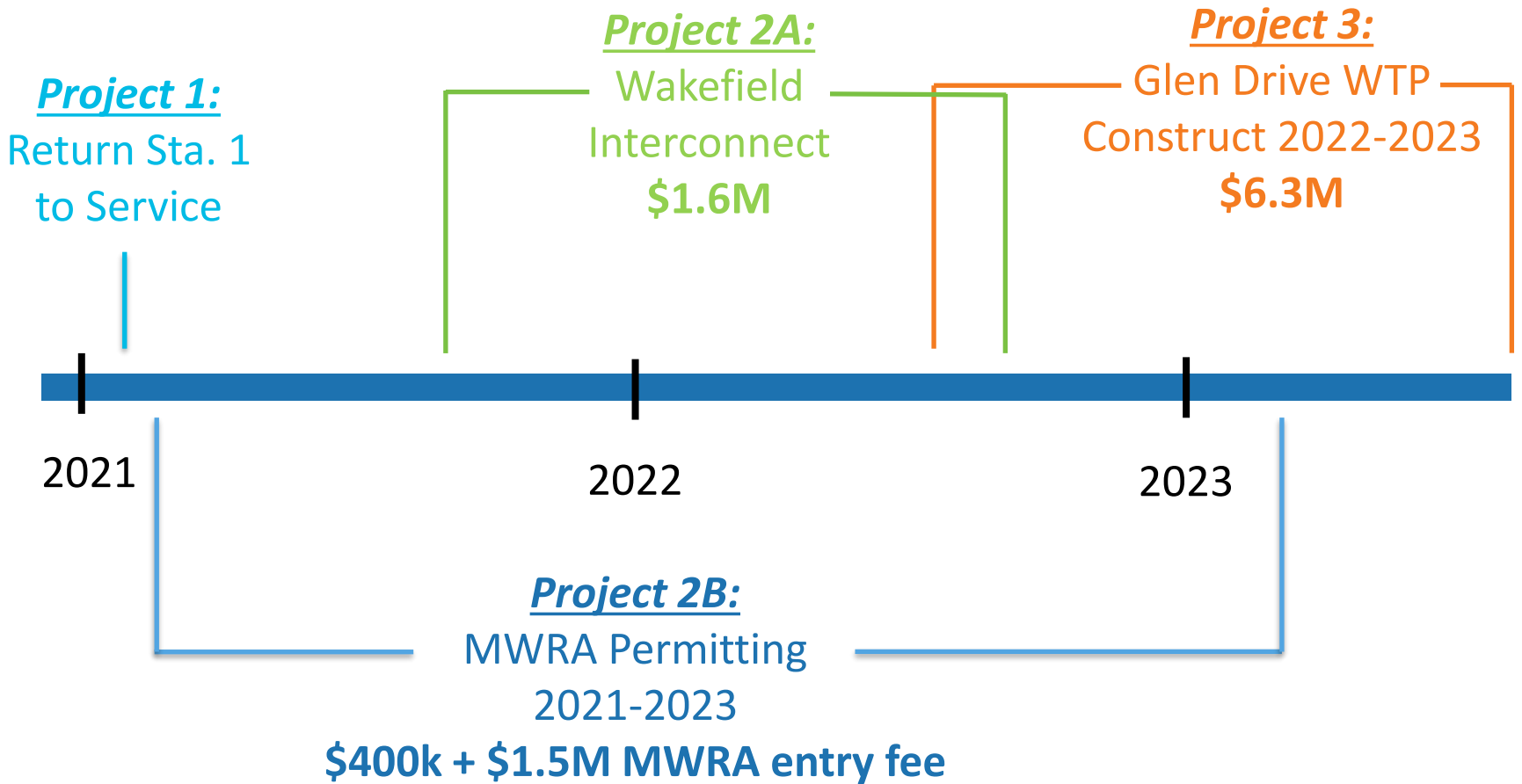


Allows for future growth



Maximizes LCWD existing strengths

Costs & Timelines



Total CIP= 9.8M



The typical residential customer will end up paying about \$200 more after all capital investments are made over the next few years

Increases will be necessary for purchased water

These increases should occur over multiple years to smooth out the increases on customers and avoid rate shock.

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