Woodard & Curran

Gardner Sludge Landfill Expansion Project

Public Information Meeting

February 10, 2025

Presenter

Megan Gatto, AICP

- Project Manager for the Project's Environmental Review
- 10+ years experience
- Planning & Environmental Review
- Infrastructure & Resiliency
- Water/Sewer Infrastructure

Agenda

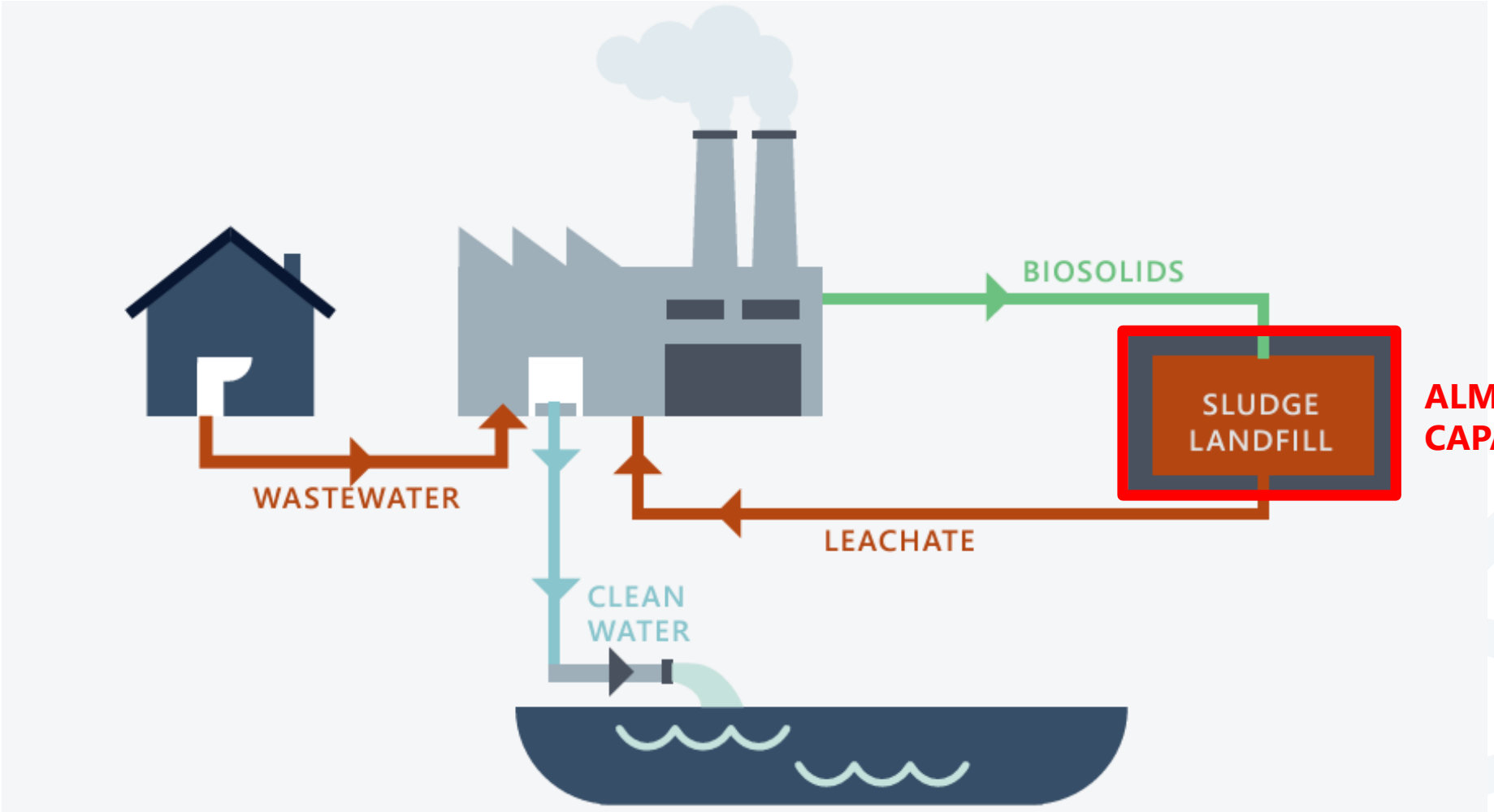
- Wastewater Treatment Service
- Wastewater Residual Disposal
- MEPA Process & The Public Involvement Plan (PIP)
- The Sludge Landfill Expansion Project
- Project Alternatives
- Opportunity for Public Comment

Wastewater Treatment Service

How does it work?

Woodard & Curran

City of Gardner Wastewater Treatment Process



ALMOST AT CAPACITY!

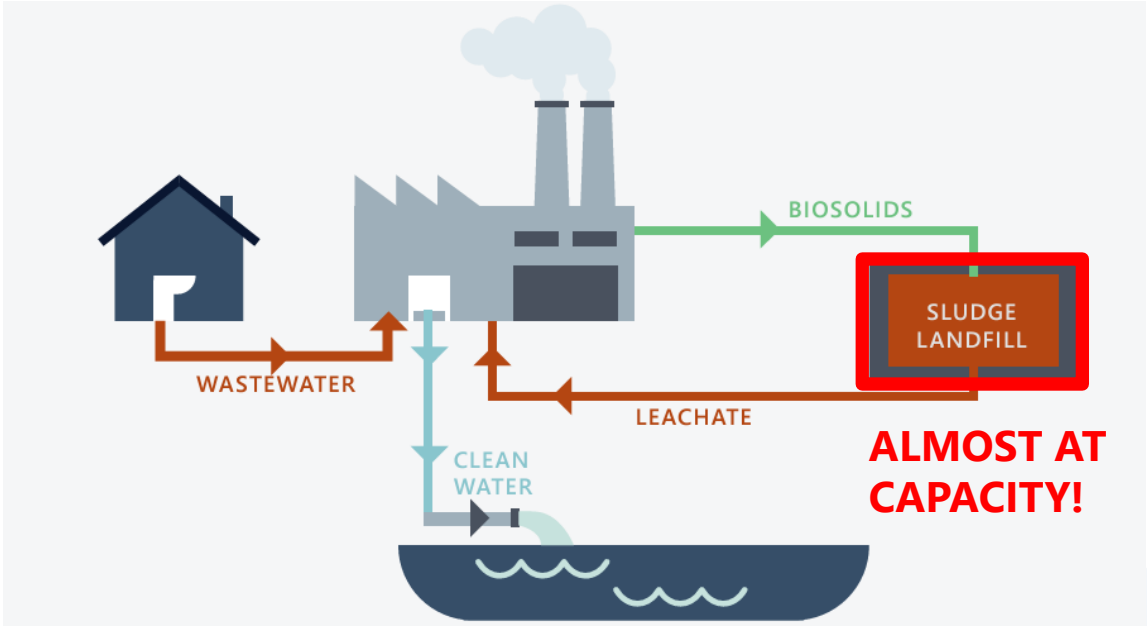
Wastewater Residual Disposal

What is the issue?

Woodard & Curran

Wastewater Residual Disposal

- Existing Sludge Landfill will reach capacity between 2027 and 2030
- Capacity will be reached based on existing usage
- The City needs an option to continue wastewater services without interruption that is feasible, permittable, and cost-effective
- If capacity is not expanded at the Sludge Landfill, the City would have to contract with an off-site hauler and sewer rate payers **could see a doubling of their current sewer rates**.



MassDEP's PFAS and Residuals Technology and Management Study, Part 1

- Report noted challenges and potential disruptions in each method of disposal, particularly with evolving regulations and capacity limitations.
- Options for managing sludge in the region are shrinking
- Challenges faced by Gardner are representative of the region as a whole
- Increase in disposal fees
- Sludge waste is hauled to greater and greater distances

The MEPA Process & the Public Involvement Plan

Massachusetts Environmental Policy Act (MEPA)

Environmental Review Process

Draft Environmental Impact Report (DEIR)

Woodard & Curran

Environmental Review Timeline

Massachusetts Environmental Policy Act (MEPA)

2015 — Planning and Analysis

2022 — Environmental Notification Form (ENF) (December 23, 2022)

2023 — ENF Certificate Issued Requiring the Submission of a Draft Environmental Impact Report (DEIR) (February 10, 2023)

2024 — Prepare DEIR

2025 — Public Information Meeting (February 10, 2025)

WE ARE HERE

*Anticipate Submission of DEIR to MEPA February 28, 2025

2025 — DEIR Certificate Issued

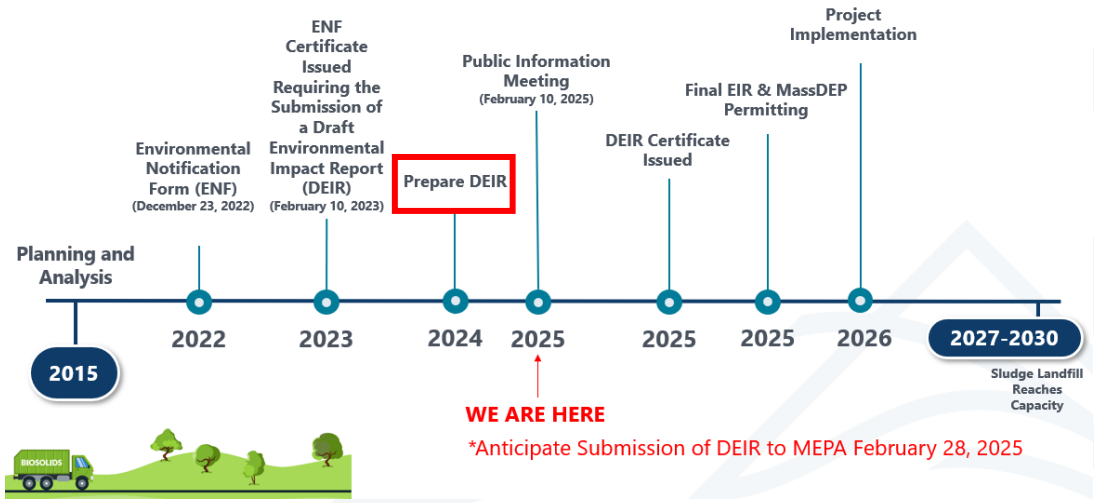
2025 — Final EIR & MassDEP Permitting

2026 — Project Implementation

2027-2030 — Sludge Landfill Reaches Capacity

Draft Environmental Impact Report (DEIR)

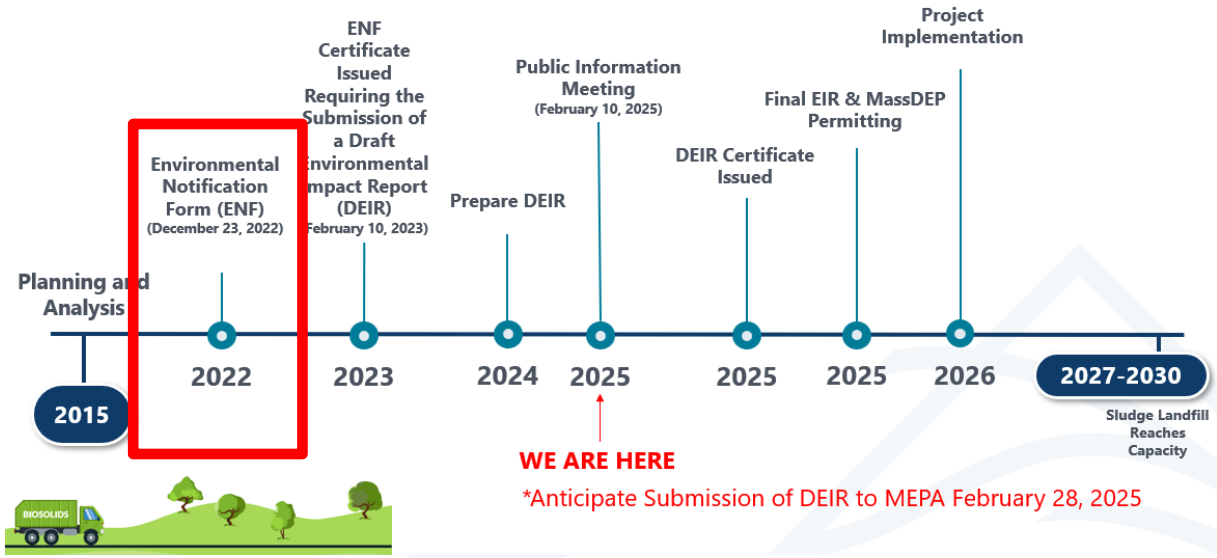
- Project Description and Permitting
- Alternatives Analysis
  - Sludge Landfill Expansion
  - Landfill Closure and Off-Site Hauling
  - Hydrothermal Carbonization
- Environmental Justice
  - **Public Involvement Plan***
- Landfill Design & Construction
  - Single Construction Event vs. Phased Construction Event
- Groundwater
- Stormwater
- Air Quality
- Climate Change
- Construction Period
- Mitigation and Draft Section 61 Findings
- Response to Comments
- Circulation List
- List of Preparers
- Appendix A: Project Drawings
- Appendix B: Public Involvement Plan
- Appendix C: ResilientMass Climate Change Projection Dashboard Output



Concerns addressed in the DEIR

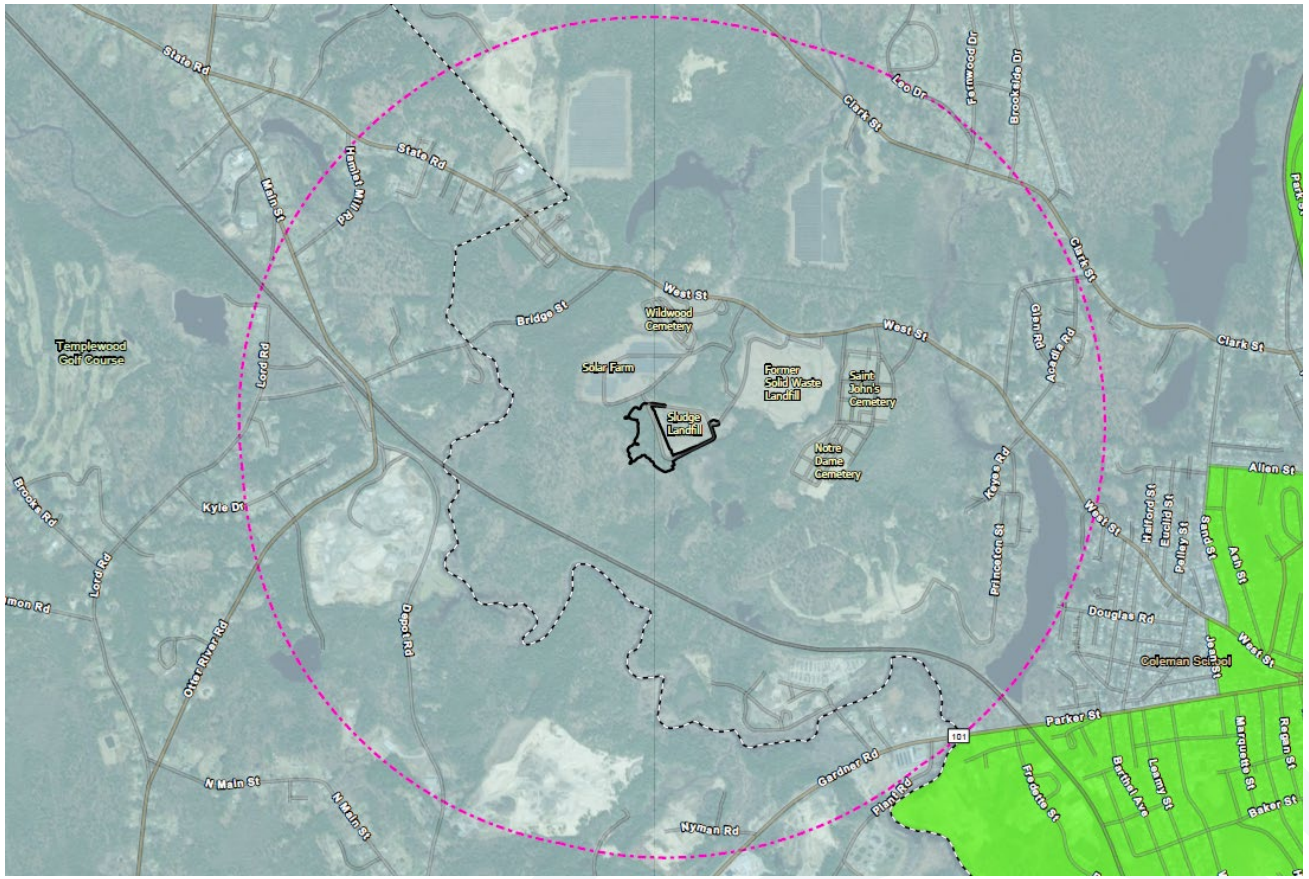
- Alternatives Analysis
- Trails and Recreation
- Air Quality and Odor
- Groundwater Contamination
- Environmental Justice

- If already submitted a comment on the ENF, it has been addressed in the DEIR
- **There will be opportunity to comment on the DEIR**



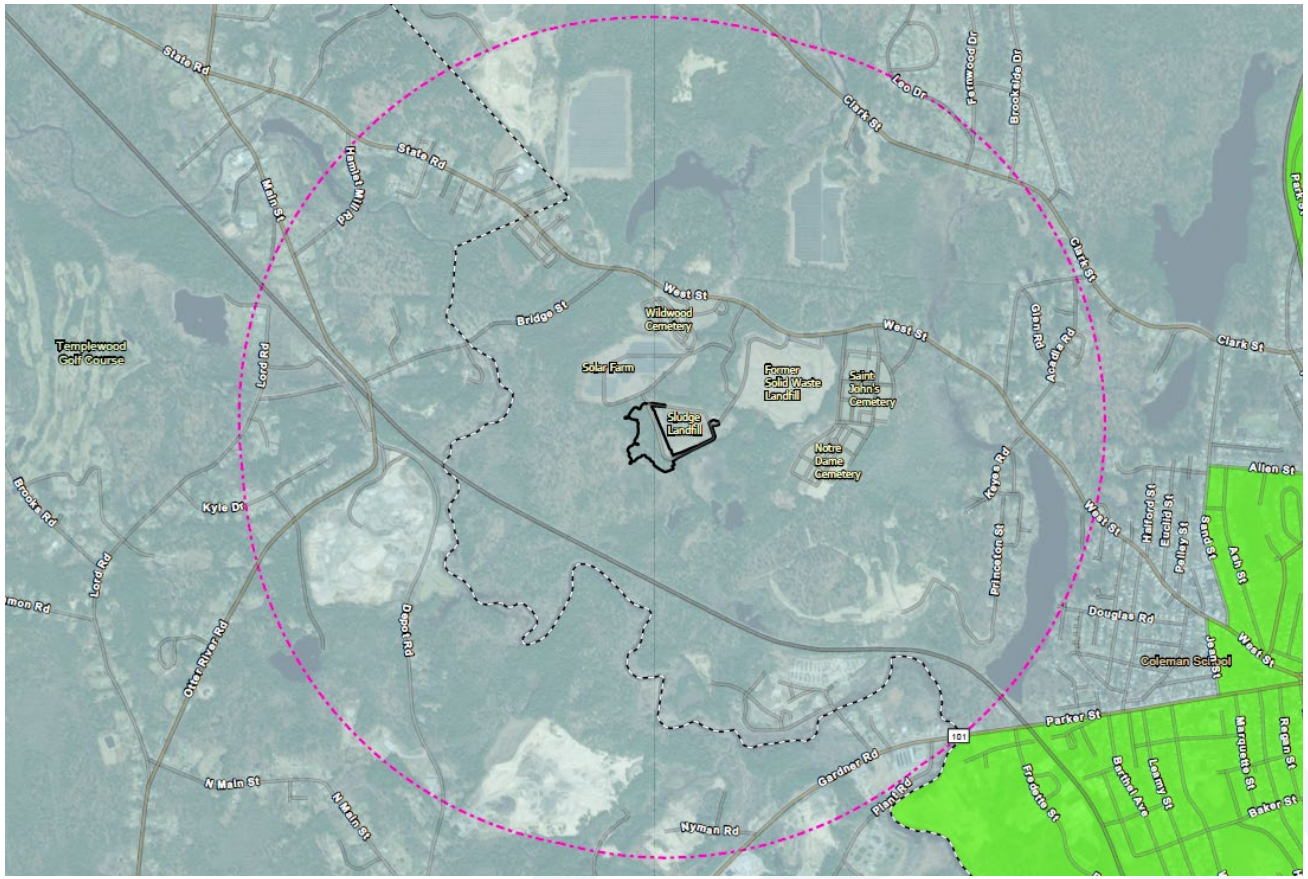
Public Involvement Plan (PIP)

- The PIP includes
  - Project Description
  - Purpose and Need
  - Project Location
  - Characteristics of the nearest state designated EJ populations
  - Discloses potential effects on EJ populations
  - Lists measures to enhance public involvement
  - Public involvement history
  - Describes how comments will be addressed in the DEIR
  - A schedule of public involvement activities
- A living document, may be revised during the course of the Project
- Revisions will be posted to the City website and a revised PIP will accompany the filing of the DEIR with MEPA



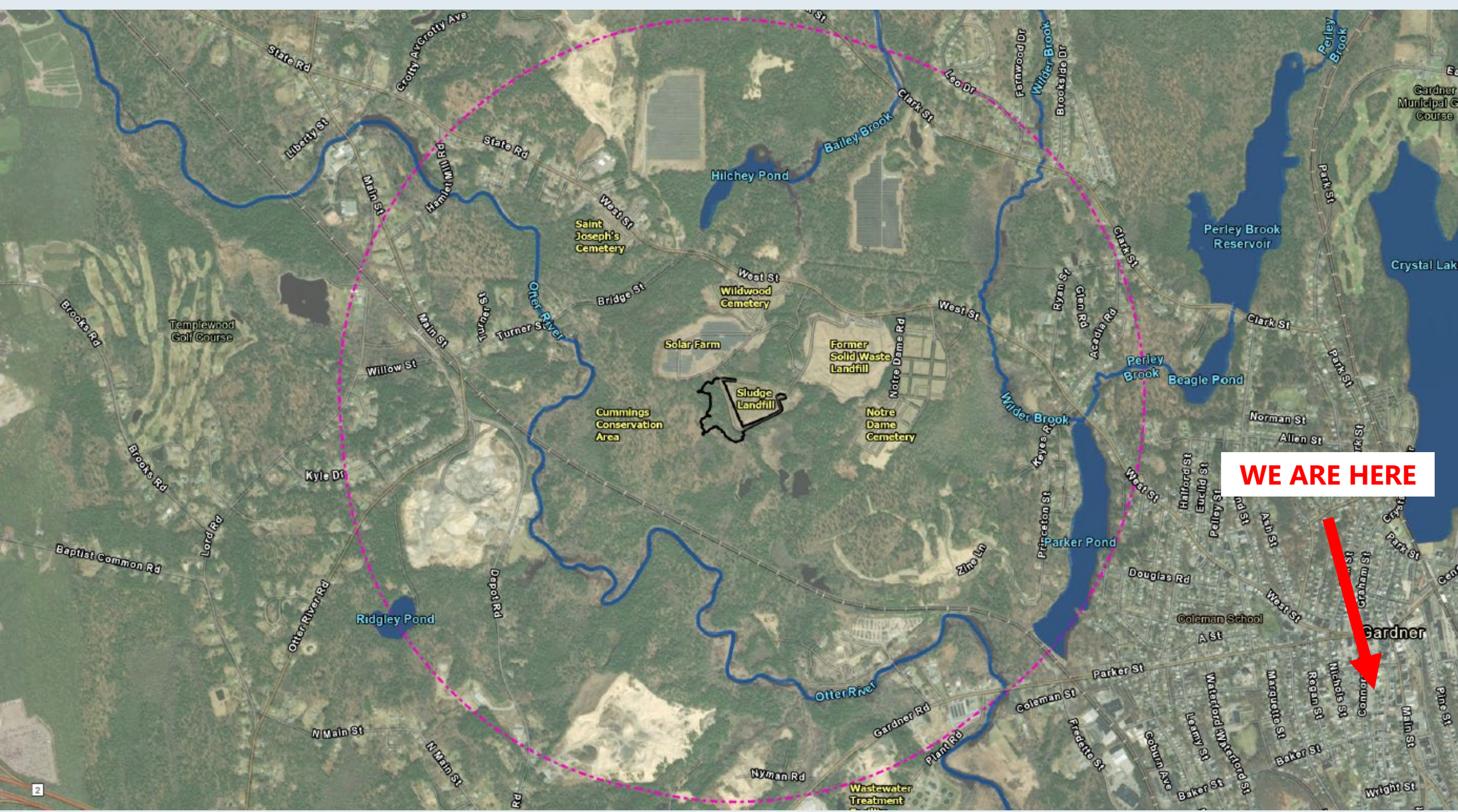
Public Involvement Plan (PIP)

- Available for review online at https://gardner-ma.gov/1276/Sludge-Landfill-Expansion
- Paper copies available upon request
- Seeking feedback on the PIP **tonight and via email at slf@gardner-ma.gov**



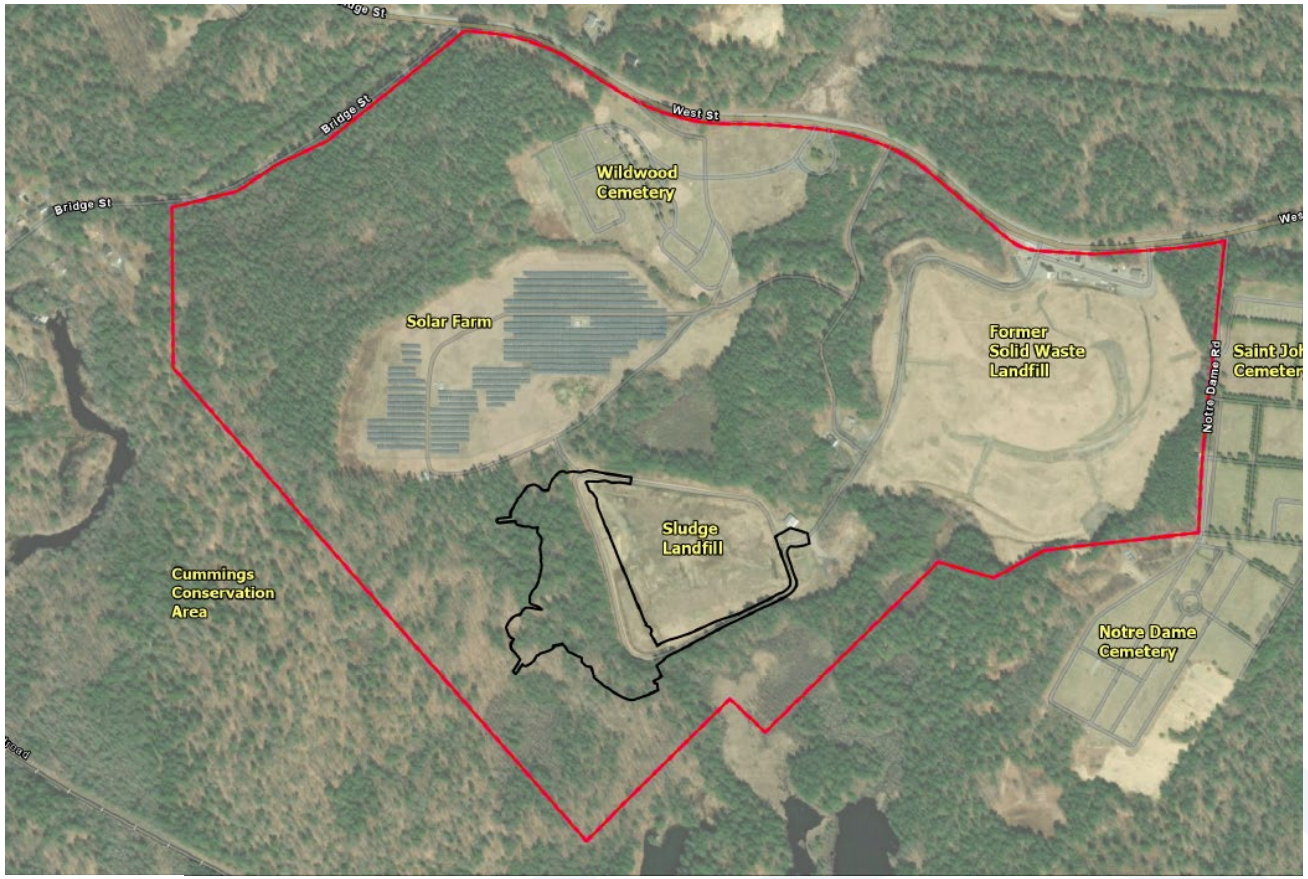
The Sludge Landfill Expansion Project

Woodard & Curran


WE ARE HERE
Hilchey Pond
Bailey Brook
Saint Joseph's Cemetery
Wildwood Cemetery
Solar Farm
Former Solid Waste Landfill
Sludge Landfill
Cummings Conservation Area
Notre Dame Cemetery
Templewood Golf Course
Perley Brook Reservoir
Beagle Pond
Parker Pond
Ridgley Pond
Otter River
Wilder Brook
Perley Brook
Crystal Lak
Gardner Municipal Course
Coleman School
Gardner
Wastewater Treatment
State Rd
Crotty Ave
Liberty St
Main St
Hamlet Rd
West St
Bridge St
Turner St
Brooks Rd
Willow St
Kyle Dr
Lord Rd
Baptist Common Rd
Otter River Rd
Depot Rd
N Main St
Nyman Rd
Gardner Rd
Plant Rd
Clark St
Leo Dr
Fernwood Dr
Brookside Dr
Ryan St
Glen Rd
Acadia Rd
Notre Dame Rd
Keyes Rd
Zine Ln
Princeton St
Halford St
Euclid St
Pelley St
Ash St
Park St
Norman St
Allen St
Douglas Rd
Parker St
Coleman St
A St
Graham St
Regan St
Nichols St
Marquette St
Waterford St
Leamy St
Fredette St
Coburn Ave
Baker St
Wright St
Pine St

Sludge Landfill Expansion Project

- Construct an 8.75-acre expansion to the City's existing sludge landfill
- Increases capacity to accommodate the City's sludge production until 2044
- Immediately to the west of the existing landfill (no change to operation)
- Would be designed to meet EPA and MassDEP residuals and biosolids program design standards and requirements and approved by those Agencies



City of Gardner Tax Lot

Project Site (Disposal Area + Infrastructure)

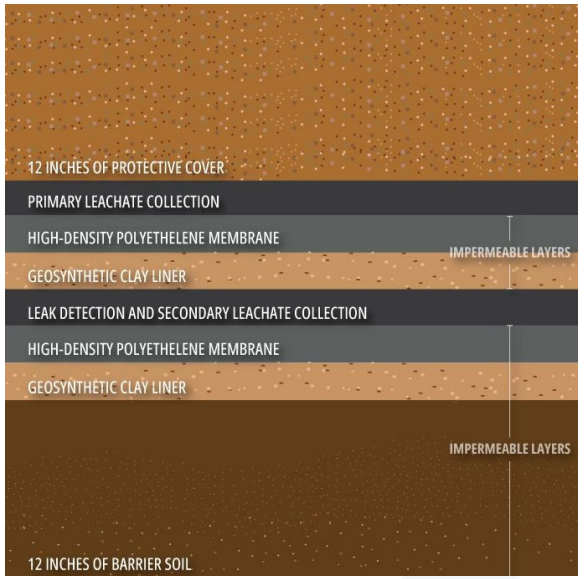
Protecting Human Health and the Environment

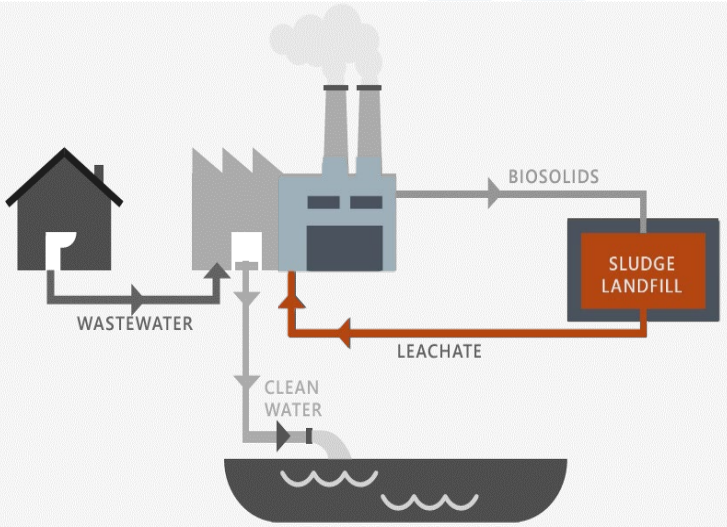
Groundwater Protection System (GWPS)

- System in place to protect groundwater
- Redundant system for enhanced environmental protection
- Leak detection system
- Meets EPA and MassDEP standards

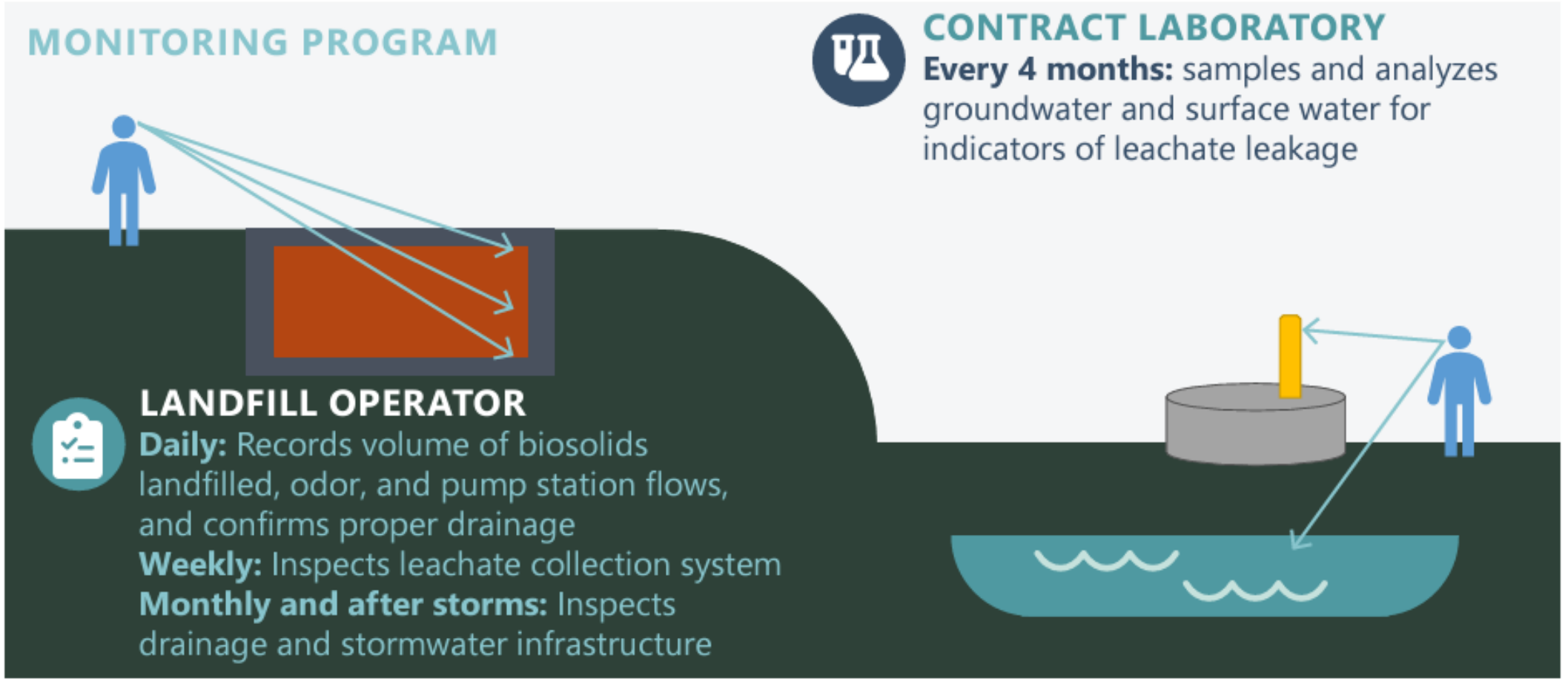
Leachate Collection and Conveyance System

- When rain falls on the active landfill cells, it is collected and pumped back to the WWTF
- There, the leachate is treated, which prevents the contamination of waterbodies or groundwater





Environmental Monitoring

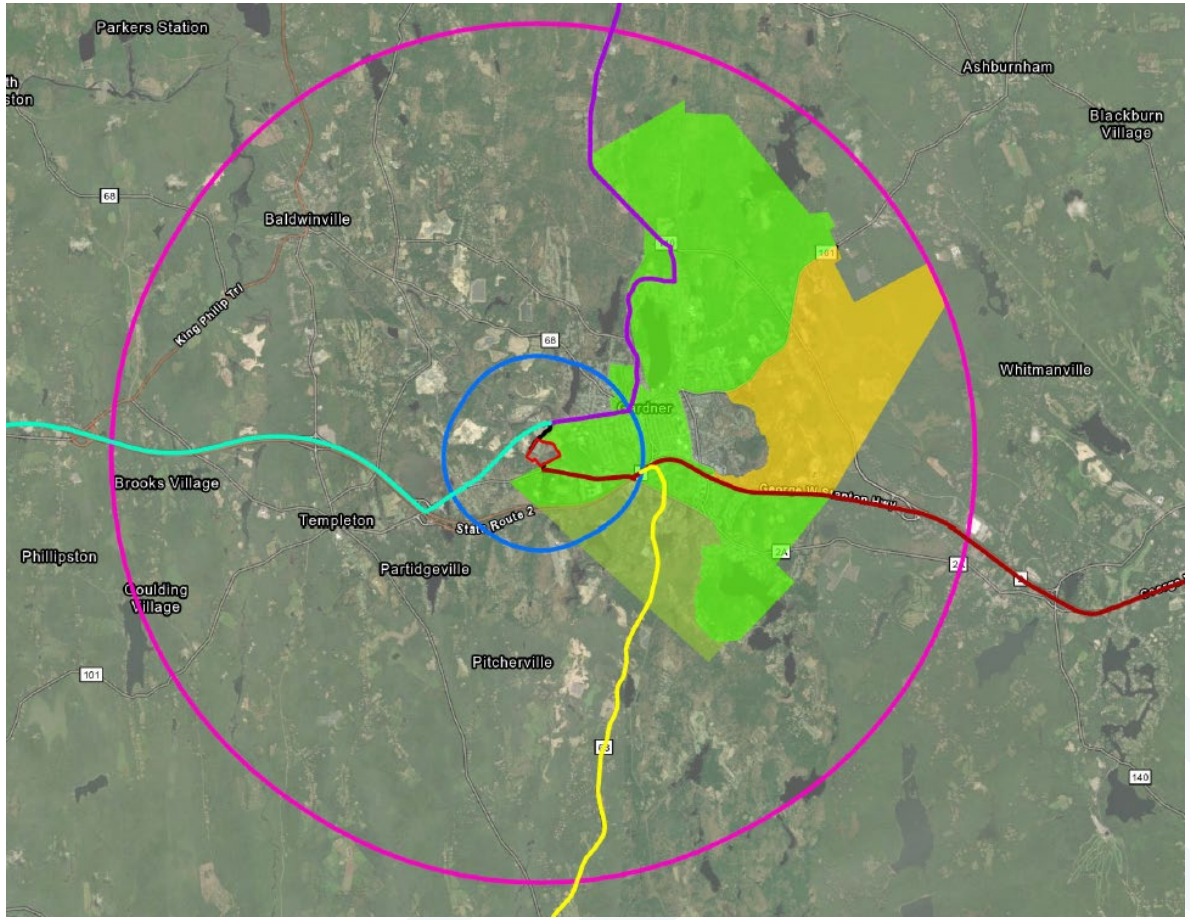


Project Alternatives

Woodard & Curran

Project Alternatives

- **Landfill Closure and Off-Site Hauling**
  - Remaining capacity of the existing sludge landfill would be used until approximately 2030
  - Landfill would not be expanded, and a landfill closure plan would be developed and executed
  - The City would then haul the sewage sludge from their WWTF to another receiving facility outside of the City of Gardner



Off-site Hauling from Gardner WWTF

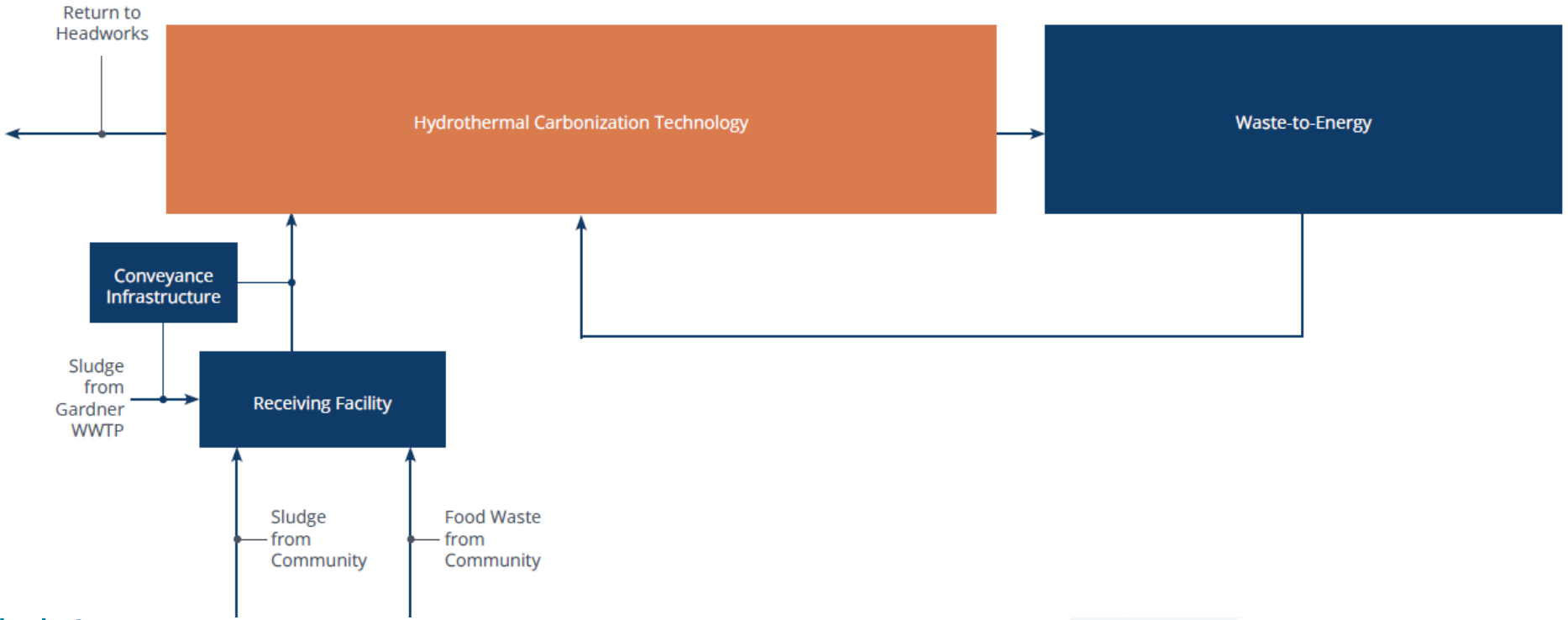
Project Alternatives

- **Fitchburg Biosolids Management Facility**
  - City of Fitchburg is planning a regional Biosolids Management Facility
  - If constructed, would reuse the site of the nearby City of Fitchburg WWTF former West Plant
  - If funded, permitted, and built, could receive sludge generated at the City of Gardner WWTF for further treatment and disposal.
  - Public private partnership (not yet identified)

Image from Fitchburg, Ma City Council Presentation

Project Alternatives

- **Hydrothermal Carbonization**
  - Modifications would be made to the Gardner WWTF to process sludge using hydrothermal carbonization technology
  - Facilitate a regional biosolids processing facility in the City of Gardner.



Alternatives				
Technical Analysis Areas	**Sludge Landfill Expansion (Project)**	**Alternative 1: Landfill Closure and Off-Site Hauling (no build alternative)**		**Alternative 2: Hydrothermal Carbonization**
		Off-Site Haul (General)	**Fitchburg BMF**	**Gardner WWTF**
Purpose & Need	(++) The project as proposed would meet all objectives	(--) Would not work to maintain a reasonable cost to sewer ratepayers and be a less cost-effective option		(--) Would not work to maintain a reasonable cost to sewer ratepayers; does not provide a solution that meets Gardner's 2027 disposal needs
Cost	$12 million	$13 million	$270 million[1]	$15-20 million
Land	(+) Impacts to land as defined by MEPA Regulations, are not expected to occur	(+) Impacts to land as defined by MEPA Regulations, are not expected to occur	Land disturbance impacts would need to be studied under Fitchburg BMF's environmental review	(+) Impacts to land as defined by MEPA Regulations, are not expected to occur
Rare Species	(+) Impacts to rare species or habitats are not expected to occur	(+) Impacts to rare species or habitats are not expected to occur	Rare species impacts would need to be studied under Fitchburg BMF's environmental review	More information needed to determine impact
Wetlands, Waterways, and Tidelands	(+) Mitigation measures proposed - with adherence to Order of Conditions, impacts to wetlands, waterways, and tidelands, are not expected to occur	(+) Impacts to wetlands, waterways, and tidelands are not expected to occur	Wetlands, waterways, and tidelands would need to be studied under Fitchburg BMF's environmental review	More information needed to determine impact
Wastewater	(++) Providing wastewater infrastructure is considered a beneficial impact	(--) Significant adverse impact to wastewater infrastructure	(-) Impact to wastewater infrastructure in Gardner	(++) Providing wastewater infrastructure is considered a beneficial impact
Transportation	(+) Impacts to transportation are not expected to occur	(+) Impacts to transportation are not expected to occur	(-) Impacts to transportation are not expected to occur (comparatively more traffic effects than the Project)	(-) Impacts to transportation are not expected to occur (comparatively more traffic effects than the Project)
Energy	(-) Project would not involve energy generation	(-) Alternative would not involve energy generation	(+) Potential to provide energy generation	(+) Potential to provide energy generation
Air Quality	(+) Impacts to air quality are not expected to occur - mitigation measures are proposed to address existing conditions	(-) Impacts to air quality are not expected to occur (comparatively more traffic-related air emissions than the Project)	(-) Impacts to air quality are not expected to occur (comparatively more traffic-related air emissions than the Project)	Impacts to air quality are not expected to occur (comparatively more traffic-related air emissions than the Project)/more information needed to determine stationary source impacts
Climate Change and Resiliency	(+) Impacts on climate change and resiliency are not expected to occur	(-) Impacts to climate change and resiliency are not expected to occur (comparatively more mobile source related GHG emissions than the Project)	(+) Impacts to climate change and resiliency are not expected to occur (comparatively more mobile source related GHG emissions than the Project; however, may be offset by facility)	(+) Impacts to climate change and resiliency are not expected to occur (comparatively more mobile source related GHG emissions than the Project; however, may be offset by facility)
Environmental Justice	(++) Impacts to environmental justice communities are not expected to occur	More information needed to determine impact	(-) Impacts to environmental justice communities are not expected to occur (comparatively more traffic-related air emissions than the Project)	(-) Impacts to environmental justice communities are not expected to occur (comparatively more traffic-related air emissions than the Project)
Construction	(+) Mitigation measures proposed - with measures to mitigate, construction impacts are not expected to occur	(+) No construction impacts	(+) No construction impacts	(+) No construction impacts
Legend:	Positive Impact / No Impact / Negative Impact / Negative Impact comparative to the Project		More information needed to determine impact	

Notes: [1] Represents regional costs.

Opportunities for Public Comment

Woodard & Curran

Opportunity for Public Comment

- The DEIR and PIP is available for review on the City's website **(ahead of the standard MEPA review period)**
- If you filed a comment on the Environmental Notification Form (ENF), a response to your comment can be found in Chapter 11 of the DEIR.
- To provide comment on today's Public Information Meeting speak after the presentation **or** email the City of Gardner at: slf@gardner-ma.gov until February 15, 2025
- Call the Department of Public Works to ask questions or give comments at (978) 630-8195.
- Once filed (anticipated February 28, 2025), deemed complete by MEPA, and published in the State's Environmental Monitor, the public can comment on the DEIR here: https://eeaonline.eea.state.ma.us/EEA/MEPA-eMonitor/home for a period of 37 days.

Opportunity for Public Comment

- There will be additional opportunity to comment on the DEIR, once filed through the *Environmental Monitor*: https://eeaonline.eea.state.ma.us/EEA/MEPA-eMonitor/home

- Please visit https://gardner-ma.gov/1276/Sludge-Landfill-Expansion for meeting materials and Project updates.

Public Comment

Woodard & Curran

Public Comment Logistics

- Be respectful of others so that we may allow everyone to speak
  - Limit comments to 3 minutes
  - Please do not repeat what has already been said or submitted
- We are here to listen to all concerns. Comments will be recorded and addressed in the DEIR and PIP.
- If you do not wish to speak today, please provide written comments to slf@gardner-ma.gov

Thank you

Woodard & Curran