



Former Tolend Road Landfill

**Dover City Council
June 3, 2026**

**John Storer
Director of Community Services**

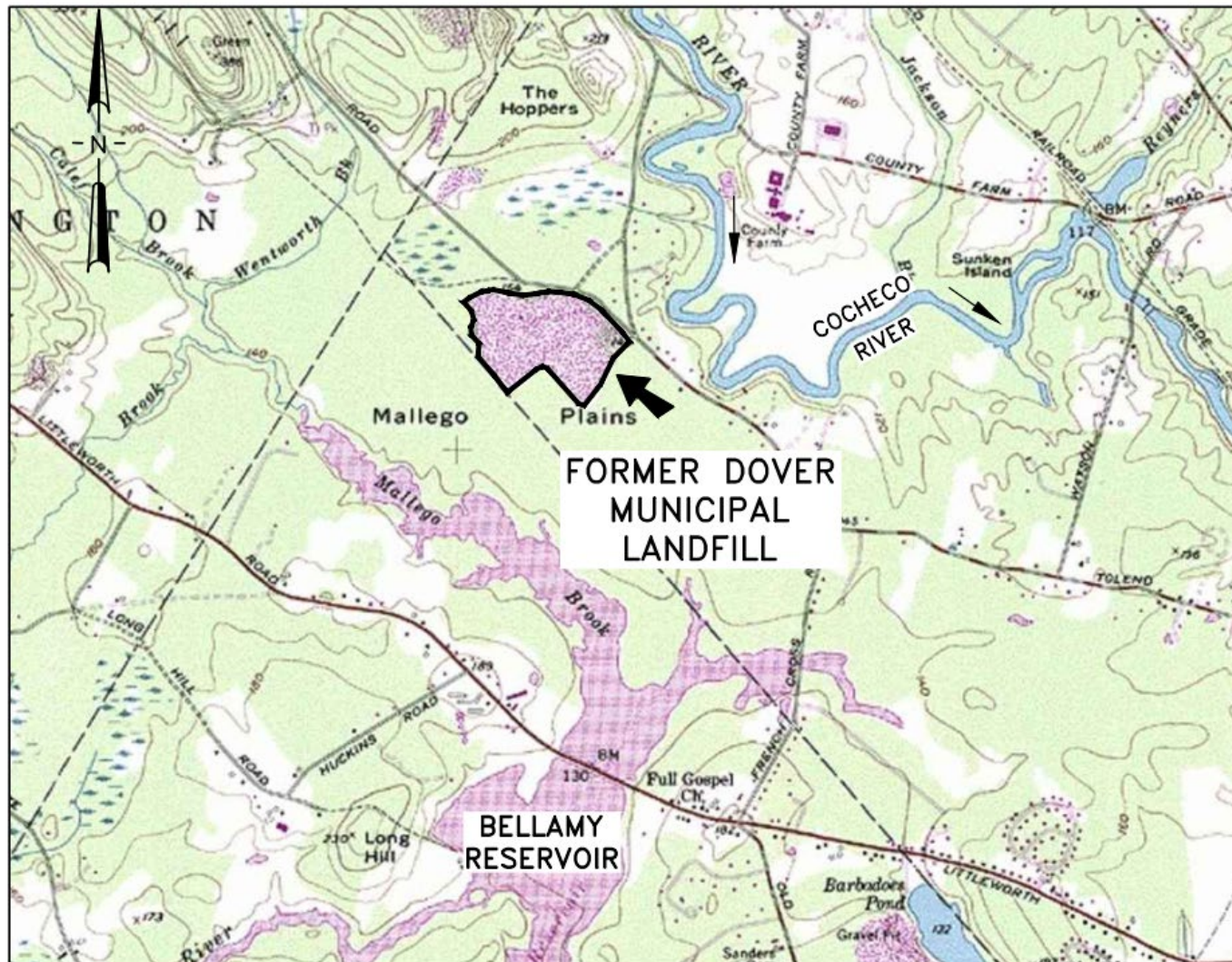
**Christene A. Binger, CHMM
Verdantas**

**Dean Peschel
Dover Group Coordinator**

Agenda Today – June 3, 2026

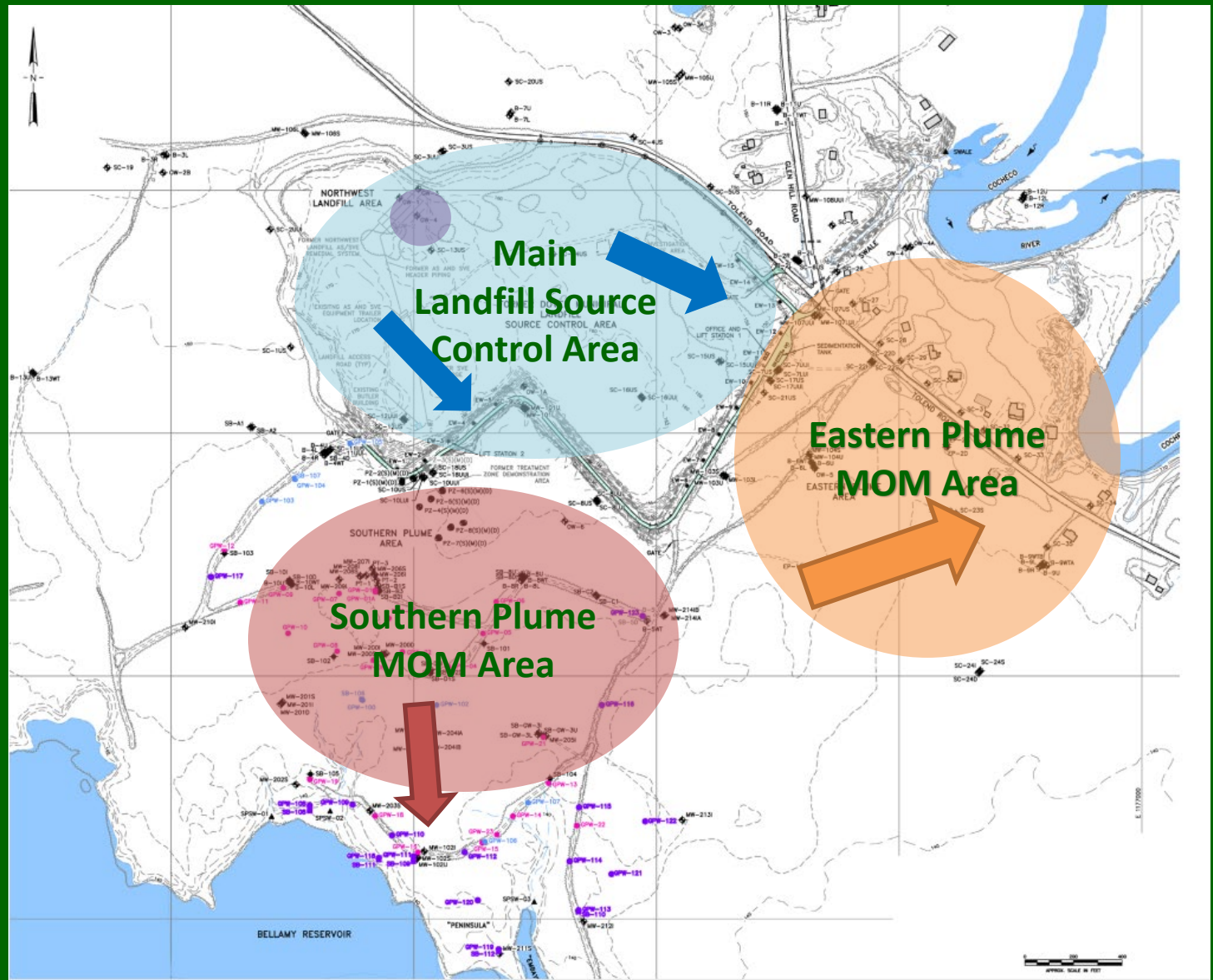
- Introductions
- Overview of Southern Plume Assessment and Design
- Projected Schedule
- Conservation Easement

Landfill Location

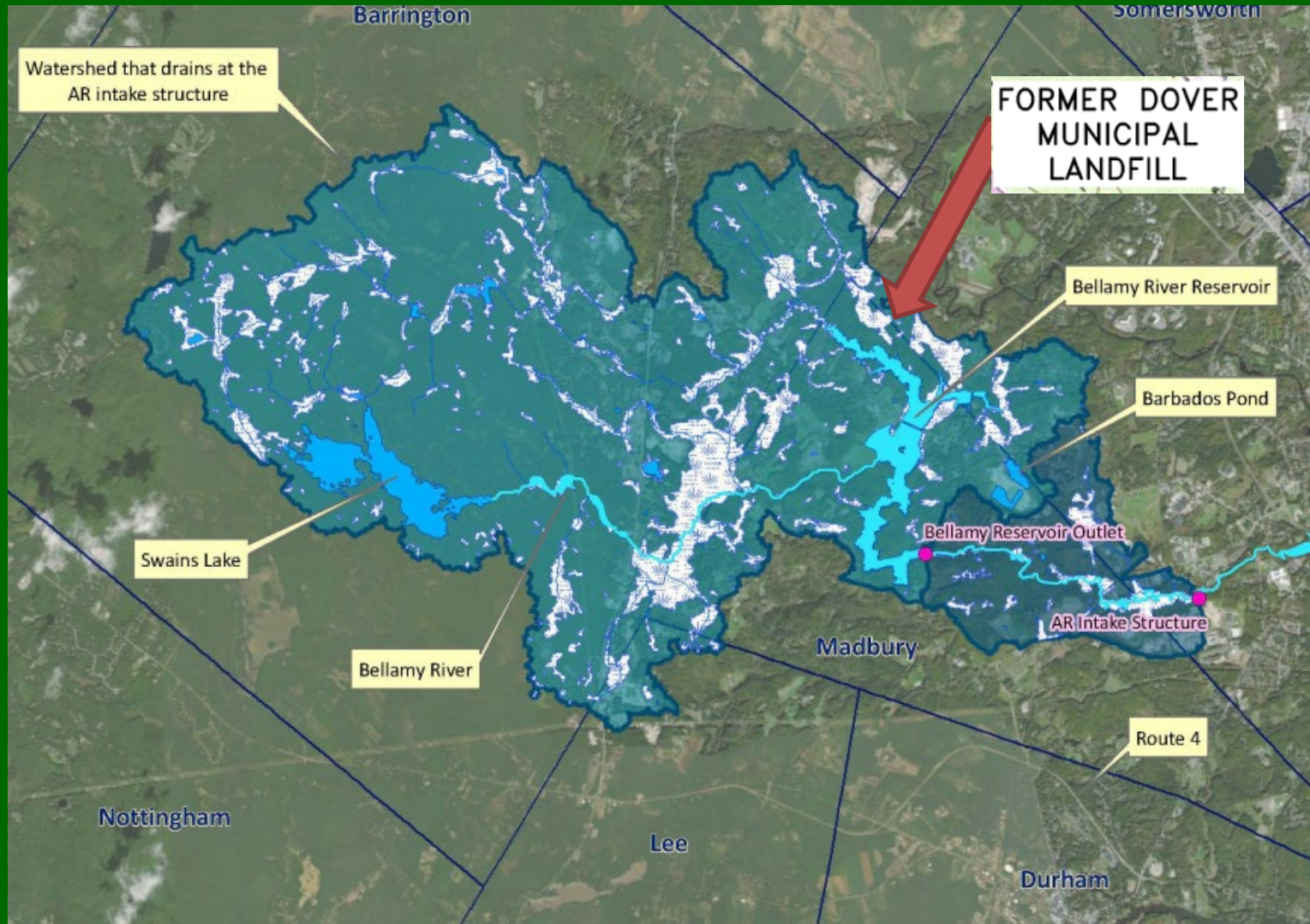


SITE AREA PLAN

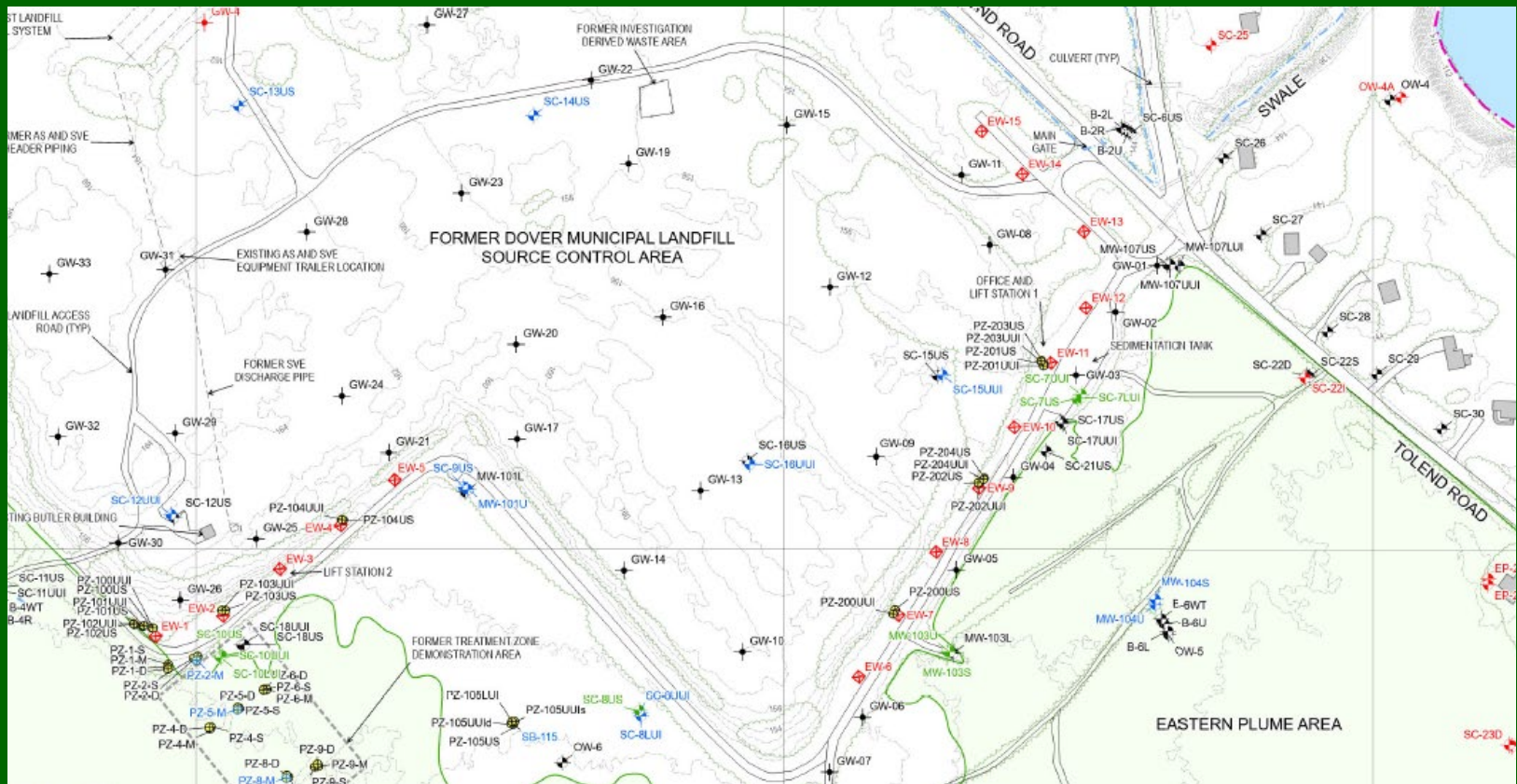
Landfill Areas



Bellamy Reservoir Watershed



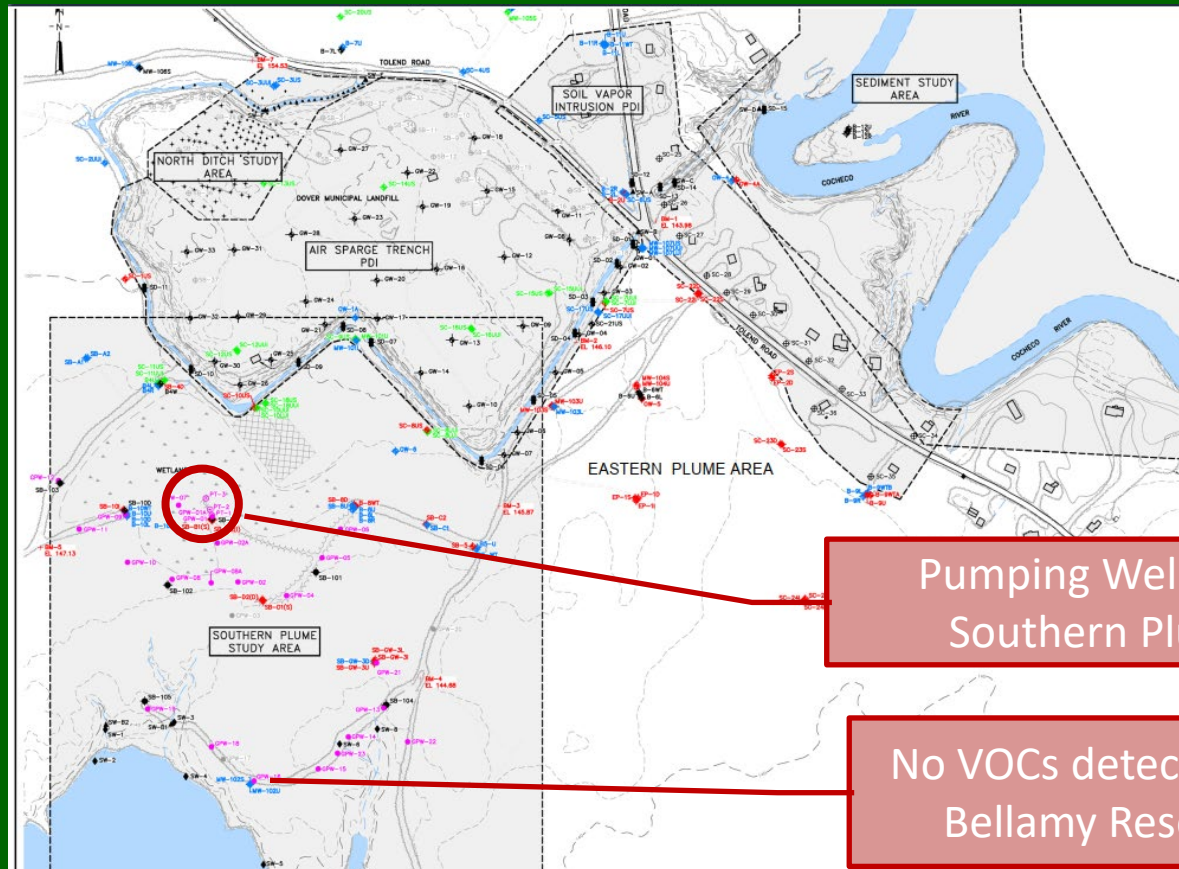
- Began groundwater extraction from series of multi-depth extraction wells located along the toe of the landfill in 2012
- Have extracted 325 million gallons of water and removed >280 pounds VOCs through 2025



2018-2019

SP Management of Migration (MOM) Remedial Action History

- Seasonal (usually April – October) extraction of groundwater from one well from approximately 2007-2011 and 2019 to present.
- Have extracted 3.1 million gallons of water and removed >38 pounds 1,4-Dioxane through 2025



Pumping Well from
Southern Plume

No VOCs detected near
Bellamy Reservoir

Southern Plume Condition Monitoring

- Shoreline Groundwater Monitoring Wells
- Shoreline Porewater Sampling
- Surface Water Sampling
 - Three Tributaries
 - Five Bellamy SW Sampling Locations
 - Eight quarterly Events – October 2023 to August 2025

Southern Plume Conditions

Shoreline Groundwater Monitoring Wells

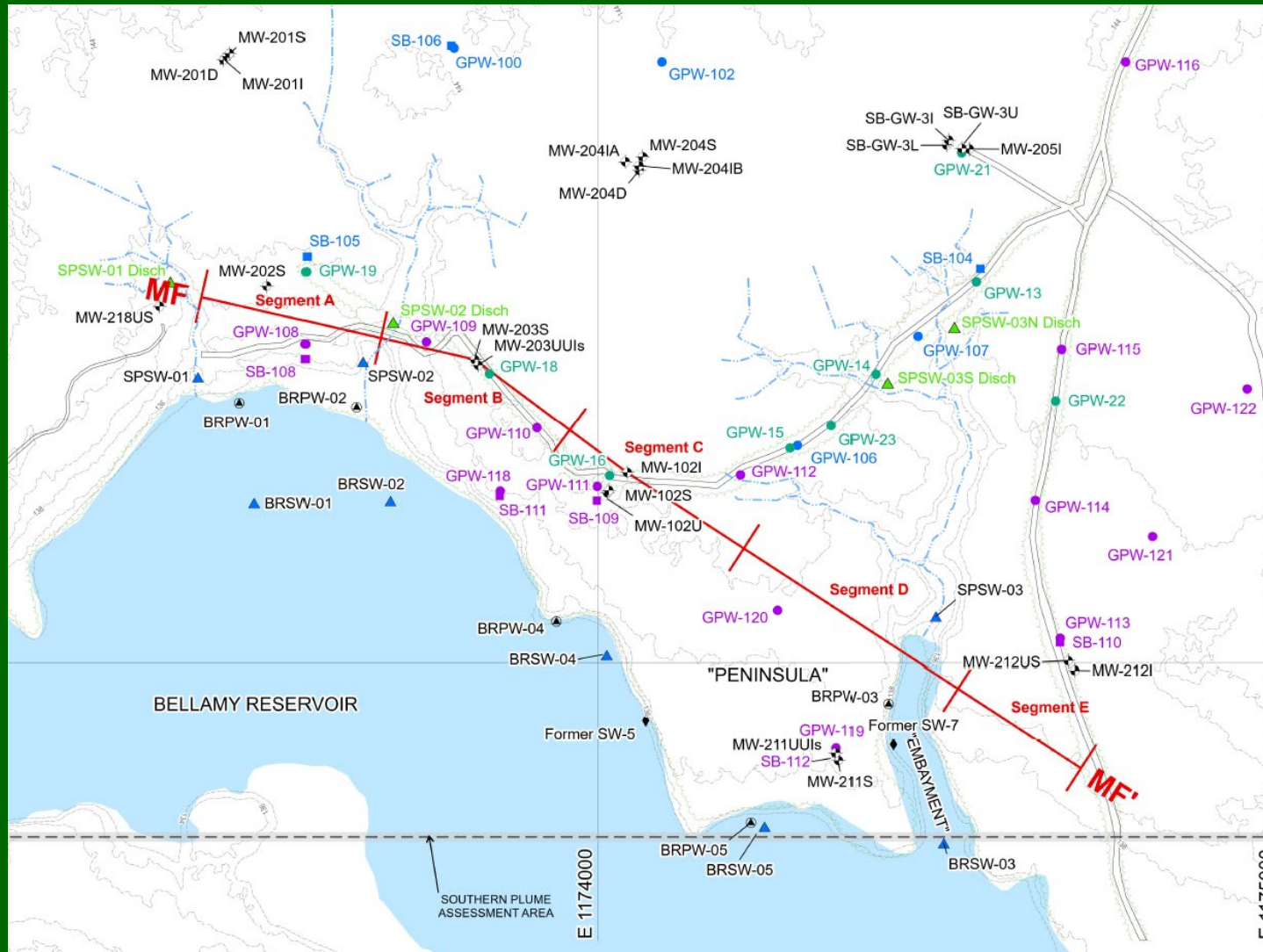
- Typical 10 to 15 feet deep
- Screened in shallow sand layer

VOC sampling since 2001 – No VOCs

1,4-Dioxane Sampling - 2019 to 2025

- Low Single digit micrograms per Liter (ug/L)
- Trends generally stable, although concentration variability and localized increases noted along plume axis

Southern Plume Conditions



Southern Plume Conditions

Two Background Samples

- Mallego-West-SW
- Bellamy River-SW

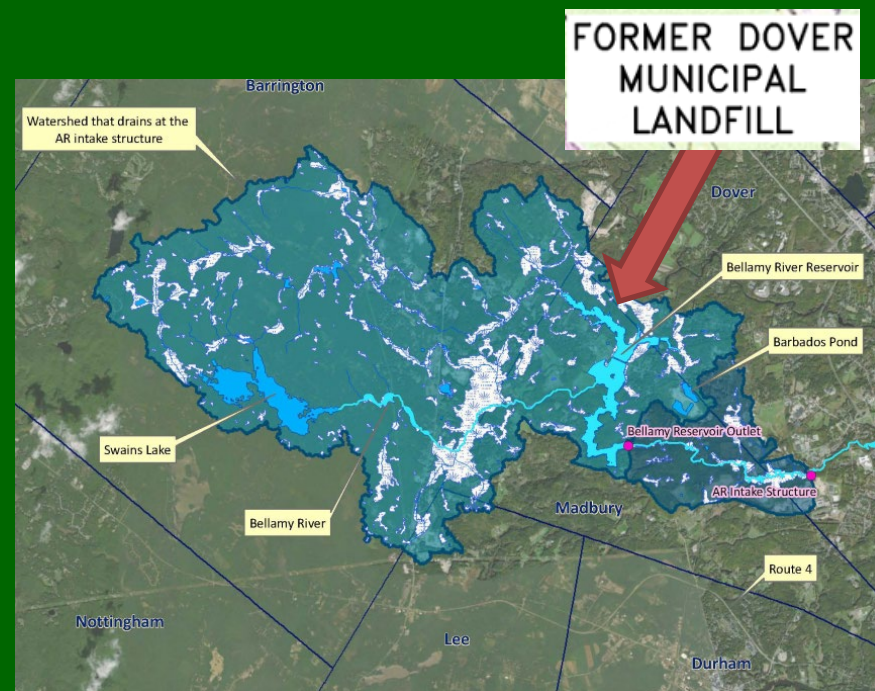
Bellamy Shoreline Surface Water

- Five locations
- Eight Quarterly Events
- 1,4-Dioxane = ND



Southern Plume

- Low levels of PFAS found at the Bellamy intake
- PFAS levels in Bellamy near site generally consistent with levels in background samples
- No 1,4-dioxane detected at water intake
- Monitoring indicates levels are generally holding steady, although concentration variability and localized increases noted along plume axis



Southern Plume Conditions



Southern Plume Design Progress

Southern Plume Extraction Well (SPEW) Groundwater Extraction (GWE) System:

Same Approach as SCRA; parts interchangeable

**12 SPEW Stations; three layers
Suction Lift Pumps**

**Two Legs: West 10 Stations, East 2 Stations
Two Lift Stations with Force Main to
Tolend Road Sedimentation Tank**

**Use Existing Sedimentation Tank
Mixing Water from SCRA and SP for
Publicly Owned Treatment Works (POTW)
compliance testing**

**Minimum GPM for capture 19.5 gpm
Anticipate 20 to 25 gpm for planning**

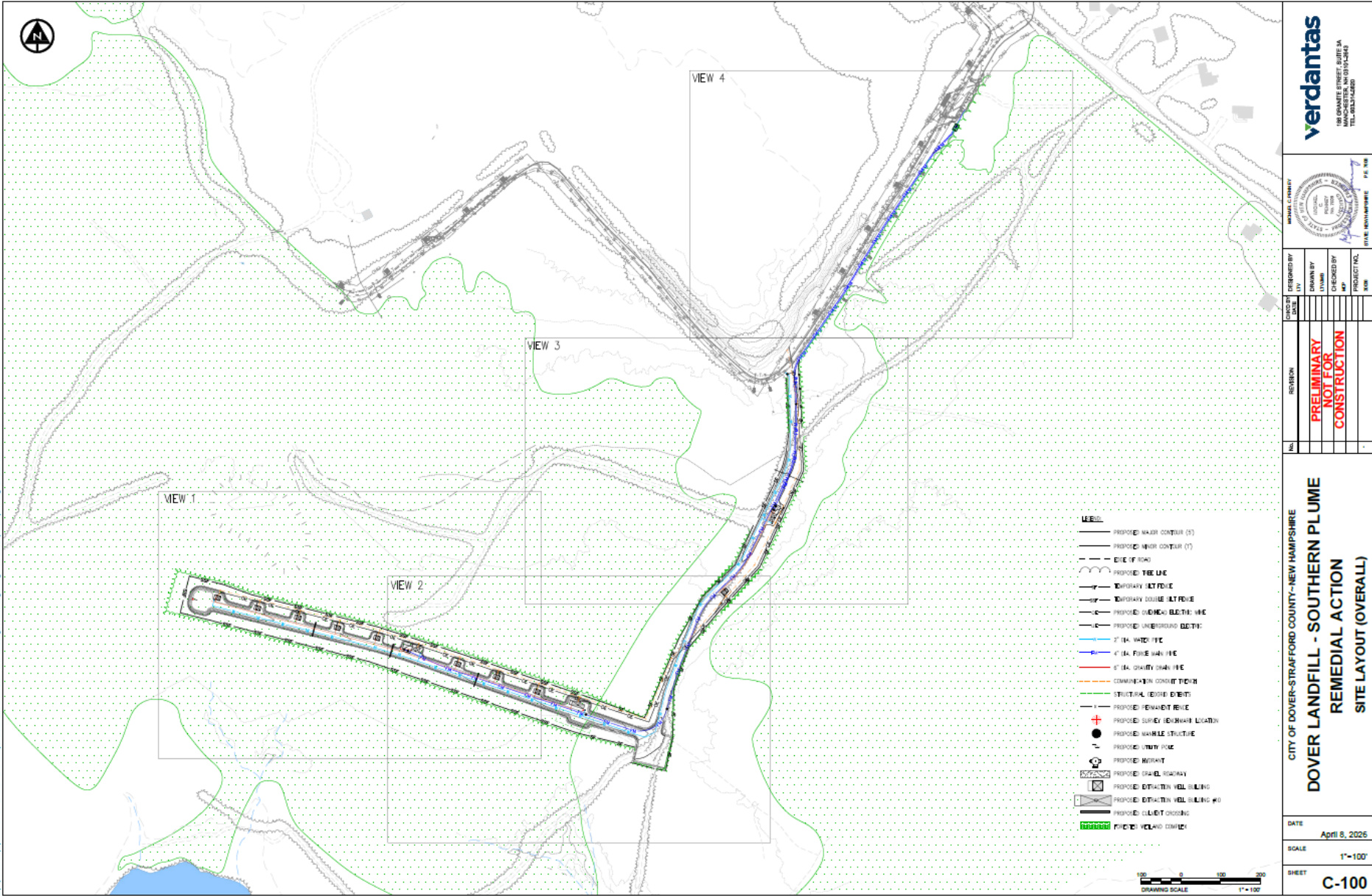
Design Process:

- **Evaluated alternative approaches**
- **Identified benefit of using existing extraction methods**
- **Reviewed constructability concerns**
- **Performed additional evaluations for Geotech and Bacteria**

Southern Plume Remediation Rationale and Objectives

- ***expand and optimize*** the existing SP GWE system to stabilize and reduce constituent concentrations in Southern Plume groundwater to concentrations that are protective of human health and the environment;
- ***eliminate or minimize the levels of contaminants*** in the groundwater emanating from and downgradient of the Landfill and prevent the discharge of impacted groundwater from the Site from entering surface water bodies in the SP area above cleanup levels;
- ***hydraulically contain groundwater at a point upgradient from the tributaries*** to minimize the migration of 1,4-dioxane in groundwater above the cleanup level (CL) of 0.32 micrograms per liter ($\mu\text{g/L}$); and
- ***monitor conditions in Southern Plume*** groundwater and associated intermittent tributaries to demonstrate stable and eventual reduced constituent concentrations in the Southern Plume area as a result of the system expansion and optimization.

Southern Plume Design - GWE



Projected Schedule

June 2026

- Solicit Bids from Contractors - Ongoing

June-July 2026

- Select and Engage Contractor

August-
October 2026

- Implement Phase I: Earthwork

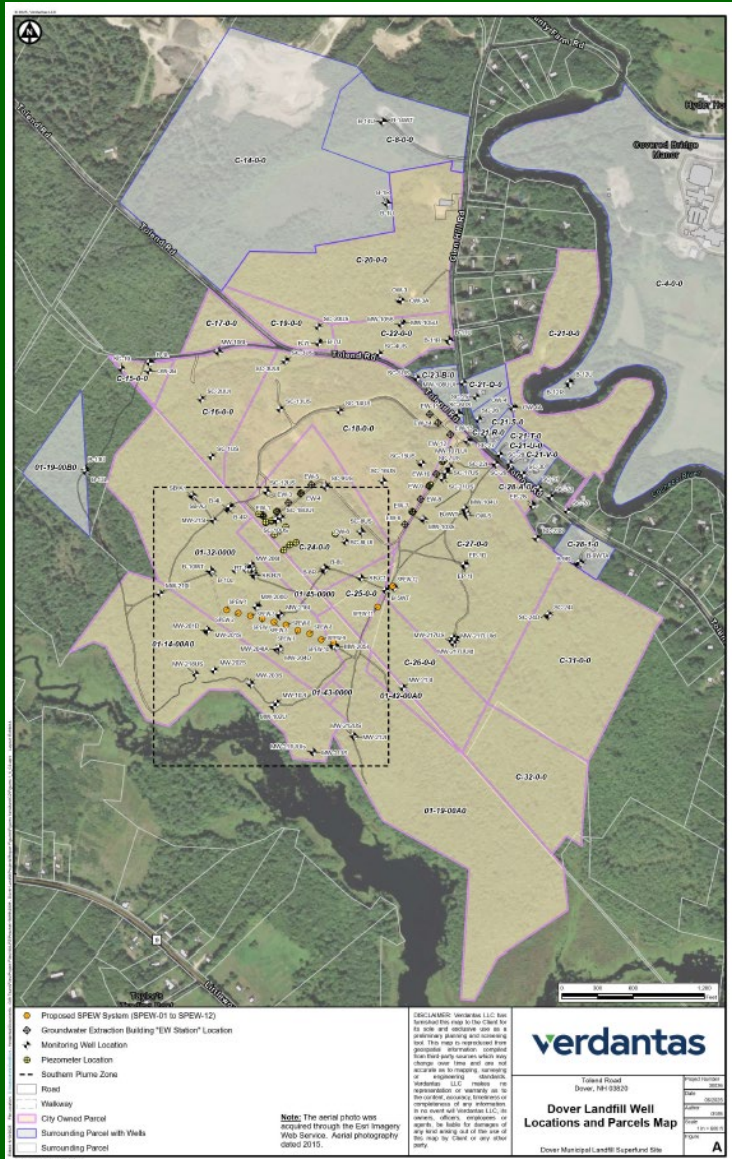
July-September
2027

- Implement Phase II: Infrastructure

October 2027

- Start up

Conservation Easement



- Approximately 270 acres
- Monitoring via Southeast Land Trust (SELT)
- Resolves Dept. of Interior damages issue



Questions??