Route 31 Sludge Disposal Site Update

Margaret Gregor, US EPA On-Scene Coordinator

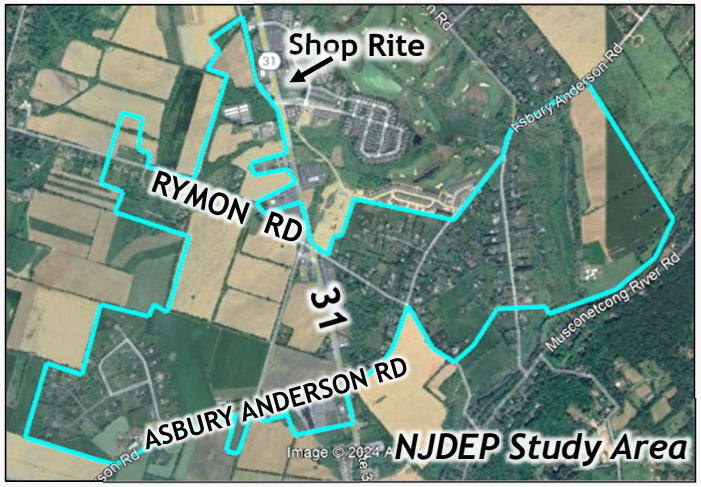
April 30, 2025 Community Meeting

AGENDA

- Recap: site background
- EPA's drinking water sampling & early action
- Overall drinking water sampling results
- Treatment system installation plans
- Other assessment work
- Next steps
- Questions & answers

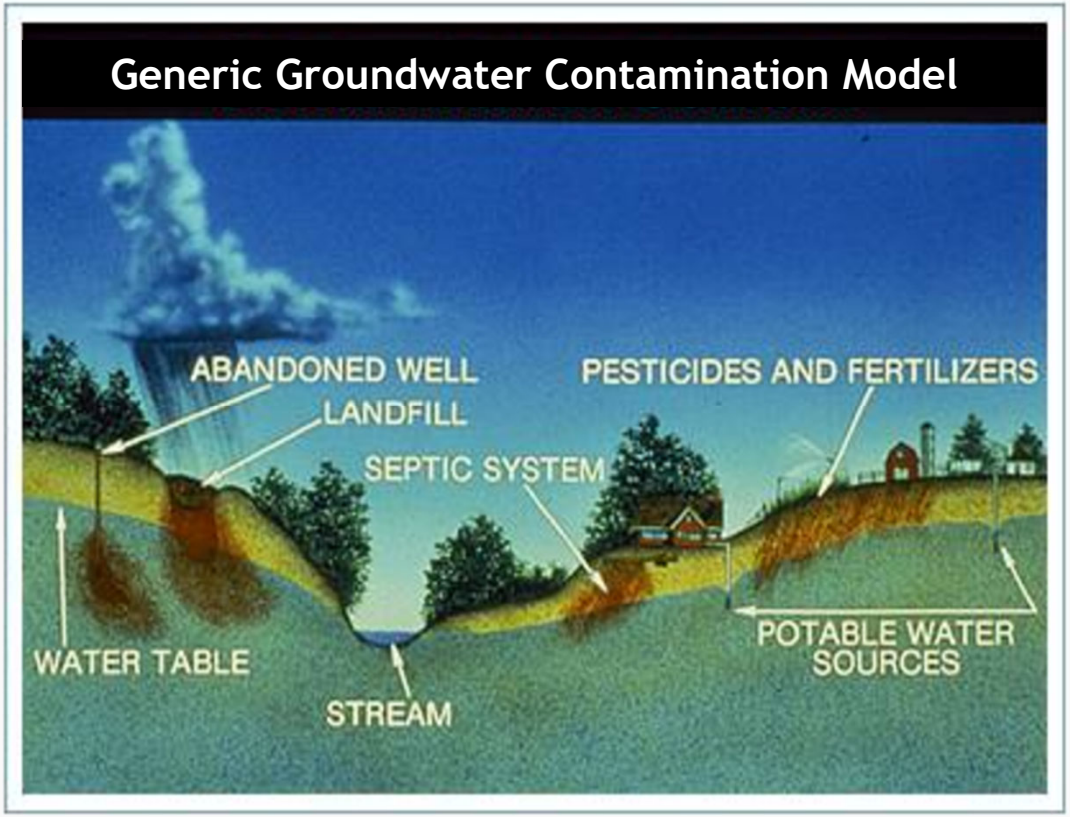
Site Background Recap

- **2019:** annual drinking water sampling at a local business detected high levels of PFAS in groundwater
- **PFAS** = per & polyfluoroaklyl substances, or "forever chemicals," are a newly studied class of widely-used, long-lasting manmade chemicals which break down very slowly, typically used to repel oil & water
- **2020-2024:** NJ Department of Environmental Protection (DEP) investigated extent & source; found high PFAS levels in dozens of residential wells and in soil at several farm properties



Site Background Recap

- **<u>Mid-1950s to mid-1970s</u>**: Castle Creek/Northern Dyeing ***textile mill*** reportedly spread **12-14,000 gallons of waste sludge per day over farm fields,** plowed in once dry
- PFAS from sludge/soil seeped into groundwater, and only now we're realizing its toxicity
- EPA has been the lead for this site since Nov. 2024



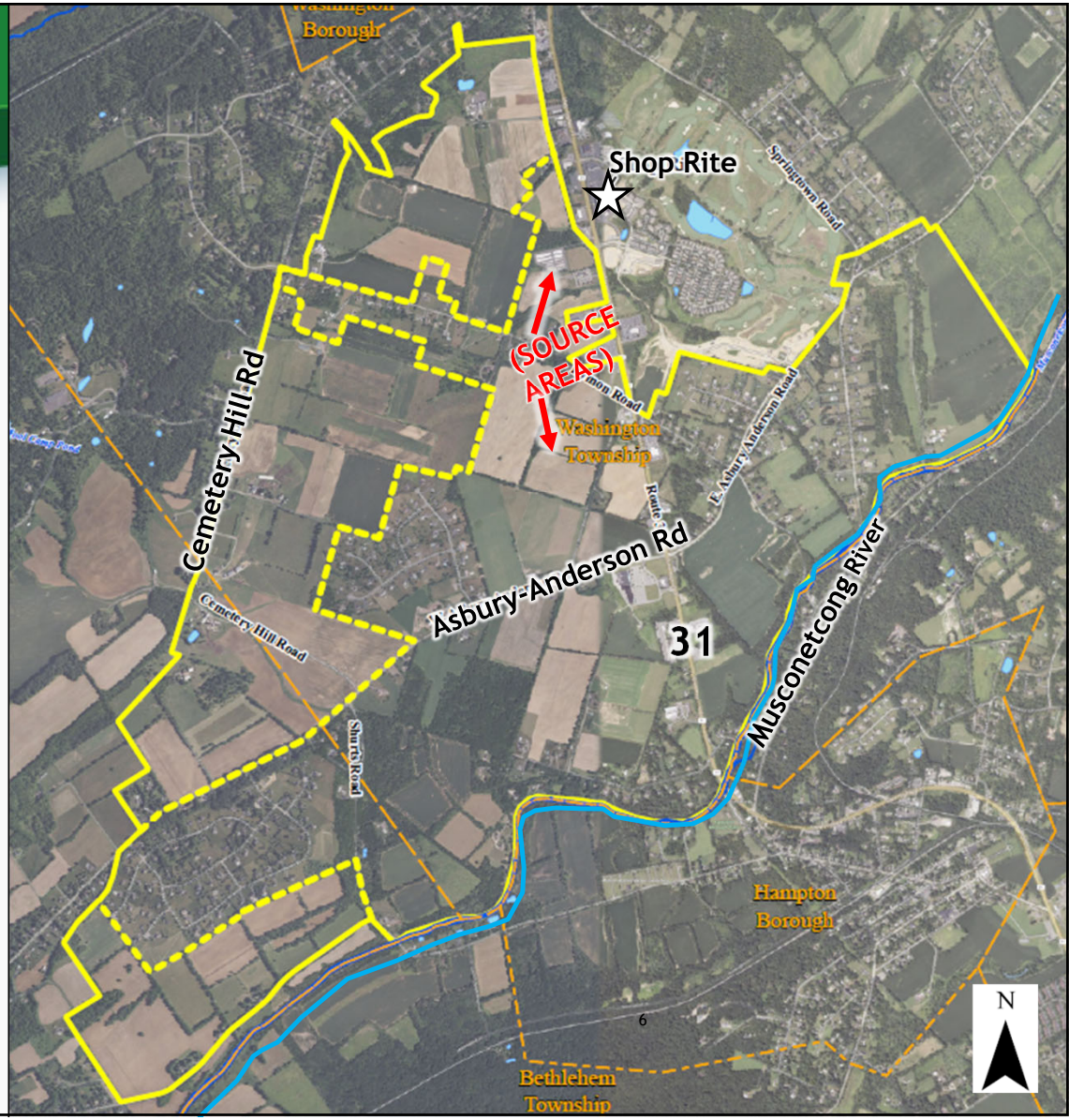
EPA's Initial Response: Drinking Water

- *Drinking water focus*: current studies show other exposures to PFAS (bathing, dishes, laundry etc.) are not significant compared to drinking & cooking

- November 2024: EPA began immediate emergency action at properties where PFAS levels > federal Maximum Contaminant Level (MCL) in EPA's drinking water study area
  - EPA also began sampling drinking water at additional nearby homes
  - EPA is providing bottled water to 184 properties

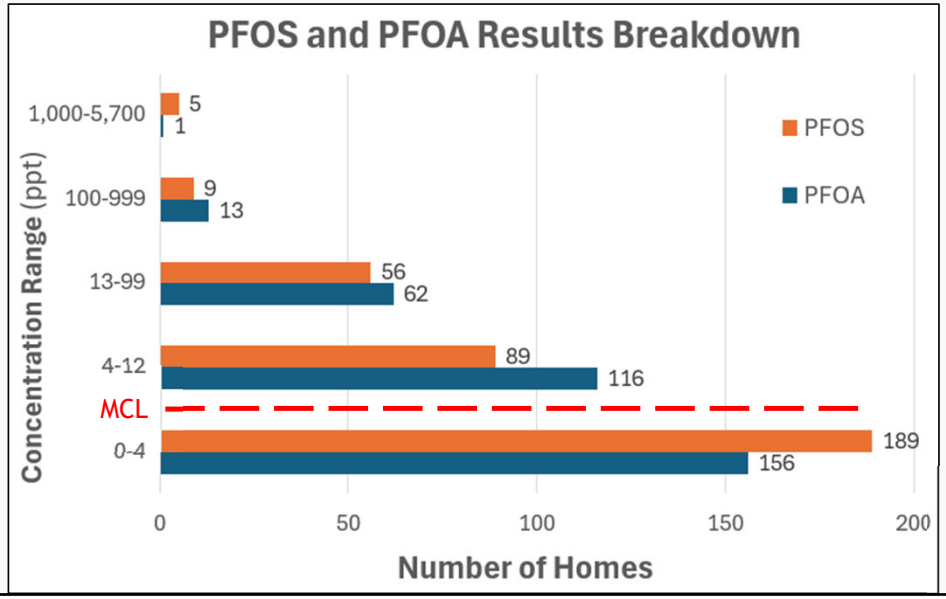
EPA's Initial Response: Drinking Water

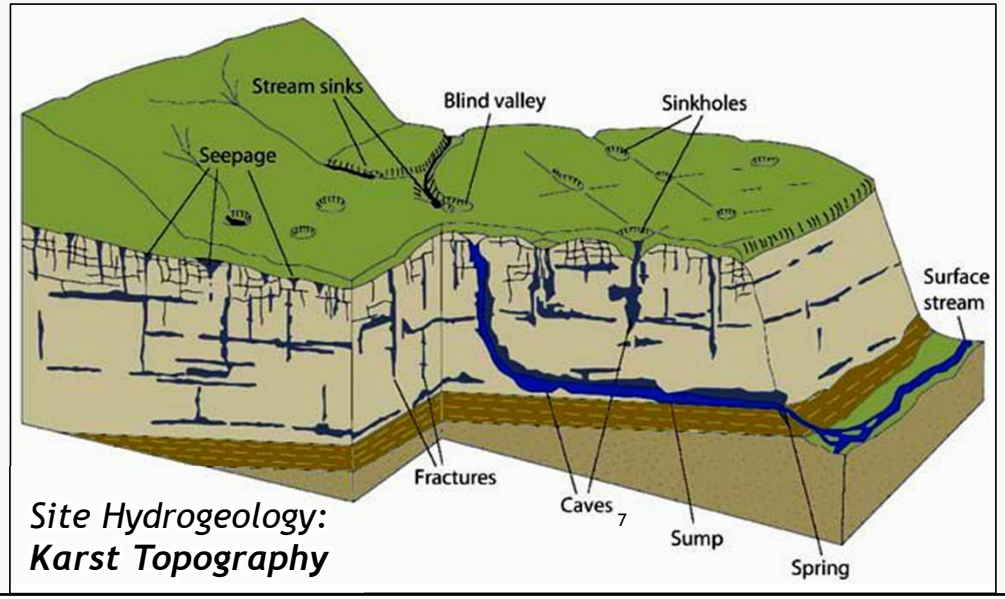
- Designation of study area for EPA well sampling:
  - Areas where contamination may flow in groundwater from known & suspected industrial PFAS sources
  - Additional properties to west added based on better understanding of local landscape and groundwater flow
- EPA sampled 347 wells; completed in March 2025



EPA Drinking Water Results

- *All residents notified*: EPA mailed December results, will send out January-March data in coming weeks
- Generally, highest levels near source areas, decreasing toward river
- Varied results due to complicated geology - fractured bedrock





Site Hydrogeology:
Karst Topography

Drinking Water: Will EPA Sample More?

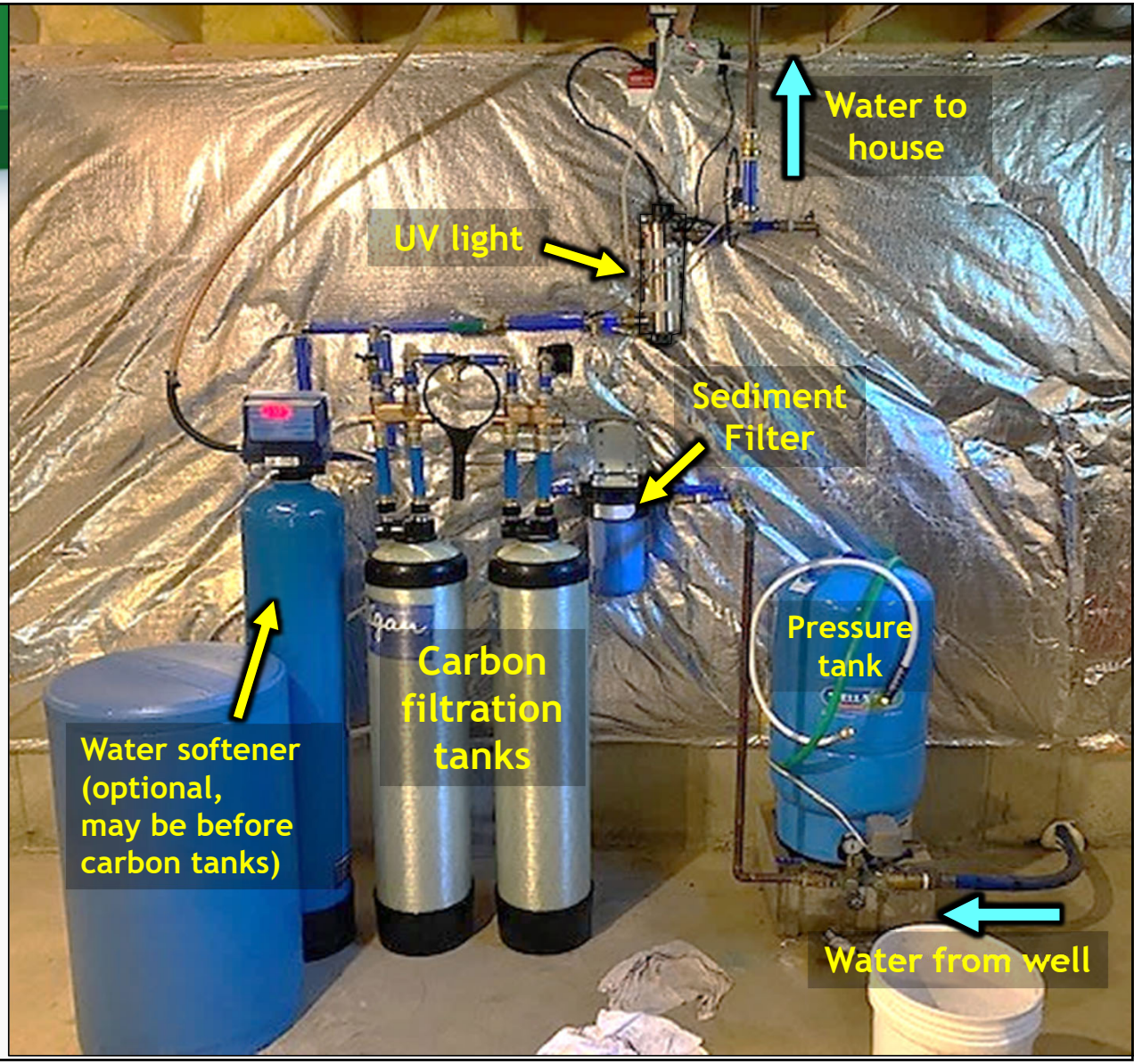
- EPA plans to resample all current drinking water study area properties; timeframe to be decided

- More information needed to determine if study area should be expanded, specifically across the Musconetcong River & into Asbury
  - **EPA Superfund Program** provides authority to address contamination from *identifiable industrial sources* → PFAS is found everywhere, so **additional speciality analysis** is needed to understand how & where ***this source of PFAS*** has spread
  - Summer-fall 2025 timeline for this fingerprinting analysis

- Potential for further groundwater investigation, such as monitoring well installation

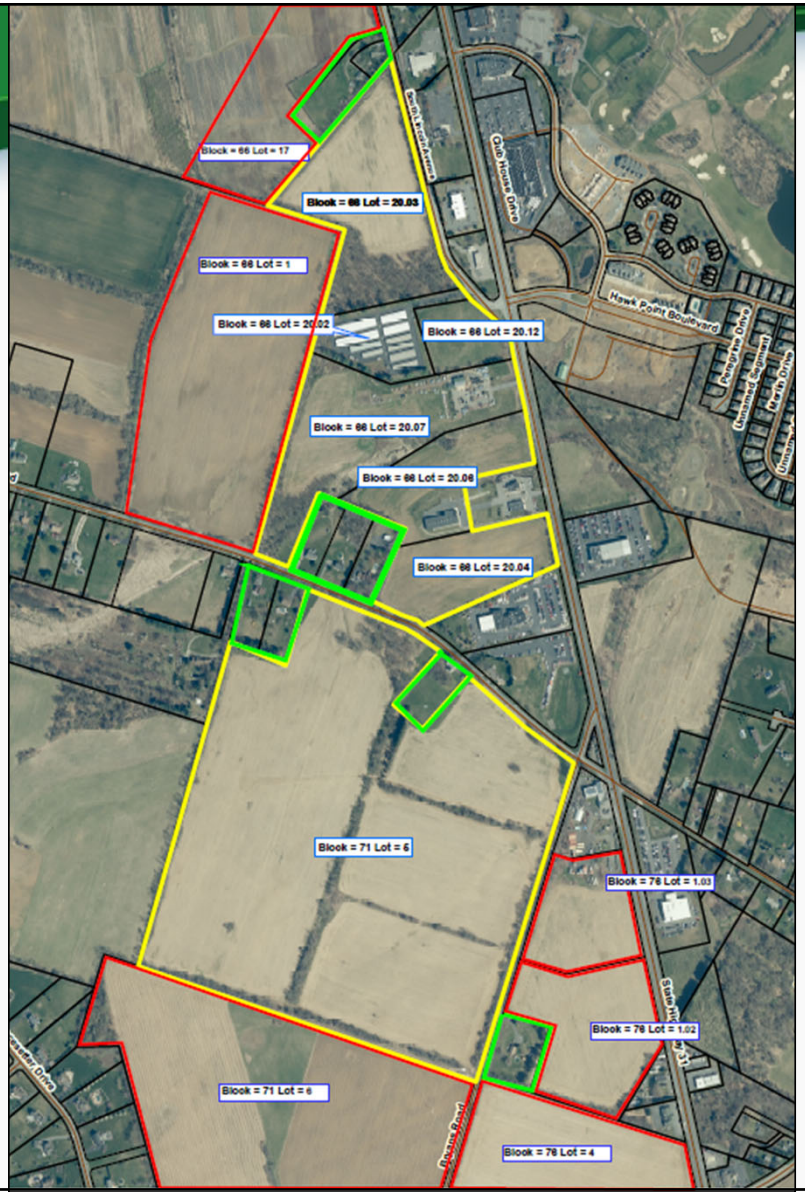
Treatment Systems

- Summer to fall 2025 installations
- EPA subcontract pending approval; to be announced
- Once sampling demonstrates effective filtering, EPA will discontinue bottled water service
- EPA to maintain existing systems



Additional Assessment Work

- EPA completed **soil sampling in & near source area farm fields** in early April
  - 815 soil samples collected, some down to 10', across five farm properties & several residences where owners provided access
  - Data is pending
- Additional **farmland assessment**
  - EPA, NJ Dept. of Agriculture, NJ DOH, USDA, FDA and farm owners working together to understand next steps to address potential PFAS contamination of farms



Additional Assessment Work

- **Musconetcong River sampling:** early May
  - Surface water & sediment, for recreational risk assessment
  - Supports NJDEP fish tissue sampling

- EPA evaluating site for proposal to the **Superfund National Priorities List, or NPL**
  - The NPL is for large, complex sites needing long-term response, and makes funding available for long-term investigation and cleanup

EPA's Next Steps

- Drinking water data provision
- Individual whole-house water treatment systems
- Analysis & determination of drinking water study area expansion
- Farmland & river assessments
- Longer-term evaluation for NPL eligibility
- **Consistent updates,** as needed and at milestones
  - Fact sheets, updating our website, availability sessions, meetings, office hours and more; all on EPA's website for the site, response.epa.gov/Route31Sludge

Thank you!

QUESTIONS?

EPA On-Scene Coordinators

Margaret Gregor | Gregor.Margaret@epa.gov, 908-421-2624

Jon Byk | Byk.Jonathan@epa.gov, 347-899-6210

Dave Rosoff | Rosoff.David@epa.gov, 908-420-4465

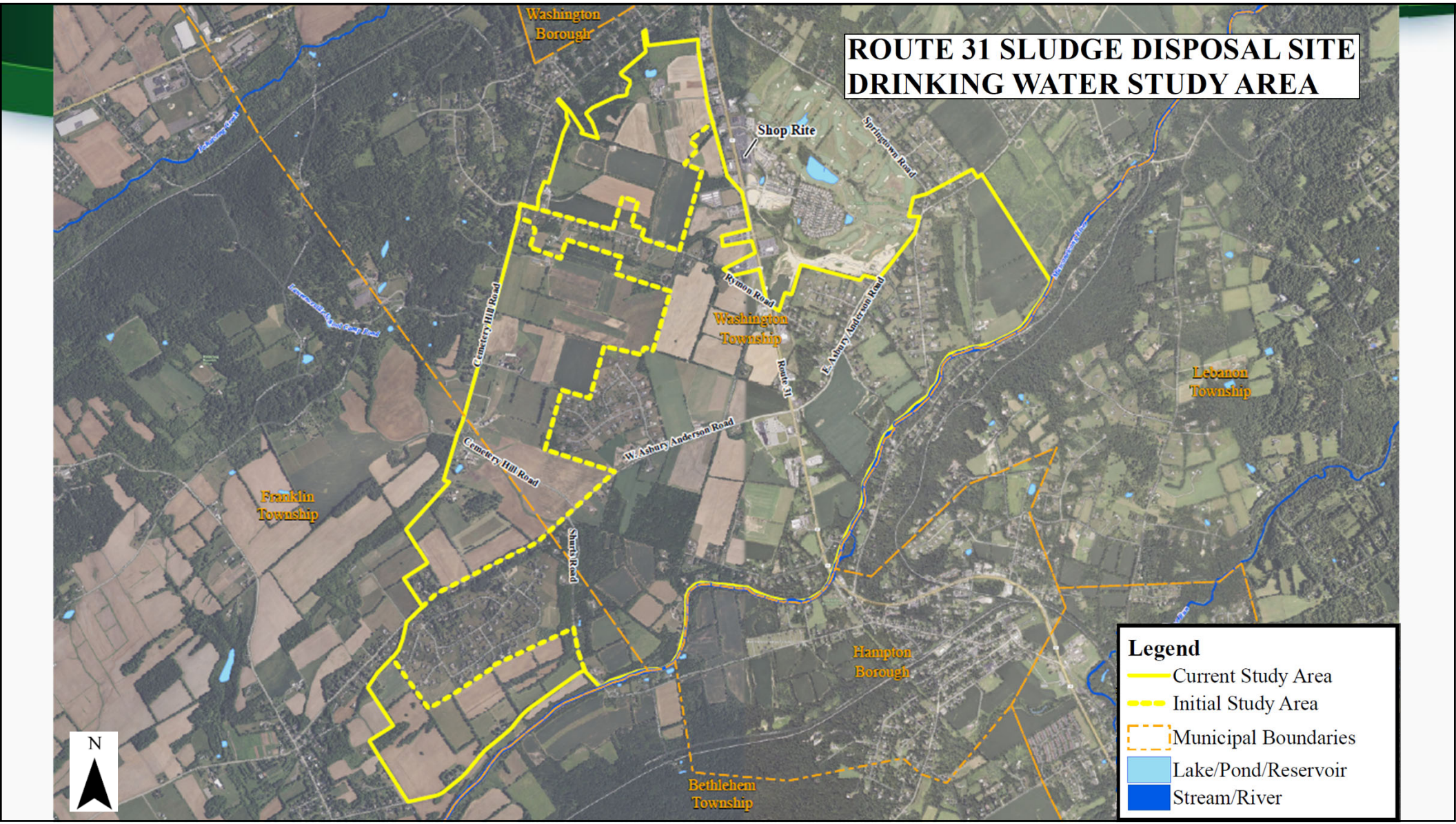
Pat Ahern | Ahern.Patrick@epa.gov, 347-931-2520

Kim Hong *(Spanish)* | Hong.Kimberly@epa.gov, 732-321-4352

EPA Community Involvement Coordinator

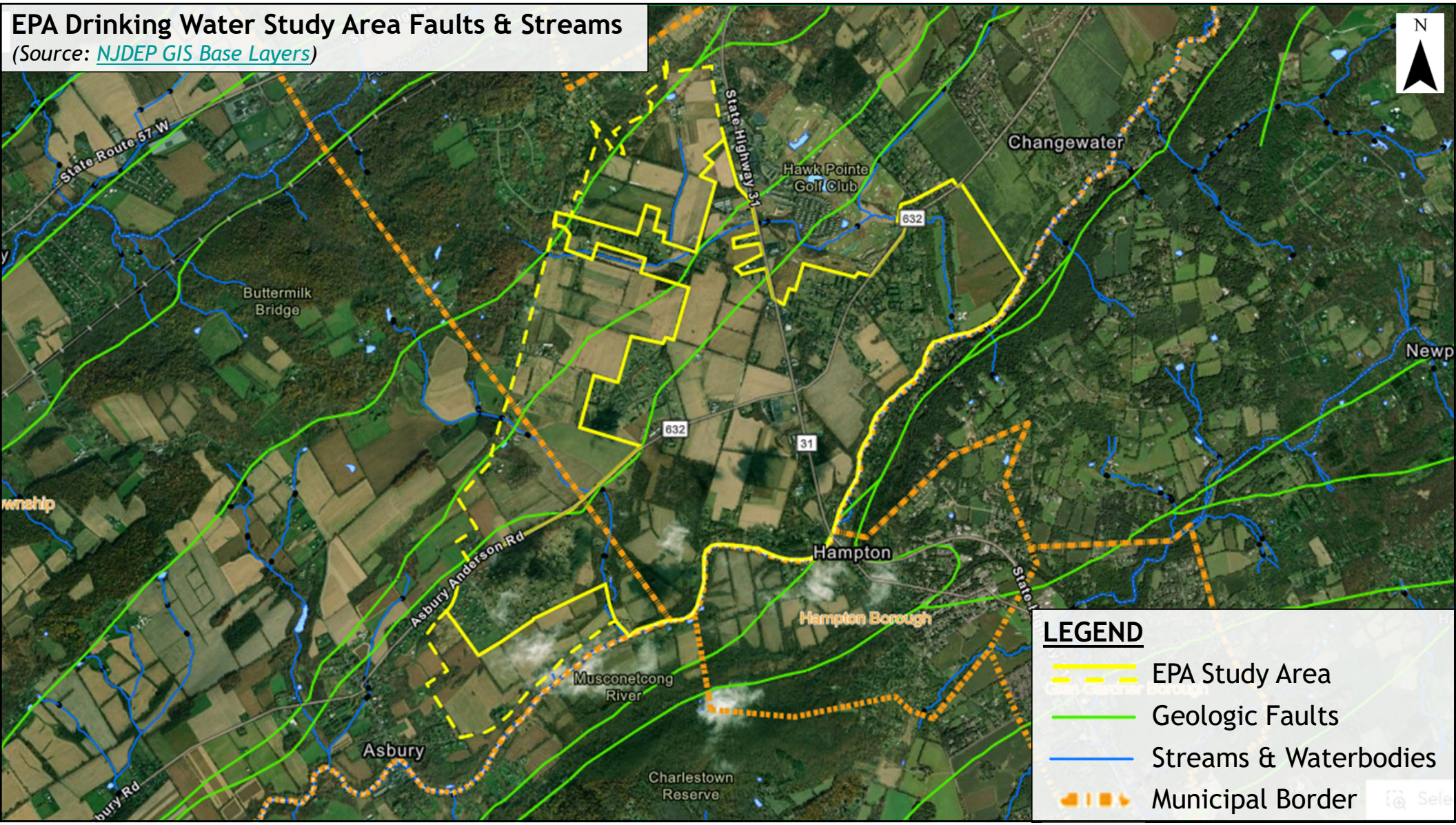
Joel Waddell | Waddell.Joel@epa.gov, 929-656-3416

Slides for Q&A Use


ROUTE 31 SLUDGE DISPOSAL SITE
DRINKING WATER STUDY AREA
Washington Borough
Shop Rite
Springtown Road
Rymon Road
Washington Township
Cemetery Hill Road
Route 31
E. Asbury Anderson Road
Lebanon Township
W. Asbury Anderson Road
Cemetery Hill Road
Franklin Township
Sharb Road
Hampton Borough
Bethlehem Township
N
Legend
Current Study Area
Initial Study Area
Municipal Boundaries
Lake/Pond/Reservoir
Stream/River

EPA Drinking Water Study Area Faults & Streams

(Source: NJDEP GIS Base Layers)



Resources for PFAS & Health

- EPA “PFAS Explained” (posted on EPA website)
  - https://www.epa.gov/pfas/pfas-explained
- EPA Info on Treatment Technologies & Home Filters
  - https://www.epa.gov/sciencematters/reducing-pfas-drinking-water-treatment-technologies
- Agency for Toxic Substances & Disease Registry (ATSDR) PFAS & Health
  - https://www.atsdr.cdc.gov/pfas/index.html
- NJDOH PFAS Fact Sheet (posted on EPA website)
  - https://www.nj.gov/health/ceohs/documents/pfas_drinking%20water.pdf